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INFORMATION ECONOMY

IN FIGURES

2011

CZECH REPUBLIC AND WORLD

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Introduction

The role of **information and communication technologies (ICTs)** has received considerable attention in the last decade or so due to their exceptional role in enhancement of economic growth and social change. Even though the production and the expansion of ICT varies significantly among countries, a general agreement prevails that it is necessary to collect reliable and comprehensive ICT indicators in order to assess the impact of these technologies on growth, productivity or innovation.

The aim of **information and communication technologies statistics** is, on one hand, to provide data on the production and the supply of advanced ICTs, including data on investments, external trade or qualified human resources in this field (**information economy statistics**) and, on the other hand, to track data on the penetration and usage of these technologies in particular sectors of society such as households, enterprise sector or public administration (**information society statistics**).

This brochure, its **fourth edition**, was compiled again in order to provide a comprehensive overview of statistical indicators about the developments of the information economy in the Czech Republic and where possible also in other, mainly EU, countries.

The brochure consists of the following five chapters:

- Chapter A: '**IT Professionals**' provides population estimates of computing professionals and computer associate professionals together with their monthly gross wages. Data on the numbers of university students of Computing were included for the first time.
- Chapter B: '**ICT Expenditures**' includes information about types of expenditures in ICT services with emphasis on software investments.
- Chapter C: '**ICT R&D and ICT Patents**' provides data on R&D expenditures in ICT equipment and software together with data about ICT related patents granted in the Czech Republic.
- Chapter D: '**ICT External Trade**' includes detail data about exports and imports both in the ICT goods and ICT services.
- Chapter E: '**ICT sector**' consists of main economic indicators for industries that are primarily engaged in the production of ICT goods and services.

Data given in this brochure were acquired, in most cases, from regular statistical surveys or databases of the Czech Statistical Office. International comparisons were compiled by the Czech Statistical Office based on freely available Eurostat, OECD or UN data sources.

Whenever possible, the data used in this brochure are based on the standards included in **The OECD Guide to Measuring the Information Society** (Paris, 2011). This publication summarizes the statistical standards and definitions developed by the OECD Working Party on Indicators for the Information Society in the field of ICTs.

For further information, please visit our website titled **Information Society**: http://www.czso.cz/eng/redakce.nsf/i/information_society

If you need any further information, do not hesitate to contact us directly. Your suggestions will be incentives for future releases.

In Prague, March 2012

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A IT professionals

IT professionals are all persons employed in the national economy, whose principal activity comes within the following two sub-groups of the International Standard Classification of Occupations (ISCO-88):

Computing professionals (CZ ISCO code 213)

- Computer systems designers and analysts (2131)
- Computer programmers (2132)
- Computing professionals not elsewhere classified (2139)

Computer associate professionals (CZ ISCO code 312)

- Computer assistants (3121)
- Computer equipment operators (3122)
- Industrial robot controllers (3123)
- Computer associate professionals not elsewhere classified (3129)

Computing professionals conduct research, plan, develop and improve computer based information systems, software and related concepts, develop principles and operational methods as well as maintain data dictionary and management systems of databases to ensure integrity and security of data.

Computer associate professionals provide assistance to users of computers and standard software packages, control and operate computers and peripheral equipment and carry out limited programming tasks connected with the installation and maintenance of computer hardware and software.

Data on the **numbers of IT professionals** come from the **Labour Force Sample Survey (LFSS)** of the Czech Statistical Office (CZSO). LFSS provides population estimates of IT professionals for the main socio-demographic characteristics, such as sex, age or level of education. Further information on the LFSS can be found at:

<http://www.czso.cz/csu/2011edicniplan.nsf/engp/3104-11>

Tables present average annual data for the reference year. Numbers lower than 3 000 persons must be considered as a data with very low reliability. As in 2010 the methodology slightly changed data on IT professionals by occupation therefore these data are not comparable in full with those for previous years.

The **Eurostat Labour Force Survey Database** was used as a data source for the international comparison.

Data on average monthly gross **wages of IT professionals'** come from the **Structural Wage Statistics (SWS)** and are based on the Information System on Average Earnings of the Ministry of Labour and Social Affairs for the business sphere and on the Salary Information System of the Ministry of Finance for the non-business sphere. Further information on the SWS can be found at:

<http://www.czso.cz/csu/2010edicniplan.nsf/engpubl/3109-10->

The amount of average gross monthly nominal wage given in this chapter is not grossed up to the whole population and holds for the survey sample (approx. 1.7 mil. employed persons) and therefore is not identical with the average wage obtained from other sources.

Data on the **numbers of university students of Computing** were provided by the former **Institute for Information on Education (IIE)** and come from the **Union Students' Registers**. The table contains the total number of university students (ISCED97 levels 5A and 6) in the field of Computing (ISCED97 group 48). Data on students of universities are always related to 31 December of the relevant year.

Further information on IT professionals' statistics can be found at:

http://www.czso.cz/eng/redakce.nsf/i/information_economy

A IT professionals

Table A1 IT professionals in the Czech Republic

	thous. persons (HC)		
	2008	2009	2010
Total	110,8	114,2	121,6
Gender			
Males	96,1	101,8	108,7
Females	14,7	12,4	12,9
Age group			
15-24 years	12,2	9,7	10,3
25-34 years	50,6	52,9	54,5
35-44 years	25,6	28,6	32,0
45-54 years	16,8	14,4	17,2
55+ years	5,5	8,7	7,5
Level of education			
Tertiary	45,0	55,0	60,5
Upper secondary	54,8	50,7	53,6
Other	11,0	8,5	7,6
Field of study			
Basic programmes	10,0	6,8	5,8
Business and administration	6,1	7,2	7,1
Computing	12,9	18,7	18,7
Engineering and engineering trades	54,8	50,8	55,7
Other	27,0	30,8	34,2

Figure A1 IT professionals

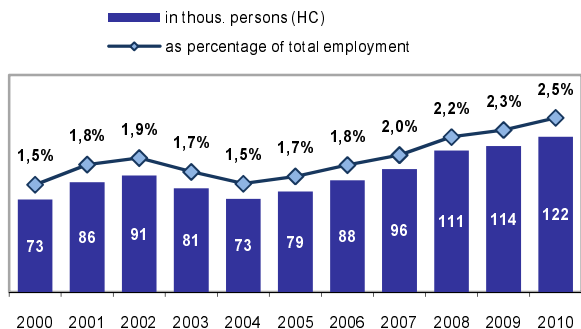
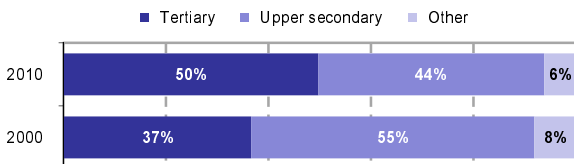


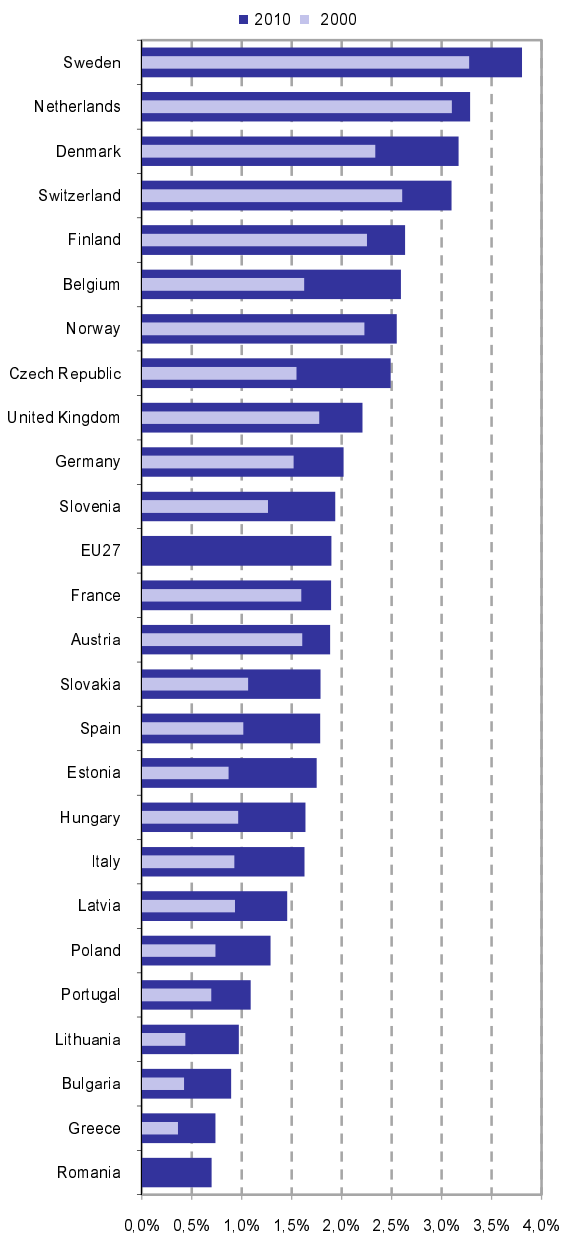
Figure A2 Composition of IT professionals by level of education



Source: CZSO, Labour force survey

A IT professionals

**Figure A3 IT professionals
(as a percentage of total employment)**



Source: Eurostat, European Labour Force Survey

A IT professionals

Table A2 IT professionals in the Czech Republic by occupation, 2010

	thous. persons (HC)		
	IT profess. total	Computing profess.	Computer associate profess.
Total	121,6	48,9	72,7
Gender			
Males	108,7	44,7	64,0
Females	12,9	4,2	8,7
Age group			
15-24 years	10,3	1,2	9,1
25-34 years	54,5	23,1	31,4
35-44 years	32,0	12,4	19,6
45-54 years	17,2	7,2	10,0
55+ years	7,5	5,0	2,5
Level of education			
Tertiary	60,5	43,7	16,8
Upper secondary	53,6	5,0	48,5
Other	7,6	0,2	7,4
Field of study			
Basic programmes	5,8	0,8	5,0
Business and administration	7,1	2,6	4,6
Computing	18,7	11,1	7,6
Engineering and engineering trades	55,7	19,0	36,7
Other	34,2	15,4	18,8

Figure A4 IT professionals by occupation, 2010 (thous.)

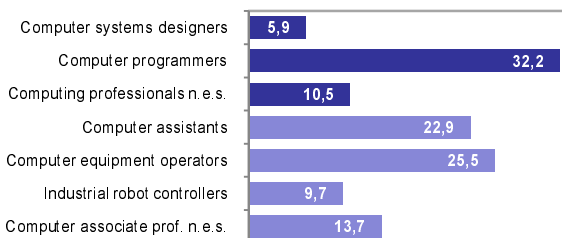
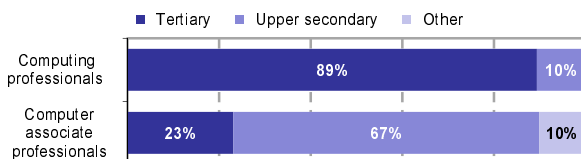


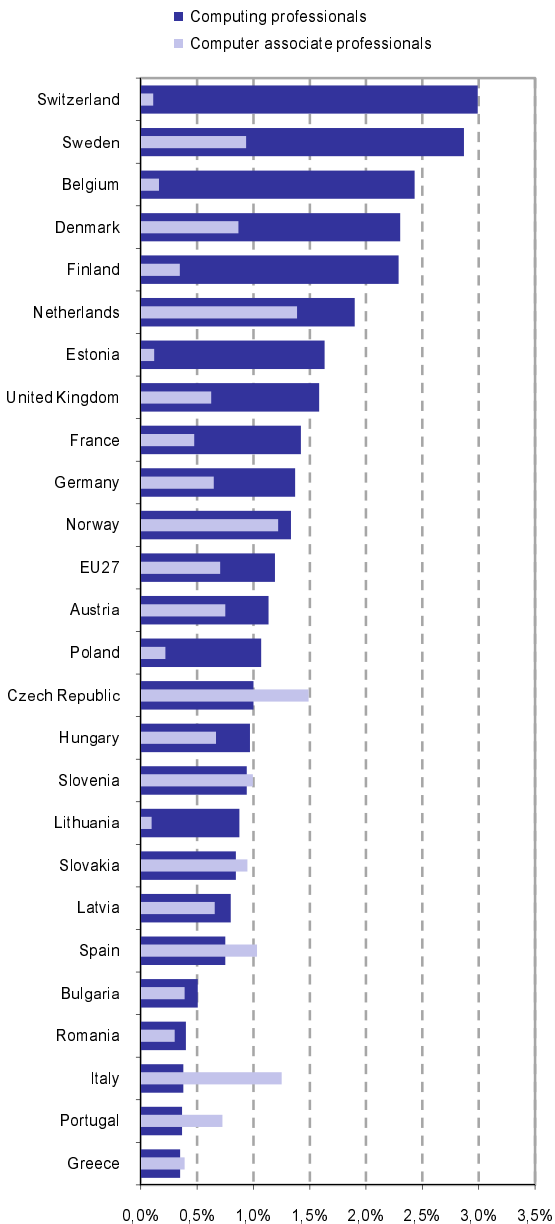
Figure A5 Composition of IT professionals by occupation and level of education, 2010



Source: CZSO, Labour force survey

A IT professionals

**Figure A6 IT professionals by occupation, 2010
(as a percentage of total employment)**



Source: Eurostat, European Labour Force Survey

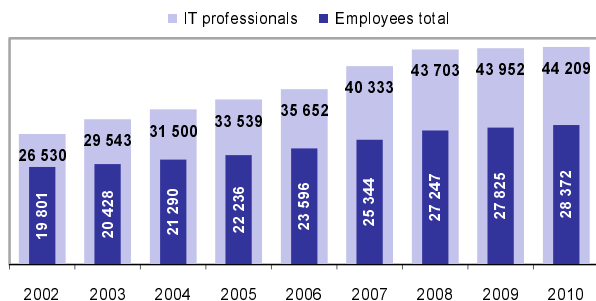
A IT professionals

Table A3 Average monthly gross wage of IT professionals, 2010

CZK

	2008	2009	2010
Total	43 703	43 952	44 209
Gender			
Males	45 484	45 590	45 934
Females	35 000	35 583	35 478
Age group			
20-24 years	26 015	25 950	25 132
25-29 years	36 864	36 126	34 960
30-34 years	48 522	47 800	46 739
35-39 years	51 637	51 992	52 204
40-44 years	49 392	50 031	51 381
45-49 years	46 257	47 111	48 209
50-54 years	43 558	44 269	45 161
55-59 years	41 185	41 308	42 076
60-64 years	43 018	44 182	44 206
Level of education			
Master and doctoral	54 255	53 784	53 800
Higher professional, bachelor	39 037	38 799	39 404
Upper secondary	36 193	36 907	37 221
other	25 977	26 056	27 576
Size class of enterprises			
10-49 employees	36 822	36 628	40 453
50-249 employees	38 013	42 013	40 829
250-999 employees	48 268	47 816	48 833
1 000-4 999 employees	40 888	40 974	40 547
5 000+ employees	44 158	44 202	45 791
Sector			
Business sector	45 246	45 443	45 654
Non-business sector	26 607	27 905	27 976

Figure A7 Average monthly gross wage* (CZK)



*Average monthly gross wage presented in this publication is different from average monthly gross wage in other documents. In this publication are presented data about the sample of the survey (not grossed up results) cover c. 1,7 mil. engaged persons.

Source: Structural statistics on earnings of employees

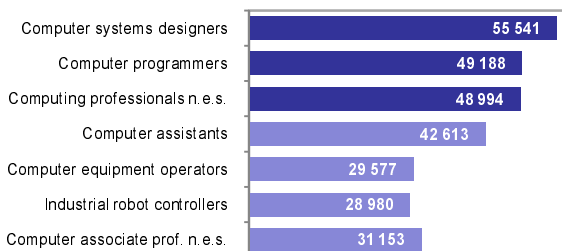
A IT professionals

Table A4 Average monthly gross wage of IT professionals by occupation in the Czech Republic, 2010

CZK

	IT profess. total	Computing profess.	Computer associate profess.
Total	44 209	50 185	35 333
Gender			
Males	45 934	51 440	37 209
Females	35 478	42 687	27 685
Age group			
20-24 years	25 132	29 321	23 458
25-29 years	34 960	39 119	30 161
30-34 years	46 739	51 934	37 999
35-39 years	52 204	57 873	41 953
40-44 years	51 381	56 772	41 875
45-49 years	48 209	52 798	40 010
50-54 years	45 161	49 955	35 740
55-59 years	42 076	47 182	33 331
60-64 years	44 206	50 186	33 045
Level of education			
Master and doctoral	53 800	56 191	46 921
Higher professional, bachelor	39 404	42 942	33 723
Upper secondary	37 221	43 287	31 245
other	27 576		27 576
Size class of enterprises			
10-49 employees	40 453	43 913	36 236
50-249 employees	40 829	45 357	34 419
250-999 employees	48 833	53 786	41 098
1 000-4 999 employees	40 547	47 678	31 559
5 000+ employees	45 791	51 813	31 766
Sector			
Business sector	45 654	52 011	36 241
Non-business sector	27 976	29 985	24 881

Figure A8 Average monthly gross wage of IT professionals by occupation, 2010 (CZK)



Source: Structural statistics on earnings of employees

A IT professionals

Table A5 University students of Computing in the CR

	2008	2009	2010
Total	19 473	21 495	22 478
Gender			
Males	17 231	18 842	19 655
Females	2 242	2 653	2 823
Educational programme			
Bachelor and master programmes	18 524	20 433	21 158
Bachelor programmes	14 624	15 962	15 988
Master programmes	3 917	4 488	5 182
Doctoral programmes	949	1 062	1 321
Field of education			
Computer sciences	12 744	14 612	15 316
Computers usage	6 799	6 944	7 229
Nationality			
Czech republic	16 979	18 550	19 211
Foreign	2 494	2 945	3 267

Figure A9 University students of Computing

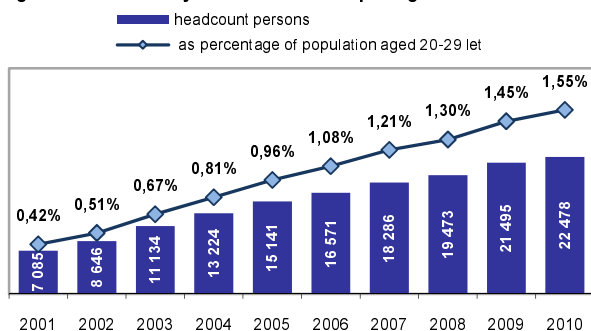
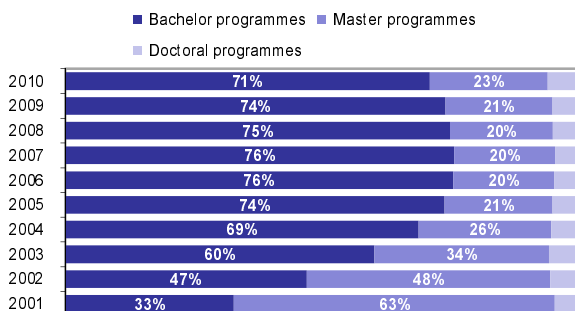


Figure A10 Composition of university students of Computing by educational programmes



Source: Institute for information on education

B ICT services expenditures

Services in the field of information and communication technologies (hereinafter as the **ICT services**) are defined as services, which must primarily be intended to fulfill or enable the function of information processing and communication by electronic means, including transmission and display (OECD 2008). ICT services are in the European Economic Community (2008 version) classified by Activity according to the Statistical Classification of Products. As the Czech Database of Annual National Accounts is available only at 2-digit (division) level of CPA classification ICT services include two following CZ-CPA divisions:

- **Telecommunications services** (CZ-CPA 61)
- **IT services** (Computer programming, consultancy and related services CZ-CPA 62)

ICT services expenditures by **resources (supply)** are divided into domestic production/output (P.1), imports (P.7) and other expenditures (trade margins, transport margins, taxes on products and subsidies on products).

ICT services expenditures by **type of expenditures (use)** are divided into intermediate consumption (P.2), final consumption (P.3) and gross fixed capital formation (investment P.51).

Intermediate consumption (P.2) consists of the value of the goods and services consumed as inputs by a process of production, excluding fixed assets whose consumption is recorded as consumption of fixed capital. The goods and services may be either transformed or used up by the production process. Intermediate consumption excludes items treated as gross capital formation. *Households do not make intermediate consumption but final consumption expenditures.*

Final consumption expenditure (P3) consists of expenditure incurred by resident institutional units (**mainly households**) on goods or services that are used for the direct satisfaction of individual needs or wants or the collective needs of members of the community. Final consumption expenditure may take place on the domestic territory or abroad. *Corporations do not make final consumption expenditures. Their purchases of the same kind of goods or services as used by households for final consumption are used for intermediate consumption.*

Gross fixed capital formation (P.51) consists of resident producers acquisitions, less disposals, of fixed assets during a given period plus certain additions to the value of non-produced assets realized by the productive activity of producer or institutional units. Fixed assets are tangible or intangible assets produced as outputs from processes of production that are themselves used repeatedly, or continuously, in processes of production for more than one year.

Software investment in tables refers to the Gross fixed capital formation (GFCF) (P.51) and includes **the following CZ-CPA codes**:

- Computer programming, consultancy and related services (CZ-CPA 62)
- Software publishing services (CZ-CPA 58.2)

The data come from the **Annual National Accounts Statistics** of the Czech Statistical Office (CZSO). Information on annual national accounts is available on the website of the CZSO at:

http://www.czso.cz/eng/redakce.nsf/i/gdp_national_accounts_ekon

B ICT services expenditures

Table B1 Expenditure on ICT services in the Czech Republic

CZK million

	2008	2009	2010*
Total	274 271	278 661	281 316
Telecommunication services	152 636	150 385	143 767
IT services	121 635	128 276	137 549
Supply resources			
Domestic output**	221 814	221 510	228 052
Imports	24 067	29 488	24 606
Others (trade margins, taxes, subsidies)	28 390	27 663	28 658
Type of expenditures			
Investment	40 277	39 965	42 841
Final consumption	58 439	56 832	55 047
Intermediate consumption	175 555	181 864	183 428

* preliminary data

** excluding domestic production intended for exports

Figure B1 Expenditure on ICT services (CZK billion)

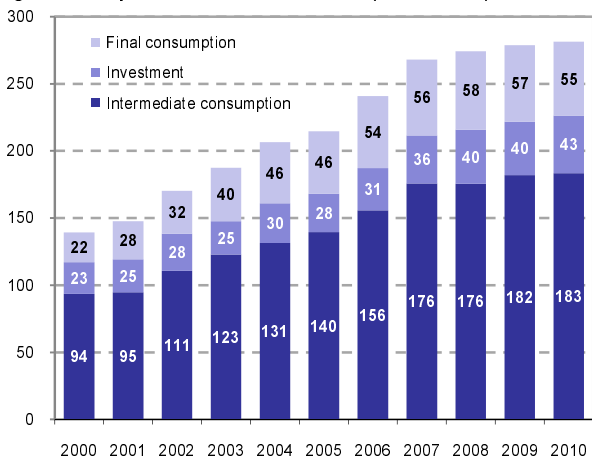
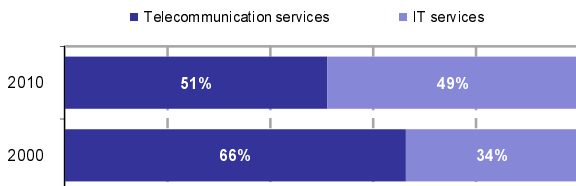


Figure B2 Composition of expenditure on ICT services by main categories of ICT services



Source: CZSO, Annual national accounts - Supply and use tables

B ICT services expenditures

Table B2 Expenditure on IT services in the Czech Republic

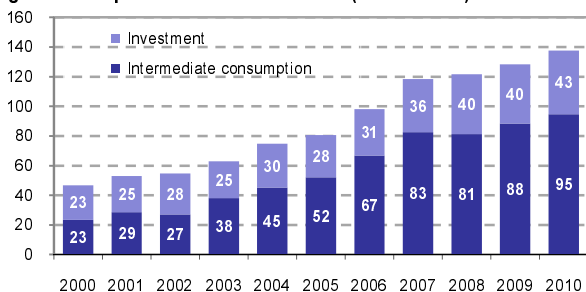
CZK million

	2008	2009	2010*
Total	121 635	128 276	137 549
Supply resources			
Domestic output**	88 130	92 565	105 039
Imports	15 474	18 549	14 109
Others (trade margins, taxes, subsidies)	18 031	17 162	18 401
Type of expenditures			
Investment	40 277	39 965	42 841
Final consumption			
Intermediate consumption, total	81 355	88 311	94 708
Industry (CZ-NACE Section)			
Agriculture, forestry and fishing	198	212	259
Mining and quarrying	42	44	51
Manufacturing	9 335	8 370	9 492
Electricity, gas and water supply	551	657	590
Construction	1 055	1 131	1 238
Wholesale and retail trade	5 776	7 248	7 747
Transportation and storage	1 588	1 846	2 177
Accommodation and food service activ.	273	313	331
Information and communication	31 118	35 350	37 554
<i>thereof Computer programming</i>	24 378	28 312	30 091
Financial and insurance activities	14 719	14 416	14 064
Real estate activities	1 681	1 529	1 741
Professional, scientific and technical activ.	5 849	6 443	7 012
Administrative and support service activ.	1 554	1 512	1 596
Public administration and defence	3 309	3 971	4 672
Education	967	1 167	1 074
Human health and social work activities	581	765	918
Other community, social services	2 759	3 337	4 192

* preliminary data

** excluding domestic production intended for exports

Figure B3 Expenditure on IT services (CZK billion)



Source: CZSO, Annual national accounts - Supply and use tables

B ICT services expenditures

Table B3 Expenditure on Telecommunication services in the CR

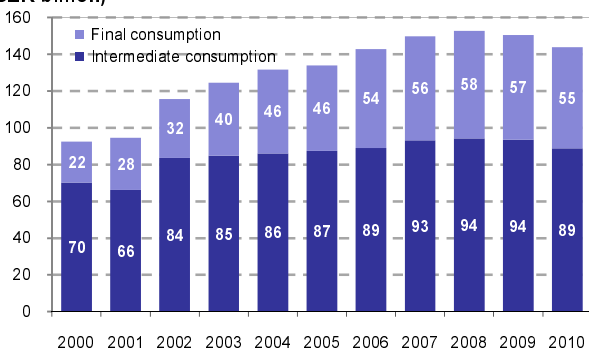
CZK million

	2008	2009	2010*
Total	152 636	150 385	143 767
Supply resources			
Domestic output **	133 684	128 945	123 013
Imports	8 593	10 939	10 497
Others (trade margins, taxes, subsidies)	10 359	10 501	10 257
Type of expenditures			
Investment			
Final consumption	58 436	56 832	55 047
Intermediate consumption total	94 200	93 553	88 720
Industry (CZ-NACE Section)			
Agriculture, forestry and fishing	588	576	653
Mining and quarrying	78	72	73
Manufacturing	6 262	4 937	5 105
Electricity, gas and water supply	1 080	1 105	1 006
Construction	2 503	2 343	2 330
Wholesale and retail trade	5 388	6 598	6 044
Transportation and storage	3 155	3 052	3 378
Accommodation and food service activ.	2 170	2 303	2 321
Information and communication	47 117	46 148	41 158
<i>thereof Telecommunications</i>	<i>43 038</i>	<i>42 099</i>	<i>37 160</i>
Financial and insurance activities	2 754	2 603	2 523
Real estate activities	2 549	2 171	2 227
Professional, scientific and technical activ.	5 246	5 073	5 169
Administrative and support service activ.	1 337	1 178	1 133
Public administration and defence	11 392	12 431	12 261
Education	583	645	634
Human health and social work activities	1 046	1 218	1 366
Other community, social services	952	1 100	1 339

* preliminary data

** excluding domestic production intended for exports

Figure B4 Expenditure on Telecommunication services (CZK billion)



Source: CZSO, Annual national accounts - Supply and use tables

B ICT services expenditures

Table B4 Software investment in the Czech Republic

CZK million

	2008	2009	2010*
Total	42 320	42 095	45 110
<i>thereof:</i>			
Non-financial sector	27 847	26 217	30 985
Financial corporations	8 118	7 356	8 166
General government	5 964	8 347	5 186
Households	282	111	711
Non-profit institutions	109	64	62
Industry (CZ-NACE section)			
Agriculture, forestry and fishing	118	83	193
Mining and quarrying	89	68	343
Manufacturing	6 400	5 023	5 917
Electricity, gas and water supply	1 072	1 244	1 392
Construction	1 440	294	590
Wholesale and retail trade	3 014	2 027	2 711
Transportation and storage	4 135	2 527	2 493
Accommodation and food service activ.	173	179	199
Information and communication	10 111	11 323	11 650
Financial and insurance activities	8 118	7 358	8 189
Real estate activities	147	209	467
Professional, scientific and technical activ	1 571	1 654	2 137
Administrative and support service activ.	895	1 010	1 664
Public administration and defence	3 392	7 340	4 491
Education	607	680	685
Human health and social work activities	621	650	1 552
Other community, social services	417	426	437

* preliminary data

Figure B5 Software investment

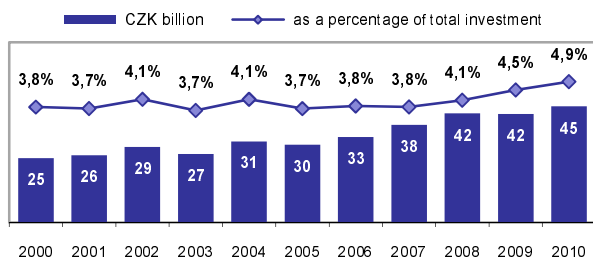
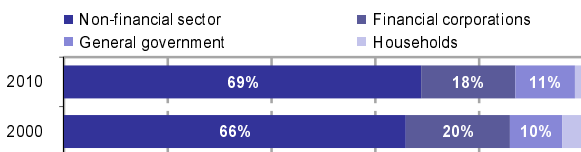


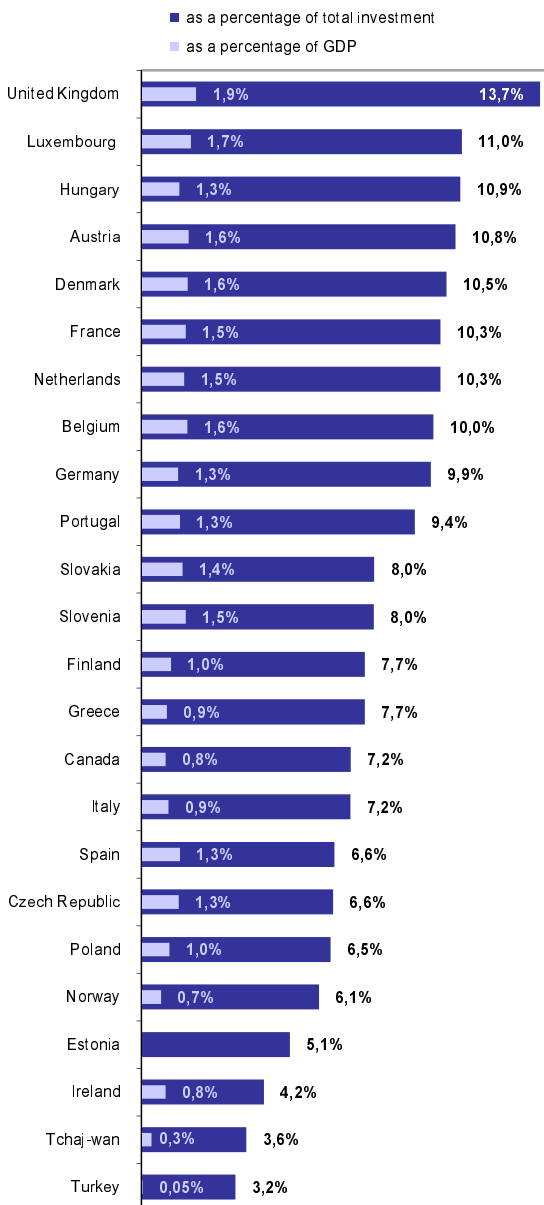
Figure B6 Composition of software investment by institutional sectors



Source: CZSO, Annual national accounts - Supply and use tables

B ICT services expenditures

Figure B7 Investment in ICT equipment and software, 2005*



* or closest available year

Source: OECD, Input-output tables

C ICT R&D expenditure and ICT Patents

Research and development (R&D) is a systematic creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of human beings, culture and society, and carried out for the purpose of obtaining or using new knowledge using methods allowing confirmation, widening or refuting of knowledge obtained.

R&D expenditure includes all current (wage and other) and capital expenditure determined for R&D performed in observed institutions on the territory of a given country made during the reference year regardless the source of the funds.

R&D expenditure in the field of ICT is based on the results of the special module about R&D expenditures in specific fields (ICT, software, nanotechnology, biotechnology) that is included in the **Annual R&D survey**. This survey includes questions on human and financial resources determined for R&D activities realized on the territory of the Czech Republic in all sectors of R&D performance. Further information on the Czech Annual R&D Survey can be found at (only at Czech):

http://www.czso.cz/csu/redakce.nsf/i/statistika_vyzkumu_a_vyvoje

Goods and services in the field of ICT for R&D expenditures are classified according to the **Classification of Products by Activity (CZ-CPA)** in two categories as follows:

- R&D expenditures into **ICT equipment** (CZ-CPA 26.1-4 and 26.8)
- **Software** R&D expenditures (CZ-CPA 62)

Software-related activities of a routine nature which do not involve scientific and/or technological advances or resolution of technological uncertainties are not to be included in R&D.

Patent statistics brings information about results and success of research, development and innovation activities in selected areas of technology.

A **patent** is a public deed issued by the relevant patent office, which provides legal protection to an invention for the period of up to 20 years (provided that maintenance fees are paid), namely on the territory for which it was issued by the office. Patent protection on the territory of the Czech Republic is ensured by the **Industrial Property Office of the CR** (hereinafter only IPO CR).

Data in this chapter were processed by the Czech Statistical Office (CZSO) based on data sources of the IPO CR. Patent data are broken down according to the **Patent Manual of the OECD (OECD, Paris 2009)**. Based on the International Patent Classification (IPC) it is possible to classify ICT related patents into four main categories as follows:

- Telecommunications
- Consumer electronics
- Computers, office machinery
- Other ICT

Category other ICT patents includes, compare to other chapters of this publication, invention in the field of ICT medical and scientific equipment.

The Czech Statistical Office publishes additional information about the **Czech applicants** broken down e.g. by their **institutional sector** (business enterprise sector, government sector, higher education sector, and natural persons) or by region of residence of the patent holder.

The following OECD web site was used as a data source for the international comparison: www.oecd.org/sti/pr-statistics.

Further information on the Czech patent statistics can be found at: http://www.czso.cz/csu/redakce.nsf/i/patentova_statistika.

C ICT R&D expenditures and Patents

Table C1 Total R&D expenditure into ICT in the Czech Republic

CZK million

	2008	2009	2010
Total	7 055	6 630	6 811
ICT equipment	3 794	3 327	3 147
software	3 261	3 303	3 664
Sector of R&D performance			
Business enterprise	6 216	5 801	5 956
Government	263	209	180
Higher education	561	603	667
Private non-profit	16	17	9

Table C2 R&D expenditure into ICT in the Czech Republic funded by government

CZK million

	2008	2009	2010
Total	1 315	1 384	1 282
ICT equipment	1 018	1 041	947
software	297	343	335
Sector of R&D performance			
Business enterprise	609	716	554
Government	225	184	162
Higher education	475	480	561
Private non-profit	5	4	5

Figure C1 Total R&D expenditure into ICT

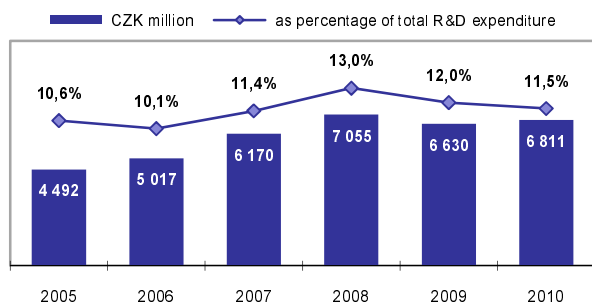
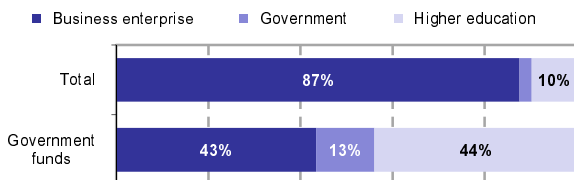


Figure C2 Composition of R&D expenditures into ICT by sector of performance, 2010



Source: CZSO, Annual R&D survey

C ICT R&D expenditures and Patents

Table C3 Total software R&D expenditure in the CR

CZK million

	2008	2009	2010
Total	3 261	3 303	3 664
Sector of R&D performance			
Business enterprise	3 083	3 105	3 415
Government	9	12	13
Higher education	169	174	235
Private non-profit	0	11	1

Table C4 Software R&D expenditure in the Czech Republic funded by government

CZK million

	2008	2009	2010
Total	297	343	335
Sector of R&D performance			
Business enterprise	142	205	137
Government	8	9	11
Higher education	146	125	187
Private non-profit	0	3	1

Figure C3 Total software R&D expenditure

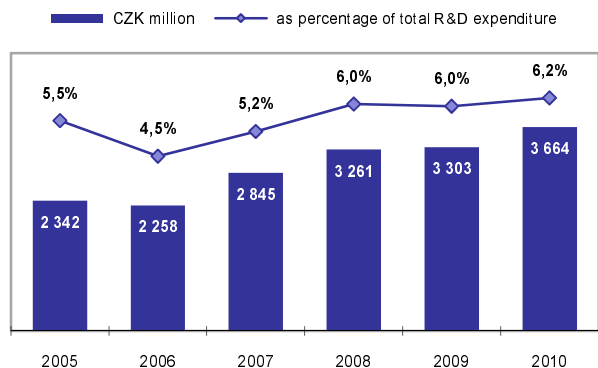
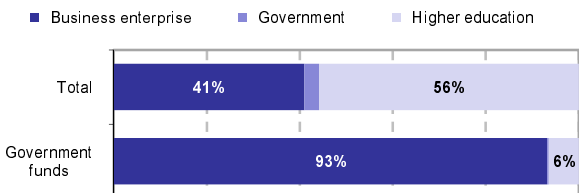


Figure C4 Composition of software R&D expenditure by sector of performance, 2010



Source: CZSO, Annual R&D survey

C ICT R&D expenditures and Patents

Table C5 ICT patents granted or validated in the CR

	number		
	2008	2009	2010
Total	317	304	304
Telecommunications	81	83	79
Consumer electronics	30	25	33
Computers, office machinery	74	70	41
Other ICT	132	126	151
Country of the patent applicant			
Czech applicants	24	42	37
Business enterprise	12	21	7
Government	3	2	3
Higher education	5	17	26
Private persons	5	2	1
Foreign applicants	293	262	267
Germany	95	88	72
United States	41	44	53
Switzerland	21	20	25
Japan	18	17	17

Figure C5 ICT patents granted or validated in the Czech Republic by main ICT categories

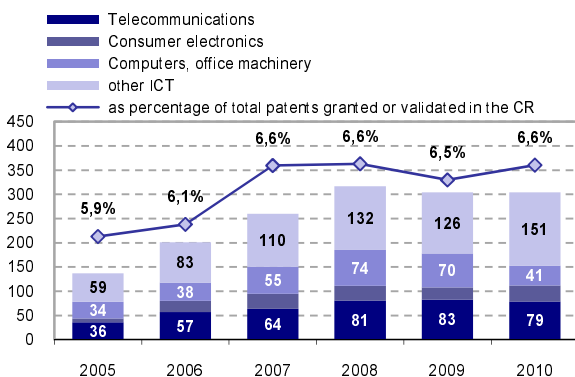
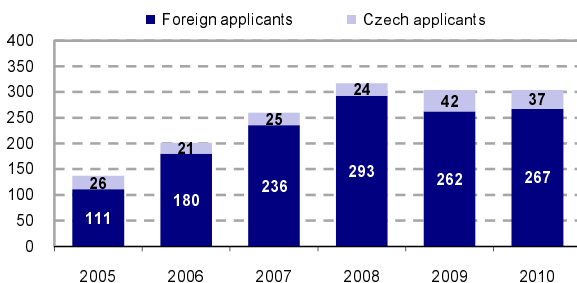


Figure C6 ICT patents of domestic and foreign applicants granted or validated in the Czech Republic



Source: Patent Office of the Czech Republic and CZSO calculations

C ICT R&D expenditures and Patents

Table C6 Valid ICT patents in the CR as of 31.12.2010

	Total	Country of the patent applicant	
		Czech	Foreign
Total	1 406	153	1 253
Telecommunications	380	17	363
Consumer electronics	166	23	143
Computers, office machinery	270	2	268
Other ICT	590	111	479

Figure C7 Composition of valid ICT patents in the Czech Republic as of 31.12.2010 by main ICT categories

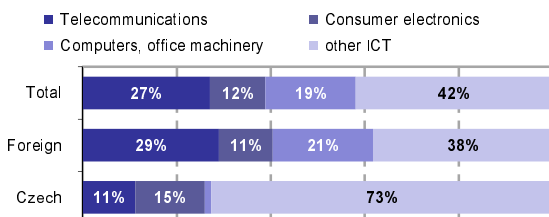
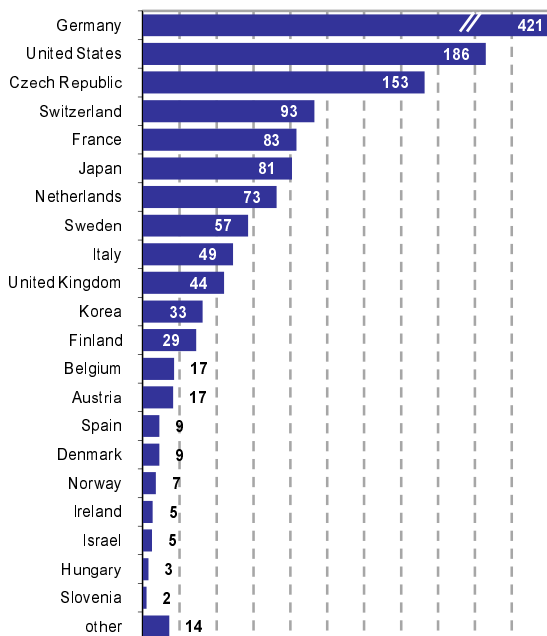


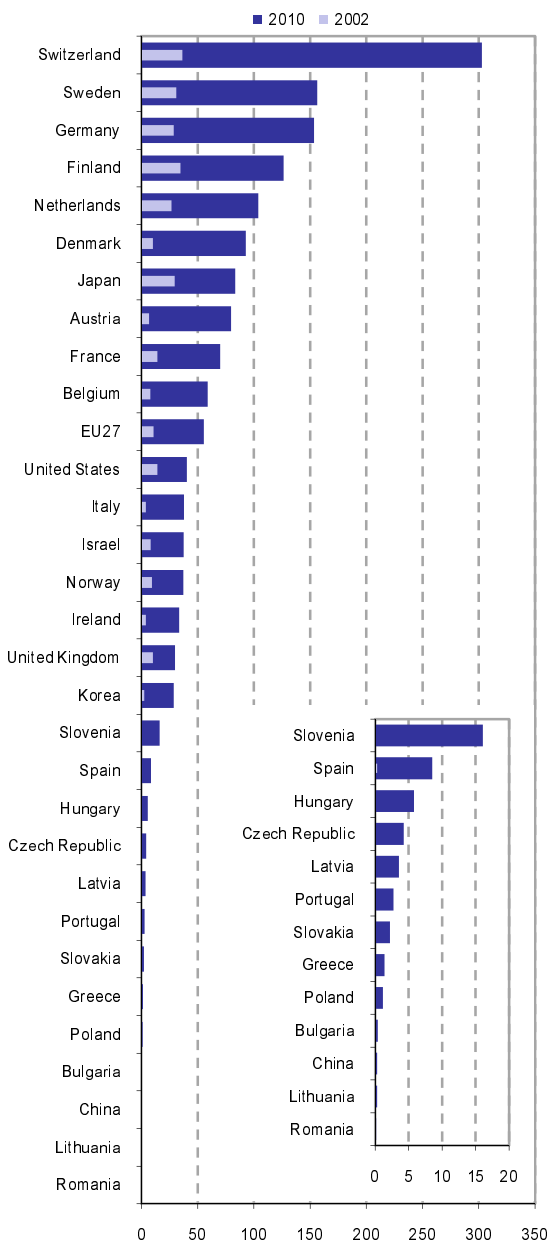
Figure C8 Valid ICT patents in the Czech Republic as of 31.12.2010 by applicant's country of origin



Source: Patent Office of the Czech Republic and CZSO calculations

C ICT R&D expenditures and Patents

**Figure C9 ICT patents granted by the European Patent Office
(per million inhabitants)**



Source: OECD

D ICT external trade

ICT external trade **contains** external trade in both ICT goods and ICT services.

ICT products are defined as goods or services which must be primarily intended to fulfill or enable the function of information processing and communication by electronic means, including transmission and display (OECD 2008).

The new list of ICT goods used for the external trade statistics is based on the *Harmonized System (HS2007)*, an international classification standard used for trade statistics and worked carried by the WPIIS expert group in 2010. List of ICT goods defined at 6-digit level of HS2007 (95 items) was further grouped into the five main categories as follows:

- Computers and peripheral equipment;
- Communication equipment;
- Consumer electronics;
- Electronic components; and
- Miscellaneous ICT components and parts.

Due to substantial changes of respective items of the main ICT goods categories in the classification of the Harmonized System 2007 compared to its previous version of 2002, the detail data on external trade in ICT goods at sub-categories level before 2007 are not published here. Because the scope of ICT goods has narrowed compared to 2003 ICT goods definition, data based on these two definitions are not comparable.

The Czech **External Trade Database** of the Czech Statistical Office (CZSO) was used as a data source for national data. For more information see:

<http://apl.czso.cz/pll/stazo/STAZO.STAZO?jazyk=EN>

The **UN Comtrade database** was used as a data source for the international comparison: <http://comtrade.un.org/db/>

Data on trade in ICT goods for main ICT categories published by the Czech Statistical Office differ slightly from the data published by OECD or UNCTAD as different classification of some ICT items was used.

Further information on ICT goods trade statistics can be found at:

http://www.czso.cz/eng/redakce.nsf/i/information_economy

Data on trade in **ICT services** are currently limited compared to data on trade in ICT goods. The current services classification is based on the Extended Balance of Payments Services Classification (EBOPS). The ICT services are subdivided into two fundamental categories as follows:

- Telecommunication services (code 247); and
- IT (computer) services (code 263).

ICT services are included in the Balance of Payments (BOP) within the services trade statistics. Since 2005 data about trade in ICT services in the Czech Republic comes from the **quarterly survey on exports and imports of services** carry out by CZSO. The individual BOP items are defined in compliance with individual receipt and payment items and correspond with international codes (BPM5).

The **UN and OECD Service trade databases** were used as a data source for the international comparison.

Further information on ICT services trade statistics can be found at:

http://www.czso.cz/csu/redakce.nsf/i/zahranicni_obchod_s_ict_sluzbami.

D ICT external trade

Table D1 ICT goods exports from the Czech Republic

	CZK million		
	2008	2009	2010
Total	361 427	314 002	379 572
Communication equipment	45 716	27 953	34 358
Computers and peripherals	154 488	142 412	175 425
Consumer electronics	91 879	76 171	85 739
Electronic components	33 466	32 812	43 305
Miscellaneous ICT components/parts	35 878	34 655	40 745

Figure D1 ICT goods exports

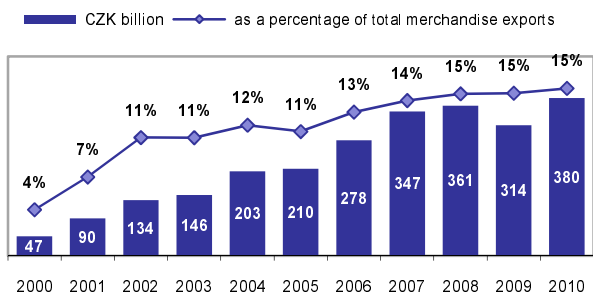


Figure D2 Composition of ICT goods exports by main groups of commodities

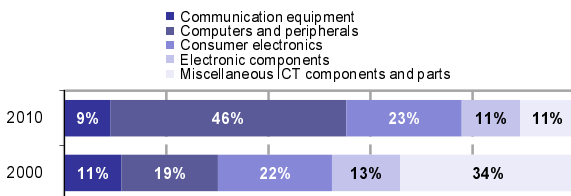
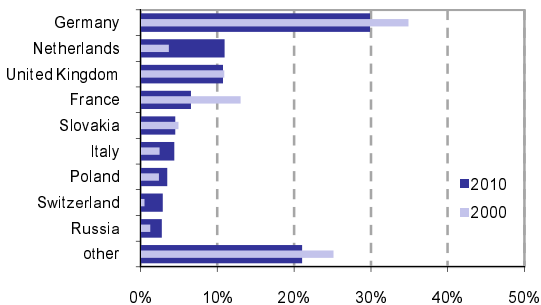


Figure D3 ICT goods exports from the CR by countries



Source: CZSO, International trade database

D ICT external trade

Table D2 ICT goods imports to the Czech Republic

CZK million

	2008	2009	2010
Total	345 340	315 247	429 872
Communication equipment	32 307	24 276	34 683
Computers and peripherals	94 842	91 653	126 148
Consumer electronics	40 944	29 644	28 540
Electronic components	59 753	73 223	111 348
Miscellaneous ICT components and parts	117 494	96 451	129 154

Figure D4 ICT goods imports

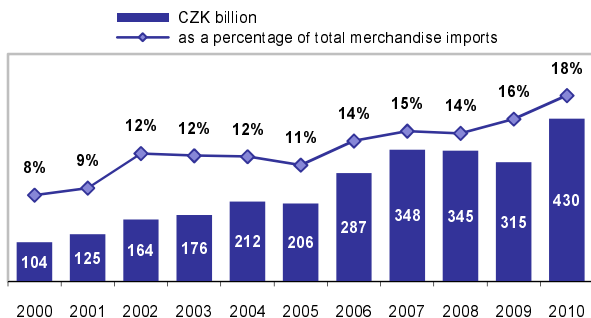


Figure D5 Composition of ICT goods imports by main groups of commodities

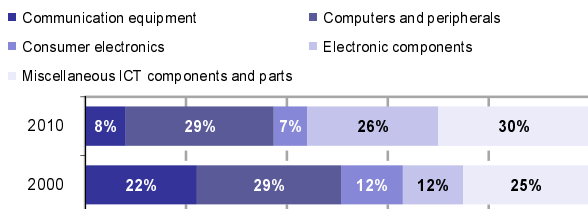
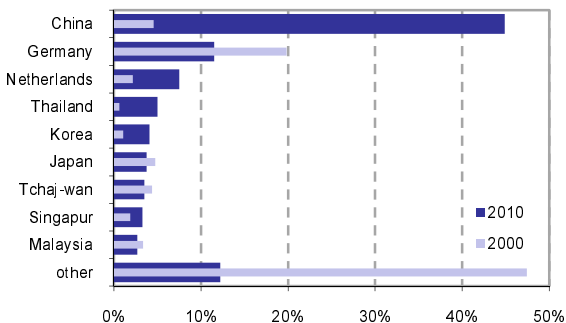


Figure D6 ICT goods imports to the CR by countries



Source: CZSO, International trade database

D ICT external trade

**Figure D7 ICT goods exports
(as percentage of total merchandise exports)**

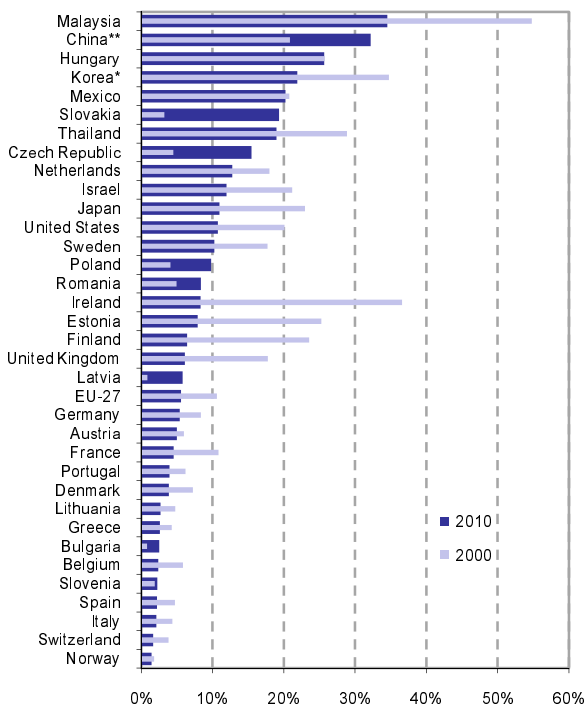
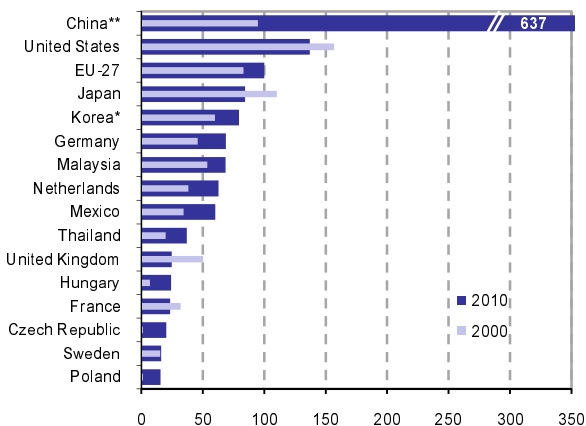


Figure D8 ICT goods exports (US\$ billion)



* year 2009; ** incl. Hongkong and Macao

Source: UN, Comtrade database

D ICT external trade

**Figure D9 ICT goods imports
(as percentage of total merchandise imports)**

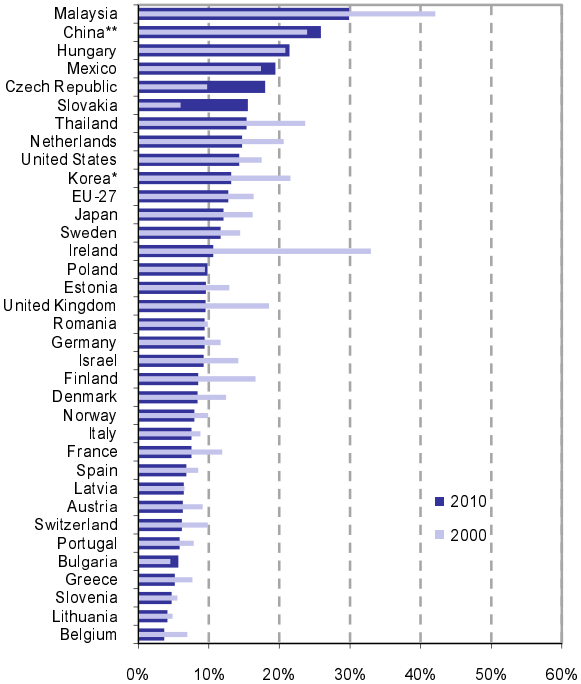
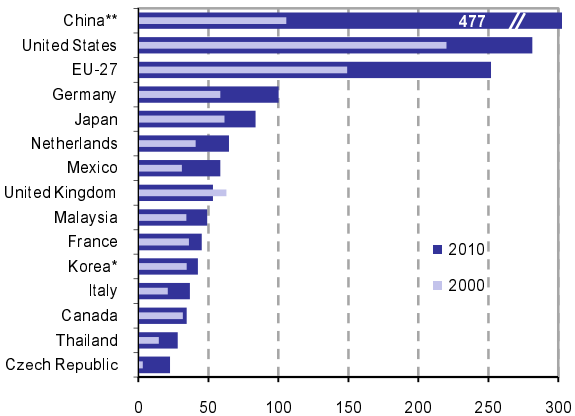


Figure D10 ICT goods imports (US\$ billion)



* year 2009; **incl. Hongkong and Macao

Source: UN, Comtrade database

D ICT external trade

Table D3 Communication equipment exports from the CR

	CZK million		
	2008	2009	2010
Total	45 716	27 953	34 358
Mobile phones	22 071	12 690	16 125
Other telecommunication equipment	2 331	1 951	1 487
Radio or TV transmission apparatus	21 315	13 312	16 746

Figure D11 Communication equipment exports

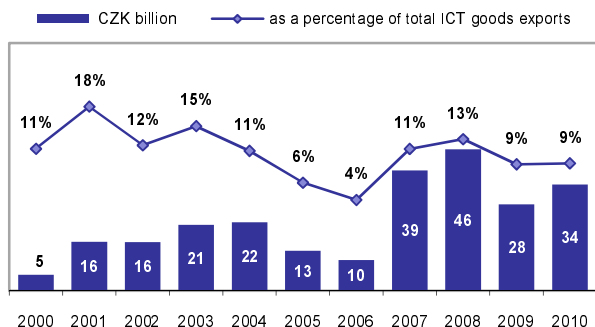


Figure D12 Composition of communication equipment exports by commodities

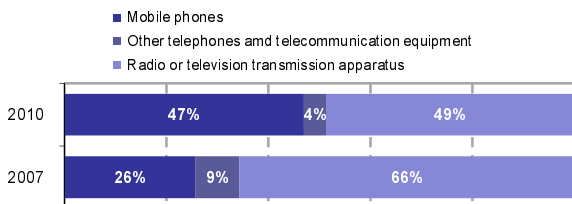
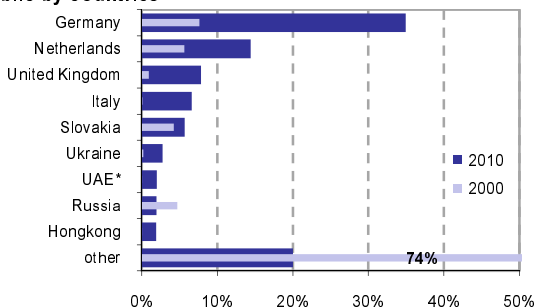


Figure D13 Communication equipment exports from the Czech Republic by countries



* United Arab Emirates

Source: CZSO, International trade database

D ICT external trade

Table D4 Communication equipment imports to the CR

	CZK million		
	2008	2009	2010
Total	32 307	24 276	34 683
Mobile phones	20 870	14 345	20 798
Other telecommunication equipment	2 466	2 249	2 415
Radio or TV transmission apparatus	8 971	7 682	11 469

Figure D14 Communication equipment imports

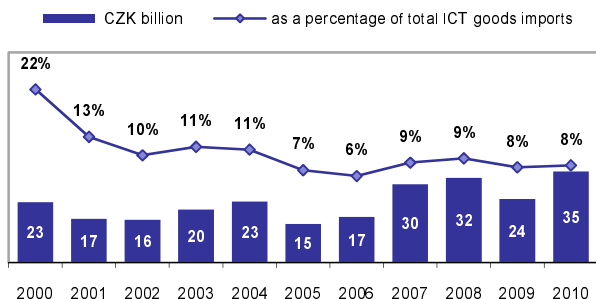


Figure D15 Composition of communication equipment imports by commodities

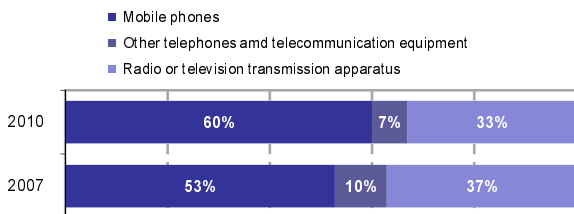
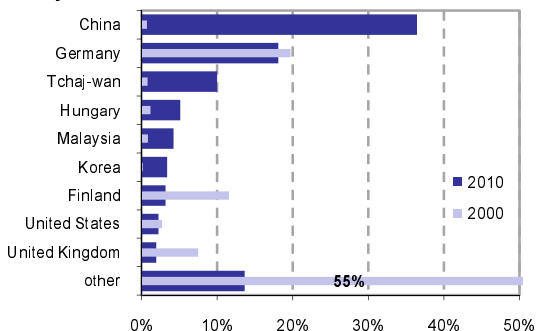


Figure D16 Communication equipment imports to the Czech Republic by countries



Source: CZSO, International trade database

D ICT external trade

Table D5 Computers and peripherals exports from the CR

CZK million

	2008	2009	2010
Total	154 488	142 412	175 425
Portable computers and PDAs	10 538	14 684	34 801
Other computers	84 724	73 442	86 393
Computer peripherals, total	59 226	54 285	54 231
Storage units	23 902	21 948	27 171
Sound, video and similar PCs cards	11 490	14 031	6 681
PC monitors and projectors	9 480	5 409	4 510
Printers or copying machines used with PCs	6 906	5 462	5 575
Computer peripherals n.e.s.*	7 450	7 435	10 294

* keyboards; joysticks, computer mice, scanners or optical readers

Figure D17 Computers and peripherals exports

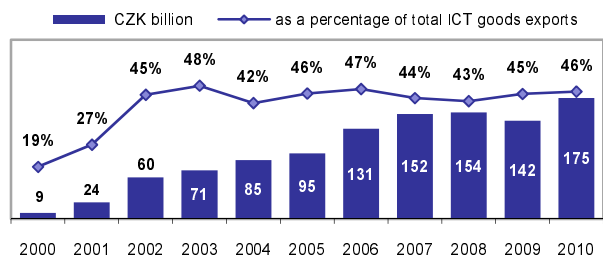


Figure D18 Composition of computers and peripherals exports by commodities

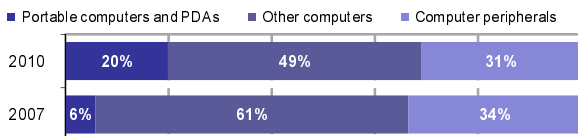
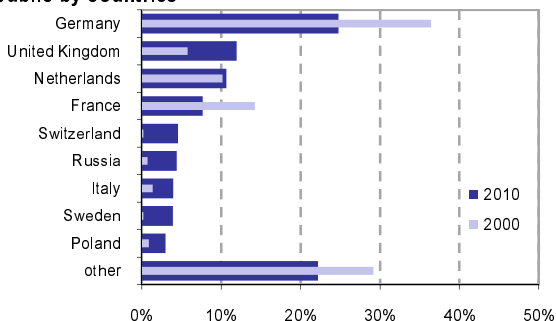


Figure D19 Computers and peripherals exports from the Czech Republic by countries



Source: CZSO, International trade database

D ICT external trade

Table D6 Computers and peripherals imports to the CR

CZK million

	2008	2009	2010
Total	94 842	91 653	126 148
Portable computers and PDAs	18 313	22 054	46 209
Other computers	9 544	10 254	15 437
Computer peripherals, total	66 984	59 345	64 501
Storage units	29 617	27 801	36 617
Sound, video and similar PCs cards	12 924	10 471	4 106
PC monitors and projectors	4 318	3 289	4 490
Printers or copying machines used with PCs	7 187	6 223	7 033
Computer peripherals n.e.s.*	12 939	11 561	12 254

* keyboards; joysticks, computer mice, scanners or optical readers

Figure D20 Computers and peripherals imports

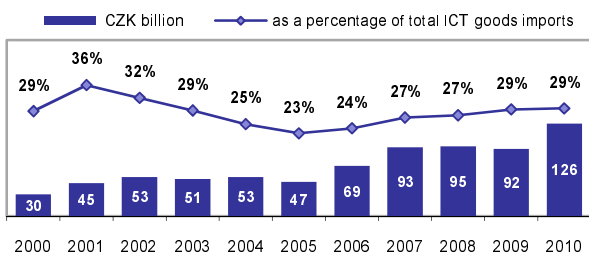


Figure D21 Composition of computers and peripherals imports by commodities

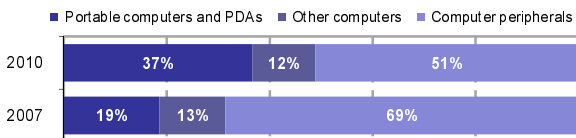
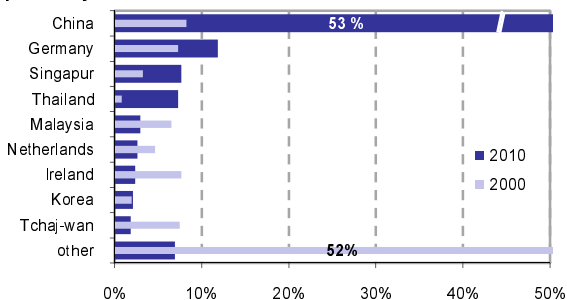


Figure D22 Computers and peripherals imports to the Czech Republic by countries



Source: CZSO, International trade database

D ICT external trade

Table D7 Consumer electronics exports from the CR

CZK million

	2008	2009	2010
Total	91 879	76 171	85 739
Radio and TV receivers	67 919	54 972	66 761
Sound, video and image recording and reproducing apparatus	11 265	13 764	12 327
other*	12 695	7 435	6 652

Headphones, earphones and combined microphone/speaker sets; Audio-frequency electric amplifiers; Electric sound amplifier sets

Figure D23 Consumer electronics exports

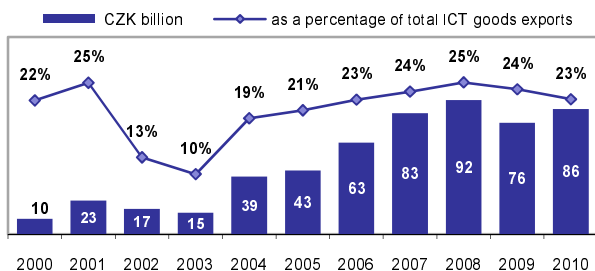


Figure D24 Composition of consumer electronics exports by commodities

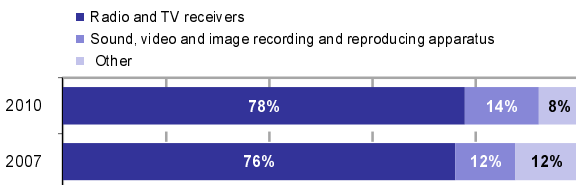
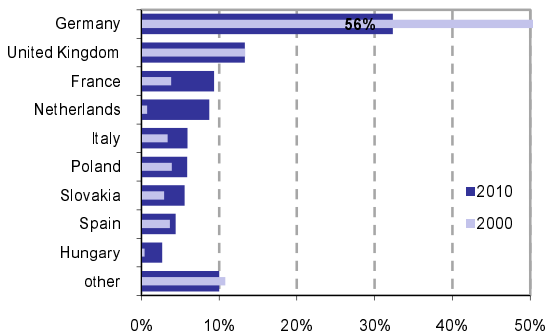


Figure D25 Consumer electronics exports from the Czech Republic by countries



Source: CZSO, International trade database

D ICT external trade

Table D8 Consumer electronics imports to the Czech Republic

CZK million

	2008	2009	2010
Total	40 944	29 644	28 540
Radio and TV receivers	20 235	13 368	11 244
Sound, video and image recording and reproducing apparatus	12 733	9 822	8 503
other*	7 976	6 454	8 793

Headphones, earphones and combined microphone/speaker sets; Audio-frequency electric amplifiers; Electric sound amplifier sets

Figure D26 Consumer electronics imports

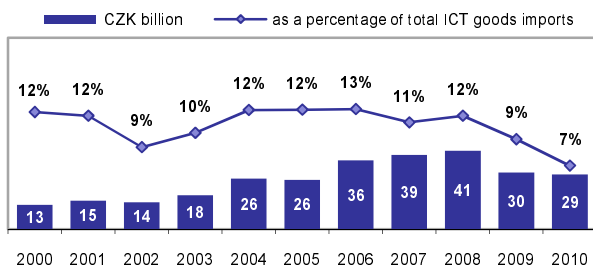


Figure D27 Composition of consumer electronics imports by commodities

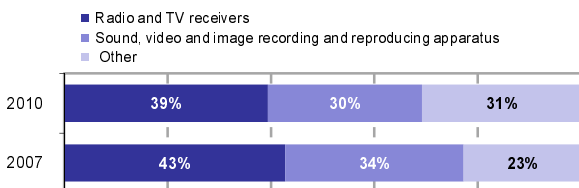
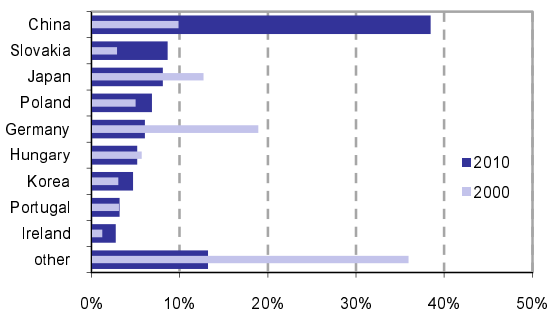


Figure D28 Consumer electronics imports to the Czech Republic by countries



Source: CZSO, International trade database

D ICT external trade

Table D9 Electronic components exports from the CR

	CZK million		
	2008	2009	2010
Total	33 466	32 812	43 305
Electronic integrated circuits	14 587	15 621	19 438
<i>thereof processors & controllers</i>	10 822	12 000	14 869
Printed circuits	3 253	2 639	2 996
Other electronic components	15 627	14 551	20 871

Figure D29 Electronic components exports

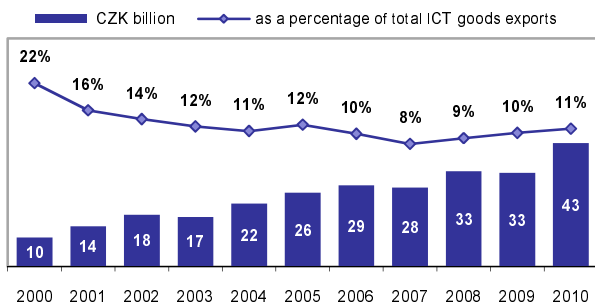


Figure D30 Composition of electronic components exports by commodities

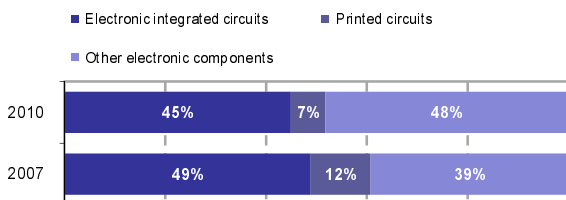
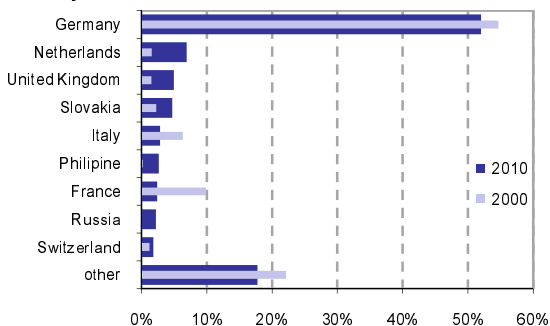


Figure D31 Electronic components exports from the Czech Republic by countries



Source: CZSO, International trade database

D ICT external trade

Table D10 Electronic components imports to the CR

	CZK million		
	2008	2009	2010
Total	59 753	73 223	111 348
Electronic integrated circuits	32 816	35 643	45 163
<i>thereof processors & controllers</i>	25 003	28 877	36 279
Printed circuits	9 209	6 549	7 329
Other electronic components	17 728	31 031	58 856

Figure D32 Electronic components imports

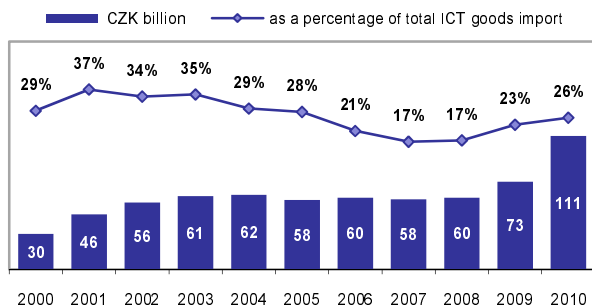


Figure D33 Composition of electronic components imports by commodities

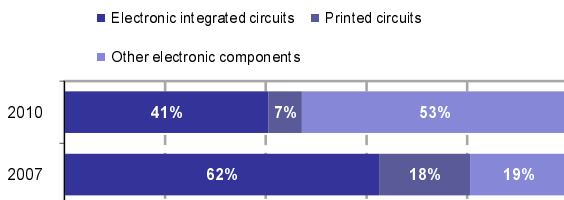
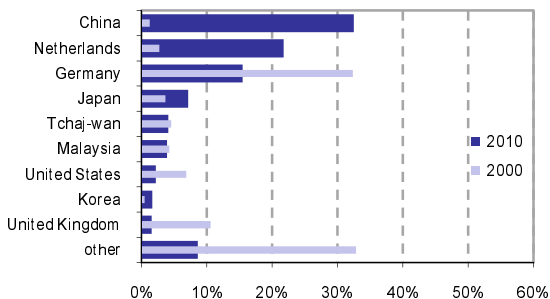


Figure D34 Electronic components imports to the Czech Republic by countries



Source: CZSO, International trade database

D ICT external trade

Table D11 Miscellaneous ICT components/parts exports from the Czech Republic

	CZK million		
	2008	2009	2010
Total	35 878	34 655	40 745
Parts and accessories of			
- computing machines	18 440	17 393	23 203
- telecommunication equipment	2 191	7 206	7 716
- consumer electronics	15 247	10 056	9 826

Figure D35 Miscellaneous ICT components/parts exports

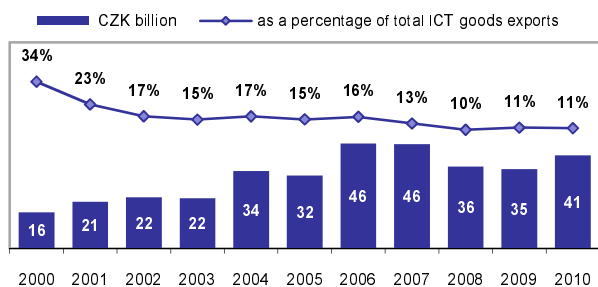


Figure D36 Composition of miscellaneous ICT components/parts exports by commodities

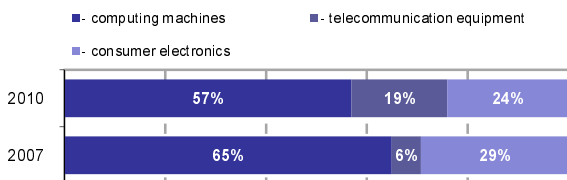
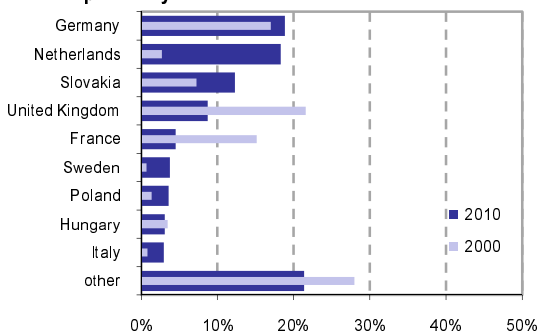


Figure D37 Miscellaneous ICT components/parts exports from the Czech Republic by countries



Source: CZSO, International trade database

D ICT external trade

Table D12 Miscellaneous ICT components/parts imports to the Czech Republic

	CZK million		
	2008	2009	2010
Total	117 494	96 451	129 154
Parts and accessories of			
- computing machines	54 149	48 653	62 433
- telecommunication equipment	5 222	4 632	7 152
- consumer electronics	58 123	43 166	59 569

Figure D38 Miscellaneous ICT components/parts imports

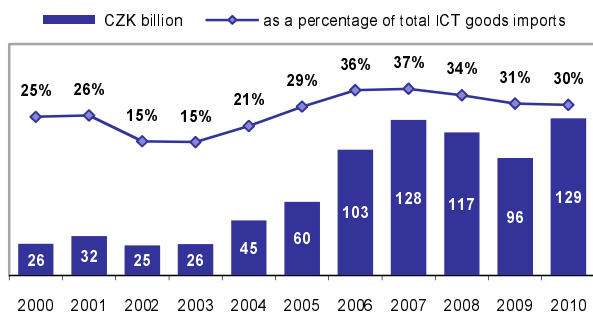


Figure D39 Composition of miscellaneous ICT components/parts imports by commodities

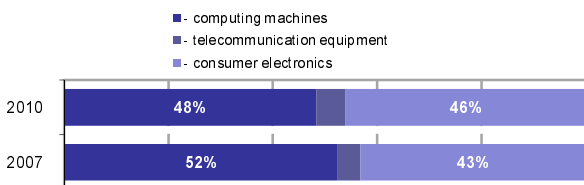
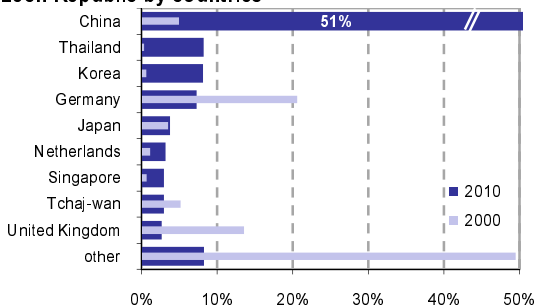


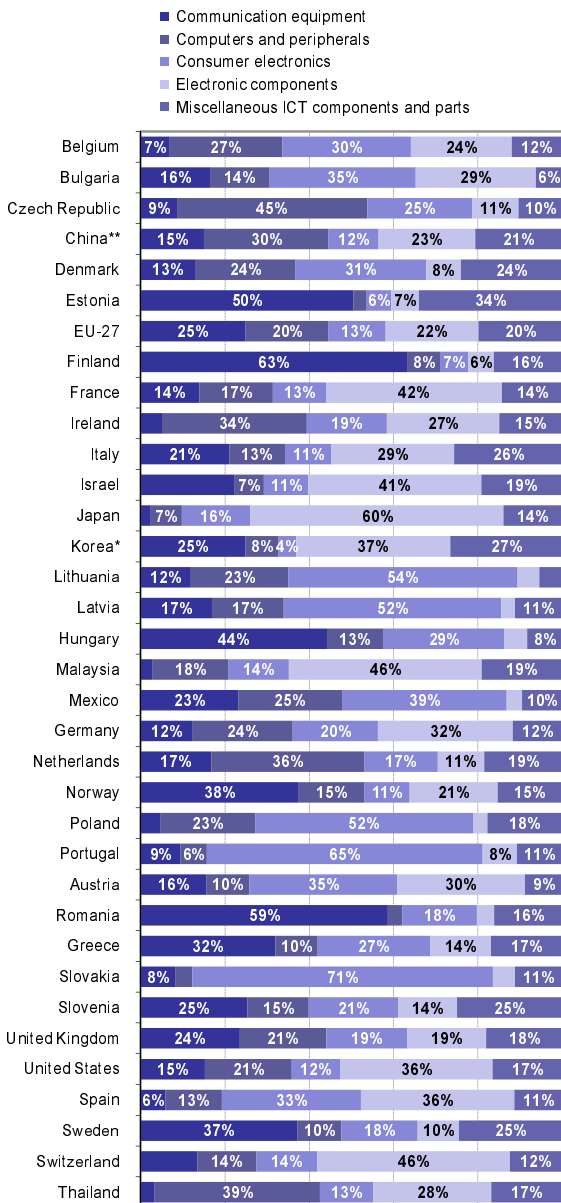
Figure D40 Miscellaneous ICT components/parts imports to the Czech Republic by countries



Source: CZSO, International trade database

D ICT external trade

Figure D41 Composition of ICT goods exports by main groups of commodities, 2010

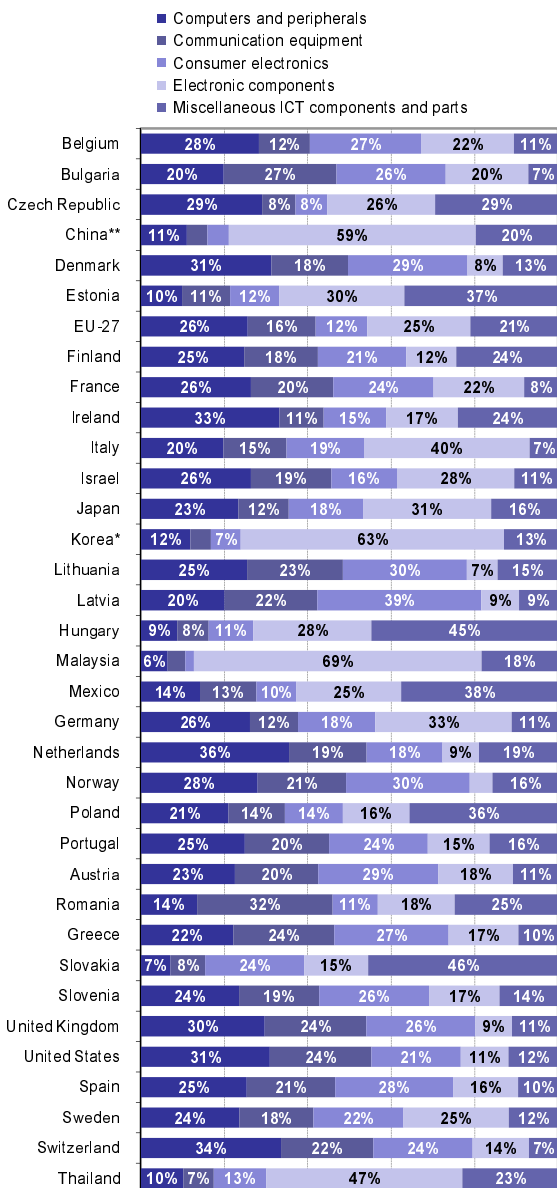


* year 2009; **incl. Hongkong and Macao

Source: UN, Comtrade database

D ICT external trade

Figure D42 Composition of ICT goods imports by main groups of commodities, 2010



* year 2009; **incl. Hongkong and Macao

Source: UN, Comtrade database

D ICT external trade

Table D13 ICT services exports from the Czech Republic

	CZK million		
	2008	2009	2010
Total	31 024	33 266	31 506
thereof from foreign affiliates	27 708	29 315	28 926
Type of services			
Telecommunication services	9 023	9 346	9 156
IT services	22 002	23 920	22 351
Size class of enterprises			
Small (0-49 employees)	3 381	1 920	1 857
Medium (50-249 employees)	5 460	6 682	7 402
Large (250+ employees)	22 184	24 664	22 248

Figure D43 ICT services exports

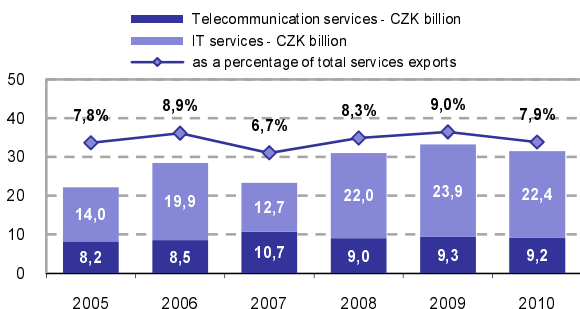


Figure D44 Composition of ICT services exports by size of exporting enterprises

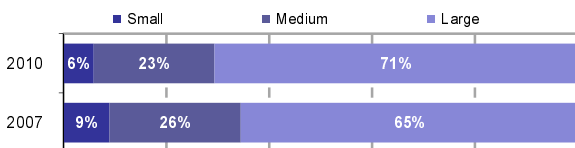
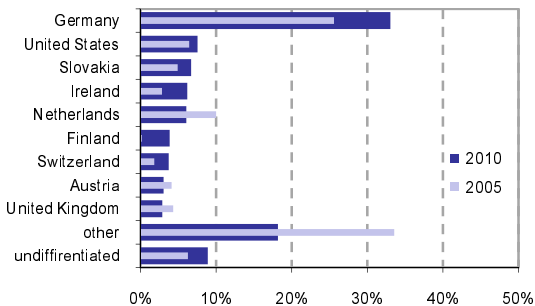


Figure D45 ICT services exports from the CR by countries



Source: CZSO, Quarterly survey on exports and imports of services

D ICT external trade

Table D14 ICT services imports to the Czech Republic

	CZK million		
	2008	2009	2010
Total	22 533	28 913	29 944
thereof to foreign affiliates	21 116	26 850	28 057
Type of services			
Telecommunication services	8 313	10 780	10 433
IT services	14 220	18 133	19 511
Size class of enterprises			
Small (0-49 employees)	2 354	2 315	1 892
Medium (50-249 employees)	2 671	4 055	5 813
Large (250+ employees)	17 508	22 543	22 239

Figure D46 ICT services imports

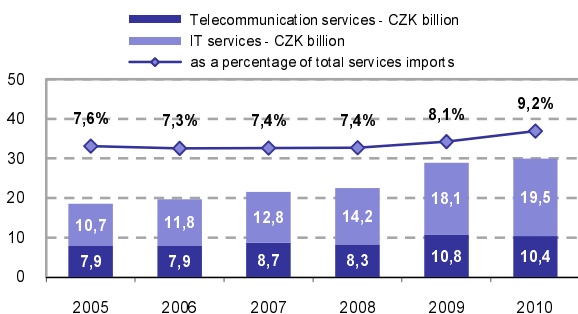


Figure D47 Composition of ICT services imports by size of importing enterprises

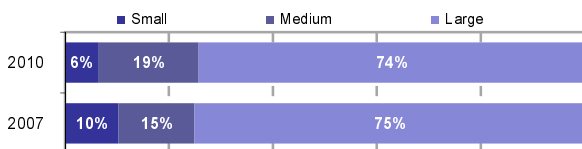
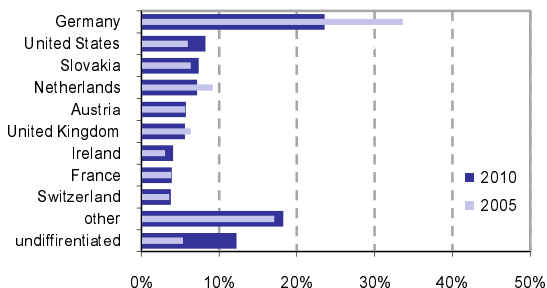


Figure D48 ICT services imports to the CR by countries



Source: CZSO, Quarterly survey on exports and imports of services

D ICT external trade

**Figure D49 ICT services exports
(as percentage of total services exports)**

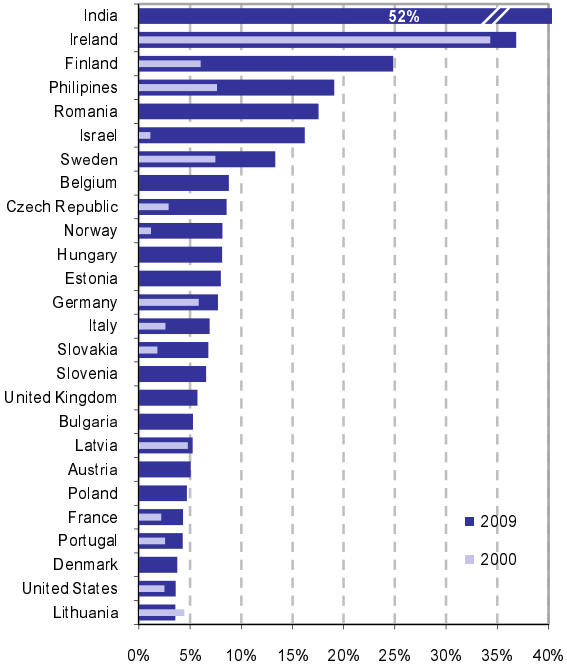
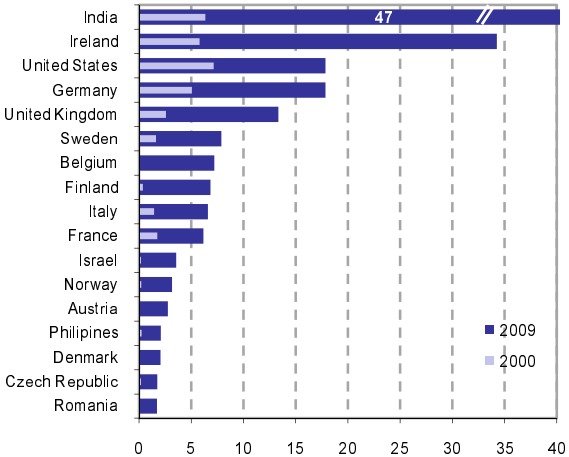


Figure D50 ICT services exports (US\$ billion)



Source: OECD – Trade in Services; UN – Service trade database

D ICT external trade

**Figure D51 ICT services imports
(as percentage of total services imports)**

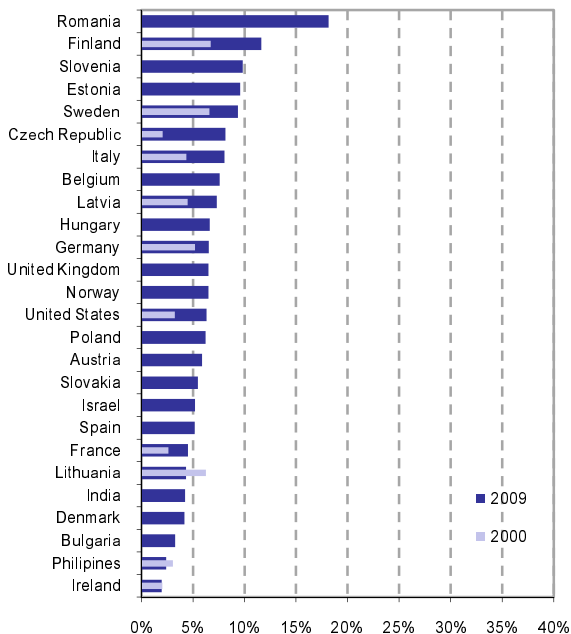
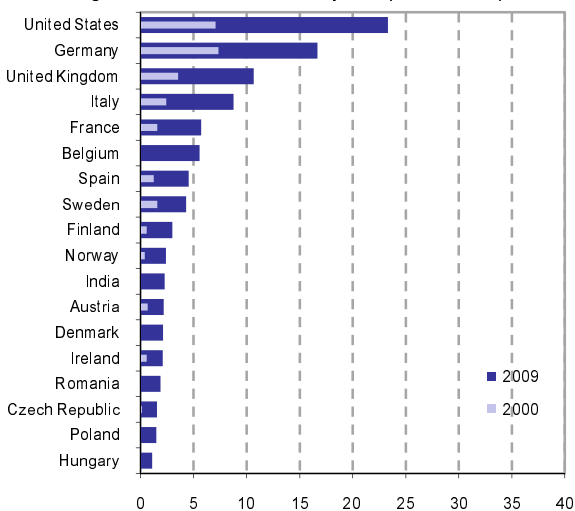


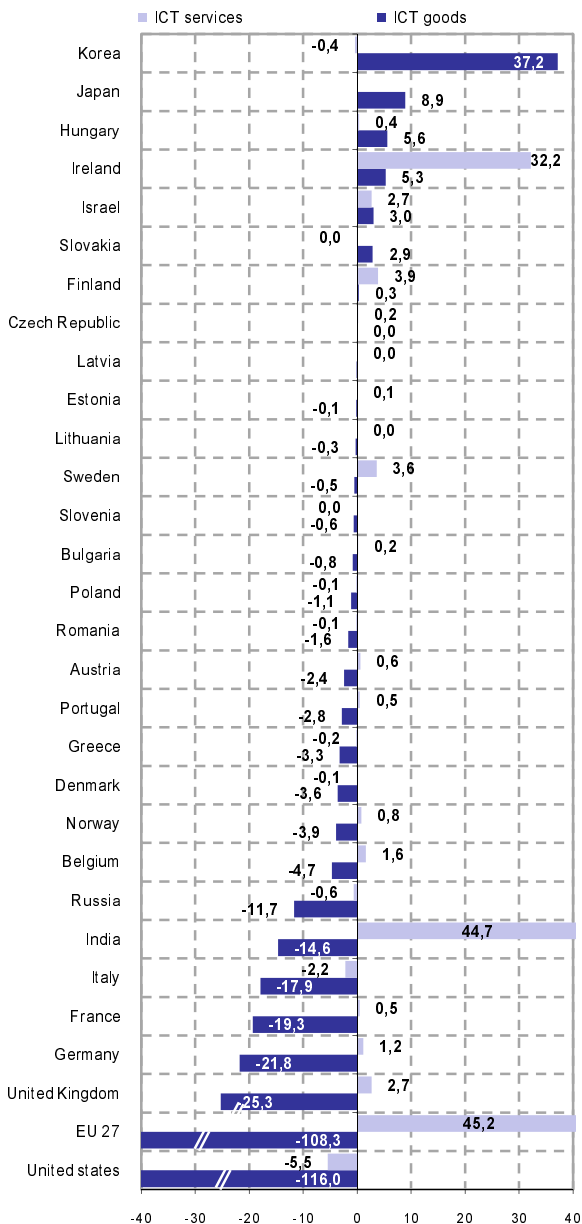
Figure D52 ICT services imports (US\$ billion)



Source: OECD – Trade in Services; UN – Service trade database

D ICT external trade

Figure D53 External trade balance in ICT goods and services, 2009 (US\$ billion)



Source: OECD, International trade database; UN - Comtrade

E ICT sector

In general, **the term ICT sector** includes a combination of ICT manufacturing and ICT services industries which are associated with the production and/or distribution of information and communication technologies and a provision of related services.

The list of ICT sector activities (industries) is decided on the following OECD definition: "The production (goods and services) of a candidate industry must primarily be intended to fulfill or enable the function of information processing and communication by electronic means including transmission and display".

In 2007 the ICT sector together with Content and media sector (information economy) was recognized by the United Nation Statistics Division as a new alternative grouping of economic activities defined within the International Standard Industrial Classification of All Economic Activities (ISIC), Revision 4. For more information see following web page:

http://unstats.un.org/unsd/cr/registry/docs/i4_information_economy.pdf

The activities (industries) in the ICT sector can be grouped into the following free main categories: ICT manufacturing industries, ICT trade industries and ICT services industries. ICT sector involves all businesses whose dominating activities belong to the **CZ-NACE groups** as follows:

ICT manufacturing industries:

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

ICT trade industries:

- Wholesale of information and communication equipment (46.5)

ICT services industries:

Telecommunication activities:

- Wired telecommunications activities (61.1)
- Wireless telecommunications activities (61.2)
- Satellite and other telecommunications activities. (61.3 and 61.9)

IT services:

- Software publishing; Computer programming, consultancy and related activities (58.2 and 62.0)
- Data processing, hosting and related activities; web portals (63.1)
- Repair of computers and communication equipment (95.1)

Data for this chapter were obtained from the annual structural survey of business entities from selected production industries (**SBS – Structural business statistics**) providing a more detailed range of final data which are available with a greater time delay. In the case of SBS the first reference period for data processing according to the new classification CZ-NACE was the year 2008. Data for 2005–2007 are based on the retroactive conversion of structural data. More information about the data from the SBS, including definitions of individual indicators, is available at: http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Structural_business_statistics

The **Eurostat Structural Business Statistics Database** was used as a data source for the international comparison.

http://epp.eurostat.ec.europa.eu/portal/page/portal/european_business/introduction

Further information on ICT sector statistics can be found at:

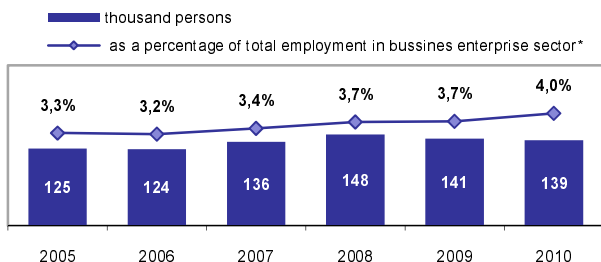
http://www.czso.cz/eng/redakce.nsf/i/ict_sector

E ICT sector

Table E1 Employment in ICT sector in the Czech Republic

	headcount persons		
	2008	2009	2010
Total	147 916	141 068	138 596
ICT manufacturing	41 515	34 432	29 375
ICT trade industries	11 235	10 389	10 975
Telecommunications	22 196	21 859	21 264
IT services	72 970	74 388	76 983

Figure E1 Employment in ICT sector



*without Financial and insurance activities (CZ-NACE Section K)

Figure E2 Composition of employment in ICT sector by main groups of activities

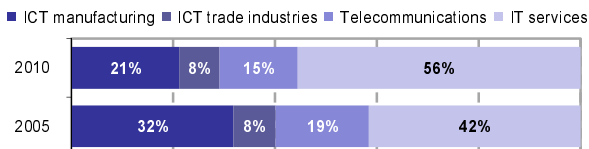


Figure E3 Composition of employment in ICT sector by ownership of enterprises

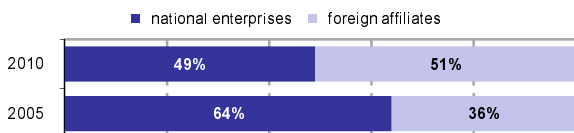
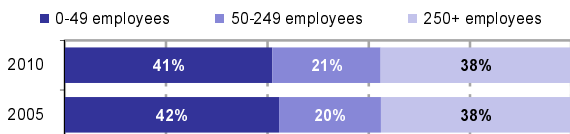


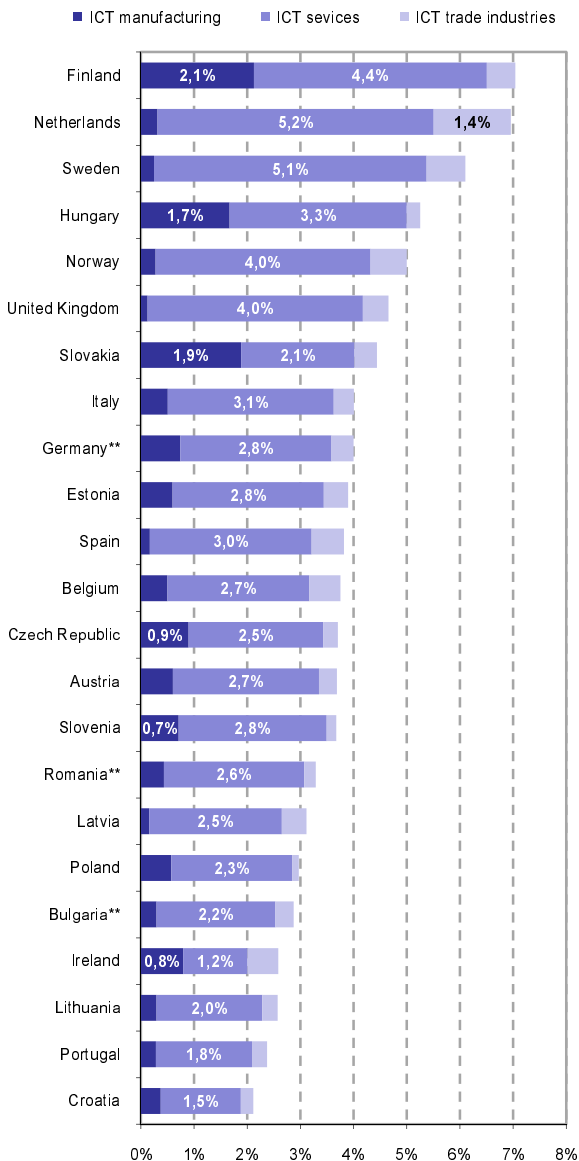
Figure E4 Composition of employment in ICT sector by size class of enterprises



Source: CZSO, Structural Business Survey

E ICT sector

**Figure E5 Employment in ICT sector, 2009
(as a percentage of total business sector employment*)**



* without Financial and insurance activities (CZ-NACE Section K)

** year 2008

Source: Eurostat, Structural business statistics

E ICT sector

Table E2 Employment in ICT manufacturing in the CR

	headcount persons		
	2008	2009	2010
Total	41 515	34 432	29 375
Employees	39 114	32 093	27 039
Self-employed	2 402	2 339	2 337
Ownership of enterprises			
national enterprises	11 936	8 694	8 402
foreign affiliates	29 579	25 739	20 973
Size class of enterprises			
Small (0-49 employees)	7 061	6 710	6 627
Medium (50-249 employees)	6 485	6 491	5 596
Large (250+ employees)	27 969	21 231	17 152
Industry (CZ-NACE Group)			
Manuf. of computers and peripherals	10 129	8 269	8 130
Manuf. of electronic components	11 623	9 184	8 850
Manuf. of communication equipment	6 713	6 516	6 600
Manuf. of consumer electronics	13 050	10 464	5 794

Figure E6 Employment in ICT manufacturing

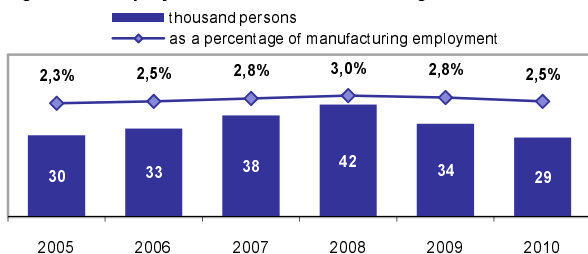


Figure E7 Composition of employment in ICT manufacturing by Industry

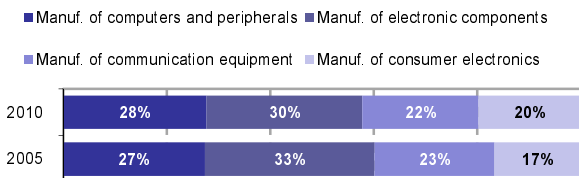
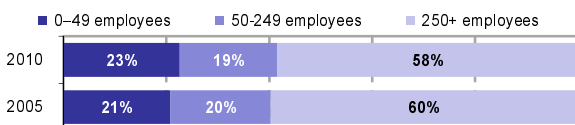


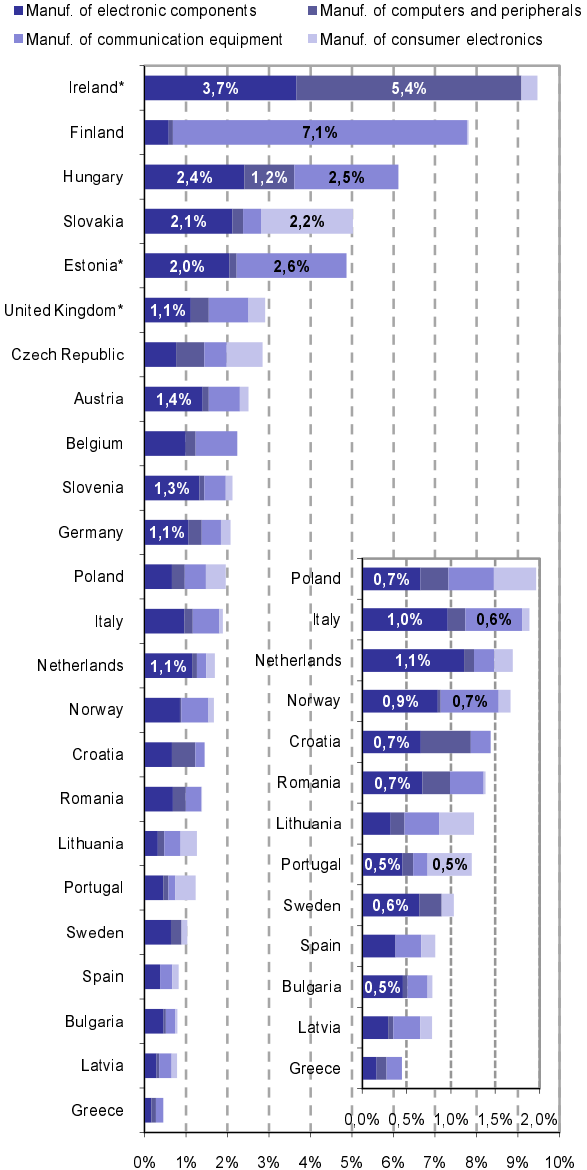
Figure E8 Composition of employment in ICT manufacturing by size class of enterprises



Source: CZSO, Structural Business Survey

E ICT sector

**Figure E9 Employment in ICT manufacturing, 2009
(as a percentage of total manufacturing employment)**



* year 2008

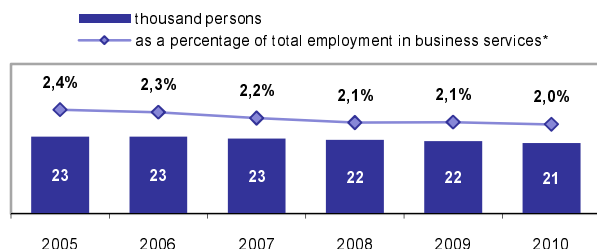
Source: Eurostat, Structural business statistics

E ICT sector

Table E3 Employment in Telecommunications in the CR

	headcount persons		
	2008	2009	2010
Total	22 196	21 859	21 264
Employees	21 087	20 856	20 419
Self-employed	1 109	1 002	845
Ownership of enterprises			
national enterprises	5 051	4 895	4 654
foreign affiliates	17 145	16 963	16 610
Size class of enterprises			
Small (0-49 employees)	3 872	3 796	3 383
Medium (50-249 employees)	1 903	1 634	1 836
Large (250+ employees)	16 421	16 429	16 045
Industry (CZ-NACE Group)			
Wireless telecommunications activities	8 339	8 542	8 820
Wired telecommunications activities	12 951	12 428	11 600
Other telecommunications activities	905	888	844

Figure E10 Employment in Telecommunications



*without Financial and insurance activities (CZ-NACE Section K)

Figure E11 Composition of employment in Telecommunications by Industry

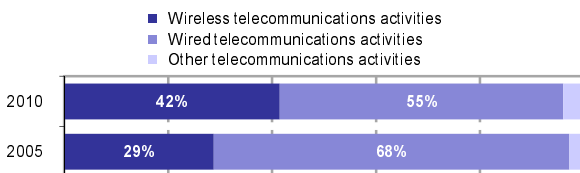
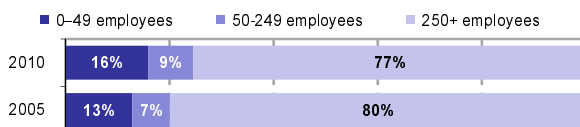


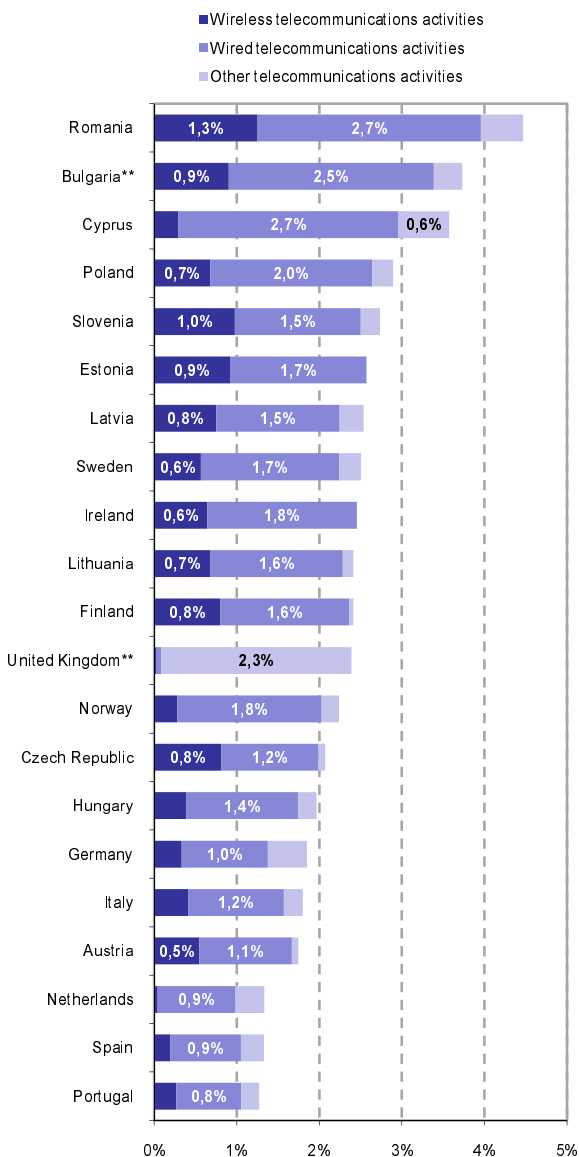
Figure E12 Composition of employment in Telecommunications by size class of enterprises



Source: CZSO, Structural Business Survey

E ICT sector

Figure E13 Employment in Telecommunications, 2009
(as a percentage of total employment in business services*)



* without Financial and insurance activities (CZ-NACE Section K)

** year 2008

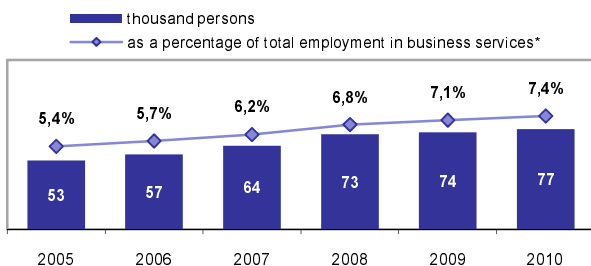
Source: Eurostat, Structural business statistics

E ICT sector

Table E4 Employment in IT services in the Czech Republic

	headcount persons		
	2008	2009	2010
Total	72 970	74 388	76 983
Employees	58 261	58 920	61 177
Self-employed	14 709	15 468	15 806
Ownership of enterprises			
national enterprises	46 459	45 294	47 346
foreign affiliates	26 512	29 094	29 637
Size class of enterprises			
Small (0-49 employees)	38 350	38 963	39 308
Medium (50-249 employees)	18 146	17 456	18 982
Large (250+ employees)	16 474	17 969	18 693
Industry (CZ-NACE Group)			
Computer programming and related act.	55 790	56 660	59 235
Data processing, hosting and related act	11 106	11 035	10 996
Repair of PCs and commun. equipment	6 074	6 693	6 752

Figure E14 Employment in IT services



* without Financial and insurance activities (CZ-NACE Section K)

Figure E15 Composition of employment in IT services by Industry

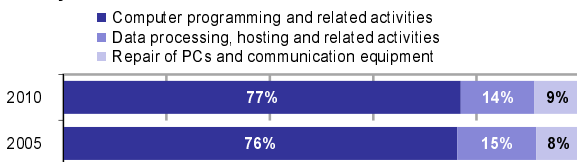
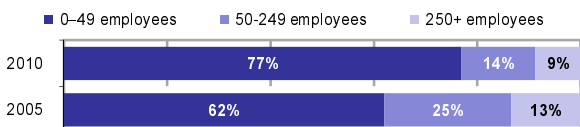
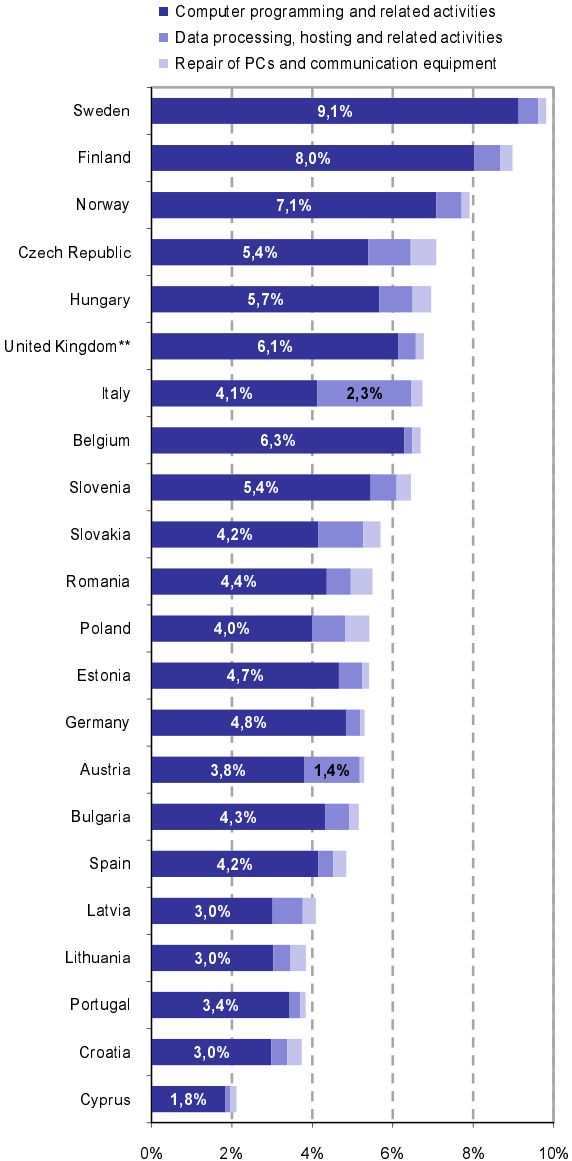


Figure E16 Composition of employment in IT services by size class of enterprises



Source: CZSO, Structural Business Survey

**Figure E17 Employment in IT services by Industry, 2009
(as a percentage of total business services employment*)**



* without Financial and insurance activities (CZ-NACE Section K)

** year 2008

Source: Eurostat, Structural business statistics

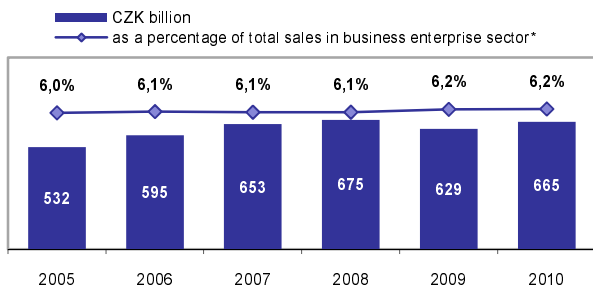
E ICT sector

Table E5 Sales in ICT sector in the Czech Republic

CZK million

	2008	2009	2010
Total	674 813	628 505	664 522
ICT manufacturing	265 053	230 892	257 320
ICT trade industries	108 033	94 287	111 453
Telecommunications	144 655	137 639	128 773
IT services	157 073	165 687	166 975

Figure E18 Sales in ICT sector



* without Financial and insurance activities (CZ-NACE Section K)

Figure E19 Sales in ICT sector by main groups of activities

■ ICT manufacturing ■ ICT trade industries ■ Telecommunications ■ IT services

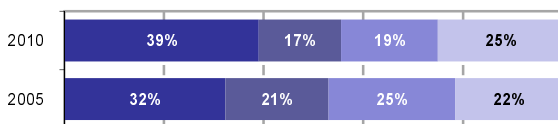


Figure E20 Sales in ICT sector by ownership of enterprises

■ national enterprises ■ foreign affiliates

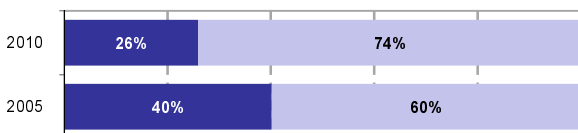
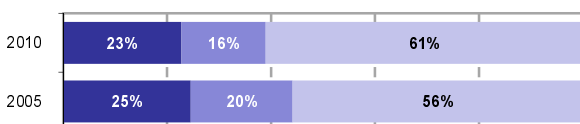


Figure E21 Sales in ICT sector by size class of enterprises

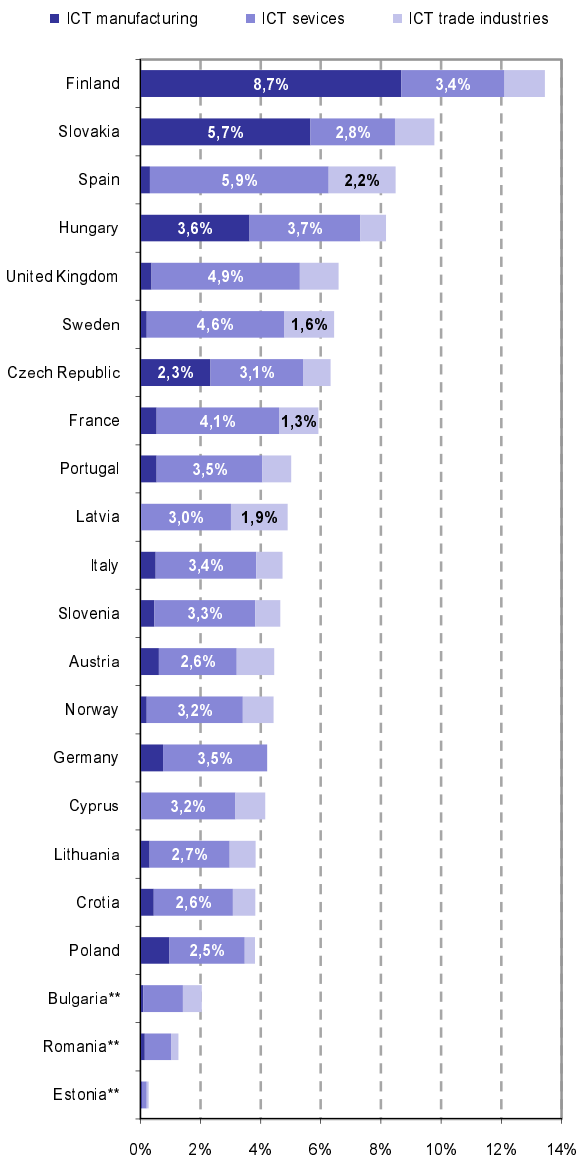
■ 0-49 employees ■ 50-249 employees ■ 250+ employees



Source: CZSO, Structural Business Survey

E ICT sector

Figure E22 Sales in ICT sector, 2009
(as a percentage of total sales in business enterprise sector*)



* without Financial and insurance activities (CZ-NACE Section K)

** year 2008

Source: Eurostat, Structural business statistics

E ICT sector

Table E6 Sales in ICT manufacturing in the Czech Republic

CZK million

	2008	2009	2010
Total	265 053	230 892	257 320
from own production	255 059	221 713	247 084
Ownership of enterprises			
national enterprises	35 812	12 459	15 132
foreign affiliates	229 241	218 433	242 189
Size class of enterprises			
Small (0-49 employees)	15 131	13 705	12 749
Medium (50-249 employees)	11 132	10 811	15 272
Large (250+ employees)	238 790	206 377	229 299
Industry (CZ-NACE Group)			
Manuf. of computers and peripherals	125 080	115 029	148 135
Manuf. of electronic components	32 842	27 615	32 400
Manuf. of communication equipment	15 861	15 178	18 909
Manuf. of consumer electronics	91 270	73 069	57 875

Figure E23 Sales in ICT manufacturing

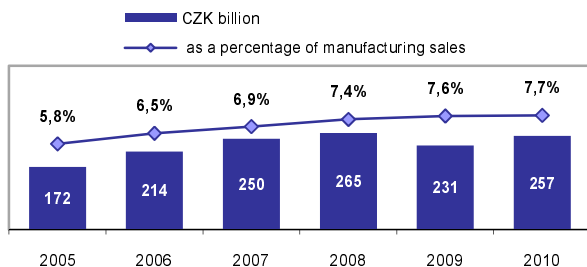


Figure E24 Composition of sales in ICT manufacturing by size class of enterprises

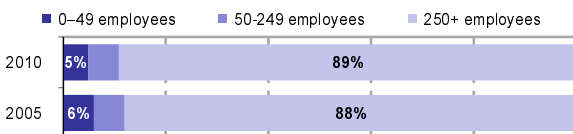
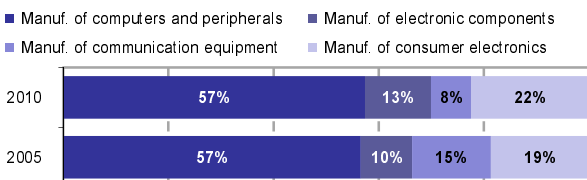


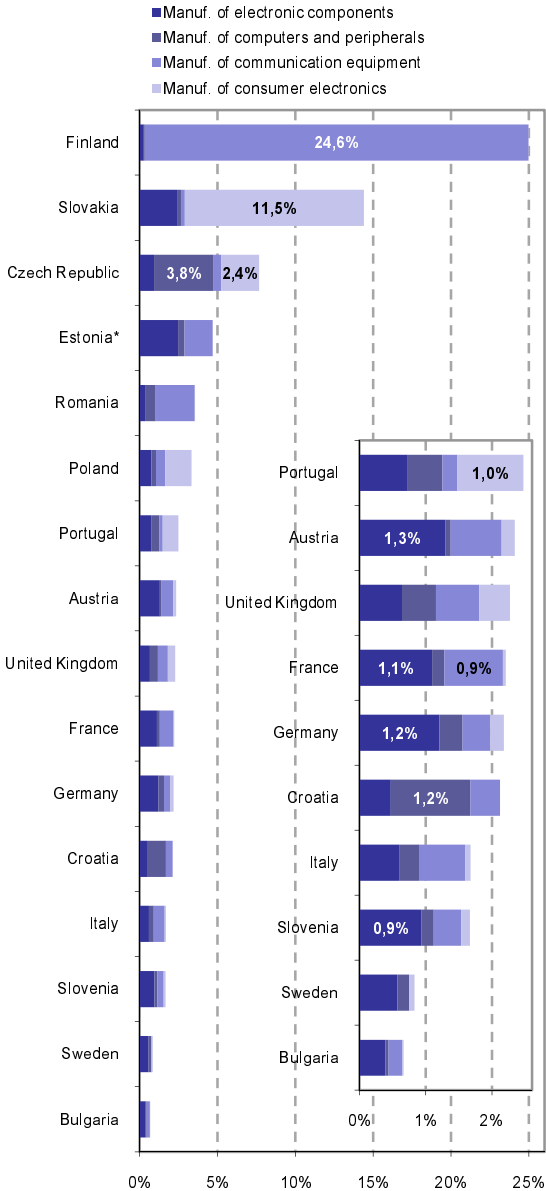
Figure E25 Composition of sales in ICT manufacturing by Industry



Source: CZSO, Structural Business Survey

E ICT sector

Figure E26 Sales in ICT manufacturing by Industry, 2009
(as a percentage of total manufacturing sales)



* year 2008

Source: Eurostat, Structural business statistics

E ICT sector

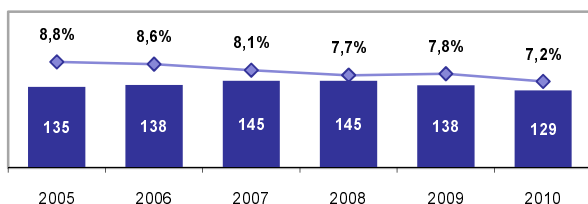
Table E7 Sales in Telecommunications in the Czech Republic

CZK million

	2008	2009	2010
Total	144 655	137 639	128 773
from own production	139 607	132 696	123 577
Ownership of enterprises			
national enterprises	9 463	9 755	9 413
foreign affiliates	135 192	127 885	119 361
Size class of enterprises			
Small (0-49 employees)	9 640	10 620	9 758
Medium (50-249 employees)	5 198	5 354	5 565
Large (250+ employees)	129 817	121 666	113 451
Industry (CZ-NACE Group)			
Wireless telecommunications activities	62 374	59 321	55 378
Wired telecommunications activities	79 482	74 825	69 789
Other telecommunications activities	2 799	3 494	3 607

Figure E27 Sales in Telecommunications

■ CZK billion ◆ as a percentage of total business services sales*



*without Financial and insurance activities (CZ-NACE Section K)

Figure E28 Composition of sales in Telecommunications by Industry

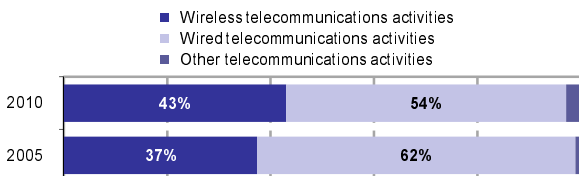
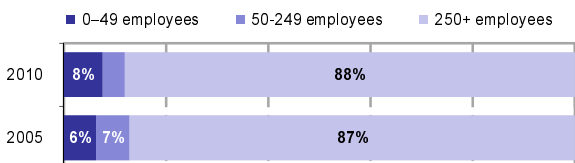


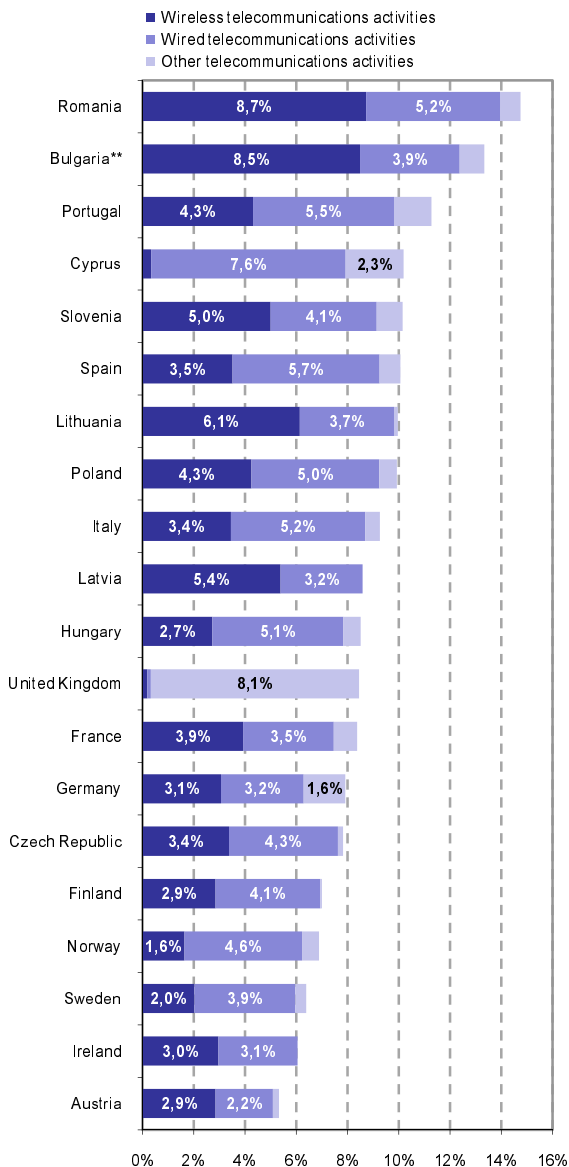
Figure E29 Composition of sales in Telecommunications by size class of enterprises



Source: CZSO, Structural Business Survey

E ICT sector

Figure E30 Sales in Telecommunications by Industry, 2009
(as a percentage of total business services sales*)



* without Financial and insurance activities (CZ-NACE Section K)

** year 2008

Source: Eurostat, Structural business statistics

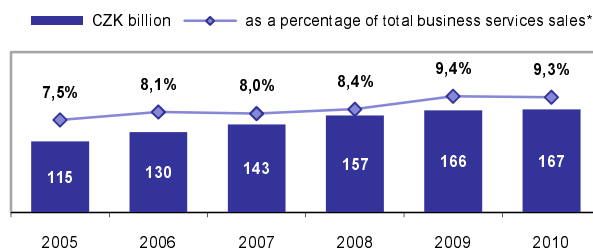
E ICT sector

Table E8 Sales in IT services in the Czech Republic

CZK million

	2008	2009	2010
Total	157 073	165 687	166 975
from own production	135 584	142 947	145 525
Ownership of enterprises			
national enterprises	77 536	75 846	80 139
foreign affiliates	79 536	89 840	86 837
Size class of enterprises			
Small (0-49 employees)	67 748	66 259	66 018
Medium (50-249 employees)	34 837	40 608	42 263
Large (250+ employees)	54 488	58 820	58 695
Industry (CZ-NACE Group)			
Computer programming and related activities	124 146	129 532	130 855
Data processing, hosting and related activities	22 340	23 263	23 764
Repair of PCs and communication equipment	10 587	12 892	12 357

Figure E31 Sales in IT services



*without Financial and insurance activities (CZ-NACE Section K)

Figure E32 Composition of sales in IT services by Industry

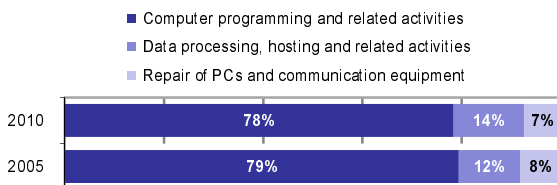
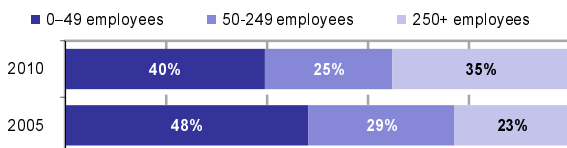
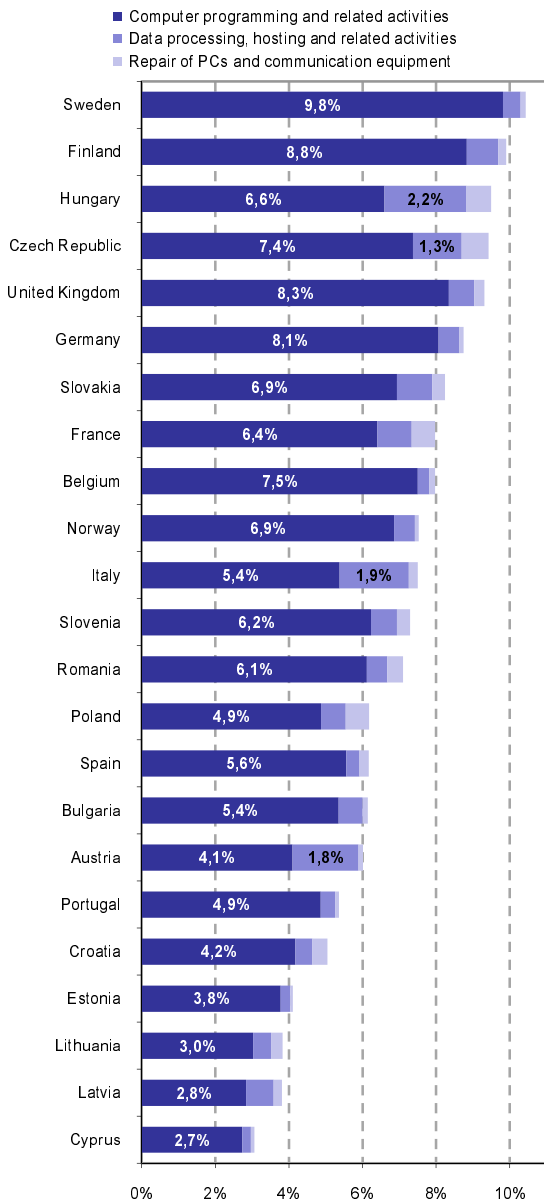


Figure E33 Composition of sales in IT services by size class of enterprises



Source: CZSO, Structural Business Survey

**Figure E34 Sales in IT services by Industry, 2009
(as a percentage of total business services sales*)**



* without Financial and insurance activities (CZ-NACE Section K)

Source: Eurostat, Structural business statistics

E ICT sector

Table E9 Sales in ICT trade industries in the Czech Republic

CZK million

	2008	2009	2010
Total	108 033	94 287	111 453
from own production	7 879	7 257	7 753
Ownership of enterprises			
national enterprises	62 916	56 558	67 685
foreign affiliates	45 117	37 728	43 768
Size class of enterprises			
Small (0-49 employees)	51 607	48 401	62 624
Medium (50-249 employees)	49 970	40 694	44 749
Large (250+ employees)	6 456	5 192	4 080

Figure E35 Sales in ICT trade industries

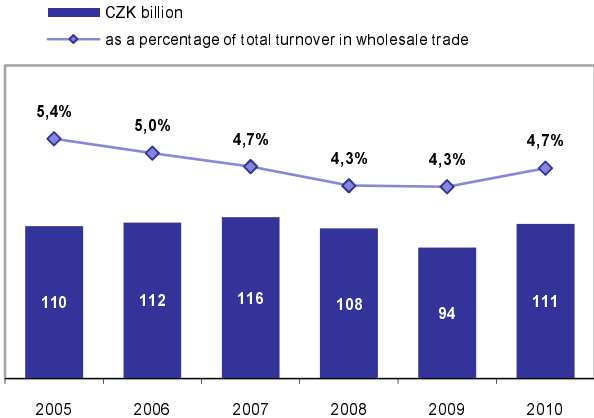
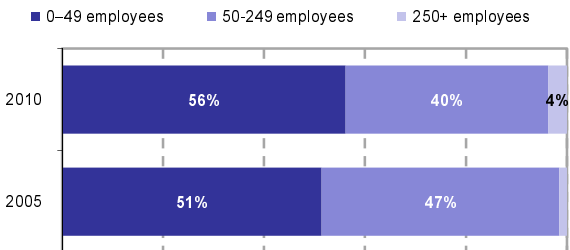


Figure E36 Composition of sales in ICT trade industries by size class of enterprises



Source: CZSO, Structural Business Survey