

## D ICT external trade

ICT external trade **contains** 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). Further information can be found at „**OECD Guide to Measuring the Information Society 2011**“:

### D. 1 External trade of ICT goods

The **list of ICT goods** that is used for the external trade statistics is based on the Harmonised System Nomenclature (HS Nomenclature 2007), a classification of goods used for the international trade. List of ICT goods defined at 6-digit level of HS2007 was further grouped into the five main categories as follows:

- Computer equipment and peripherals;
- Communication equipment;
- Consumer electronics;
- Electronic components;
- Miscellaneous ICT parts and accessories n.e.s.

The **External Trade Statistics 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 **UNCTAD database** and **The UN Comtrade database** was used as a data source for the international comparison:

<http://unctad.org/en/Pages/Statistics.aspx>; <http://comtrade.un.org/db/>

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

[http://www.czso.cz/eng/redakce.nsf/i/external\\_trade\\_in\\_ict\\_goods](http://www.czso.cz/eng/redakce.nsf/i/external_trade_in_ict_goods)

### D. 2 External trade of ICT services

Data on exports and imports of the **ICT services** come from the CZSO direct survey at respondents on exports and imports of services.

Respective items of the ICT services are then defined according to the **Classification of Services** used by CZSO since 2011. This classification is based on the Classification of Products by Activity (CZ-CPA) and the international classification of Extended Balance of Payment Services (EBOPS 2010). ICT services, according to the EBOPS 2010, are divided into two main categories:

**Telecommunication services** include, first of all, transactions of Czech and foreign telecommunication operators for implemented international calls by means of fixed or mobile telephone networks. Other telecommunication services involve payments for the access to the Internet, cable television, and to other computer networks.

**Computer services and software** consist mainly of consultancy services in the fields of hardware and software of computers, including maintenance and repairs of both hardware and software and services related to data processing. **Computer software** involves purchase and sale of tailor-made software and applications (original computer software), including purchase and sale of ownership rights to such software or licence fees for the software use. Furthermore, it is also purchase and sale of standard software and applications **supplied over the Internet**, including purchase and sale of ownership rights to such software or licence fees for the software use.

Data for **international comparisons** come from **Eurostat** data sources.

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

[http://www.czso.cz/csu/redakce.nsf/i/zahranicni\\_obchod\\_s\\_ict\\_sluzbami](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

	2013	2014	2015
<b>Total</b>	<b>414 405</b>	<b>487 462</b>	<b>522 936</b>
Computer equipment and peripherals	198 836	232 424	247 779
Communication equipment	71 383	88 432	103 728
Consumer electronics	66 078	71 144	69 489
Electronic components	33 610	35 112	42 237
Miscellaneous ICT parts and accessories	44 498	60 349	59 703

Figure D1 ICT goods exports



Figure D2 ICT goods exports by commodities

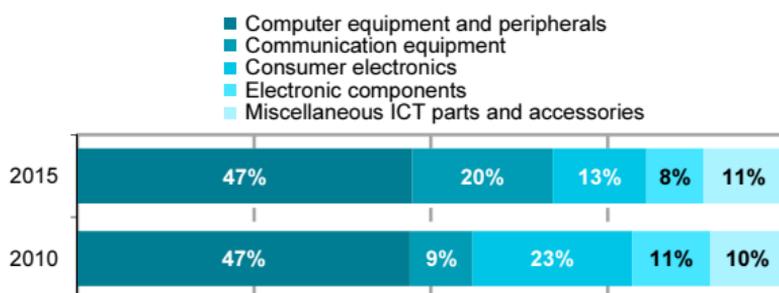
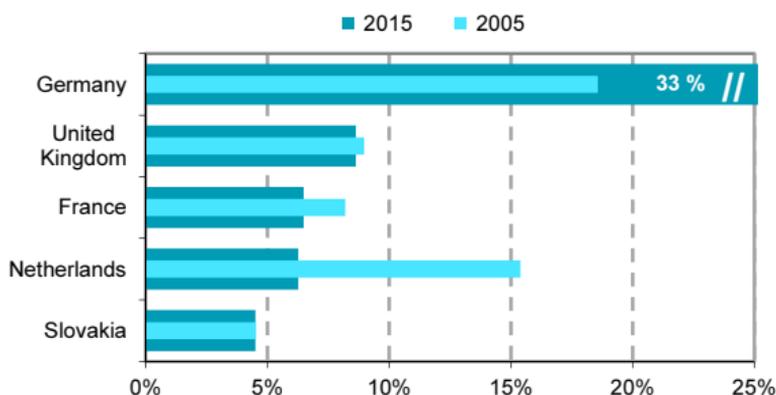


Figure D3 ICT goods exports by countries



Source: CZSO, External Trade Statistics Database

## D ICT external trade

Figure D4 ICT goods exports (% of total goods exports)

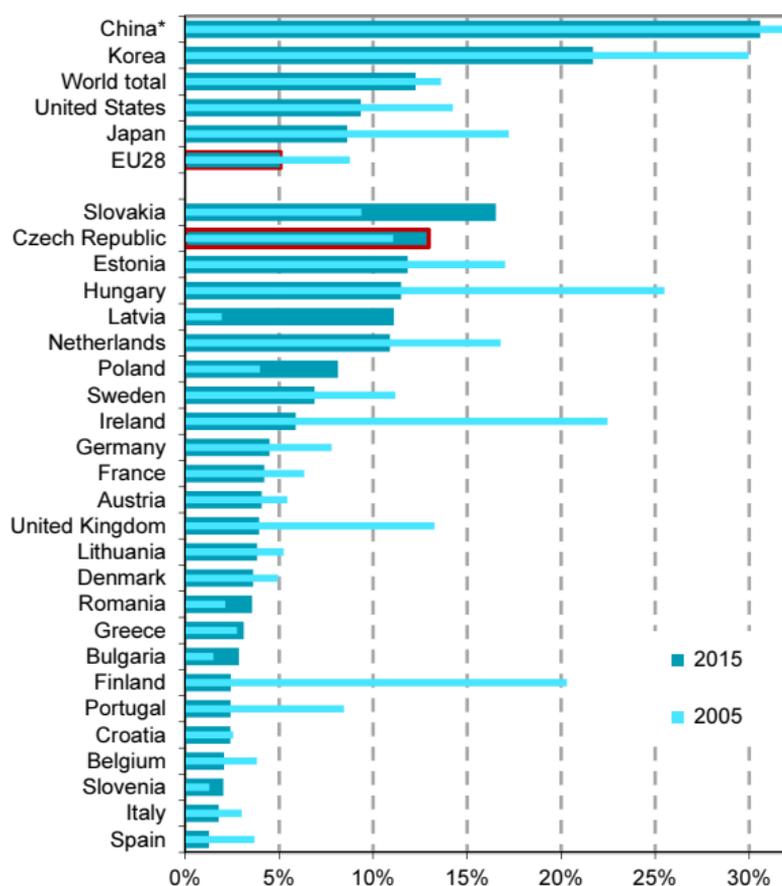
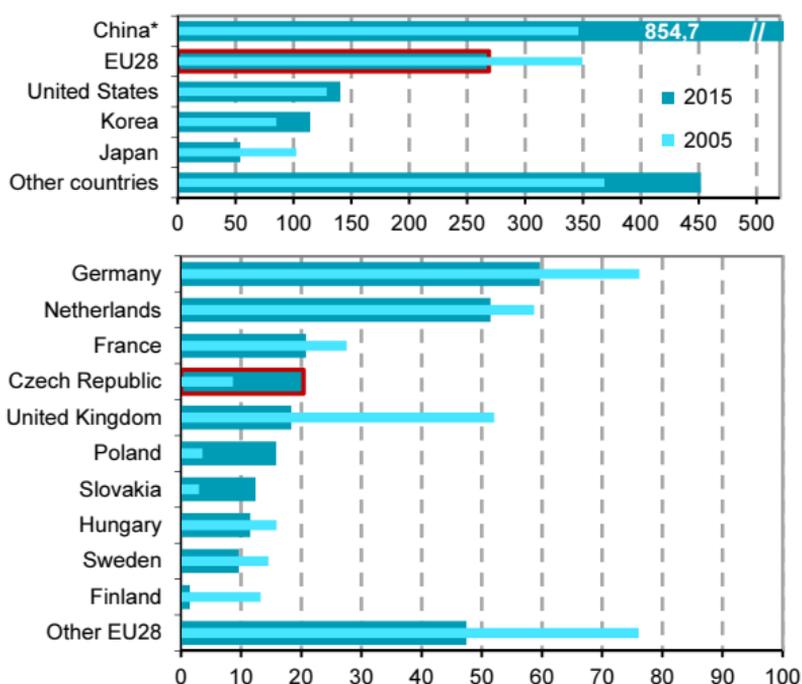


Figure D5 ICT goods exports (US\$ billion)



China\* = (China; Hong Kong China; Macao China; China Taiwan)

Source: CZSO calculations based on UNCTAD and UN Comtrade data, 2016

## D ICT external trade

Table D2 ICT goods imports to the Czech Republic

CZK million

	2013	2014	2015
<b>Total</b>	<b>383 010</b>	<b>450 580</b>	<b>524 914</b>
Computer equipment and peripherals	129 839	145 750	187 555
Communication equipment	67 707	82 719	119 738
Consumer electronics	27 003	33 108	41 873
Electronic components	69 362	83 906	74 038
Miscellaneous ICT parts and accessories	89 099	105 096	101 711

Figure D6 ICT goods imports

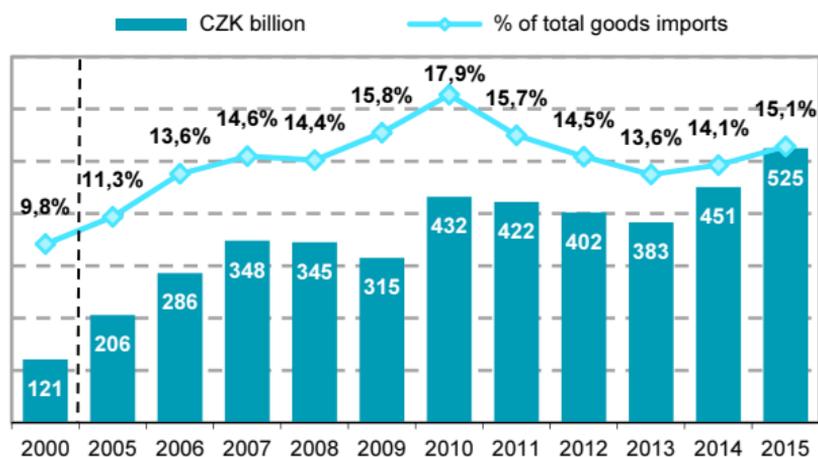


Figure D7 ICT goods imports by commodities

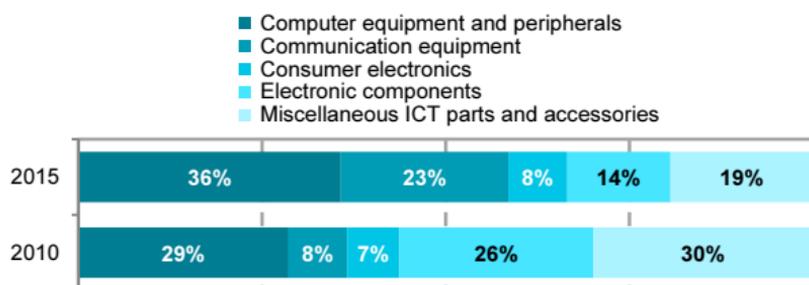
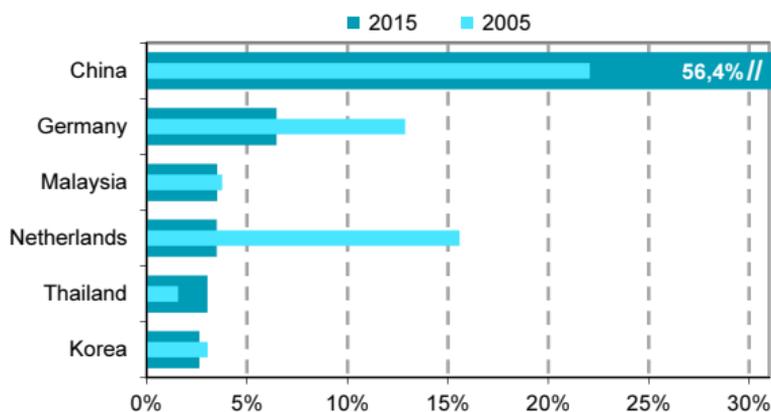


Figure D8 ICT goods imports by countries



Source: CZSO, External Trade Statistics Database

## D ICT external trade

Figure D9 ICT goods imports (% of total goods imports)

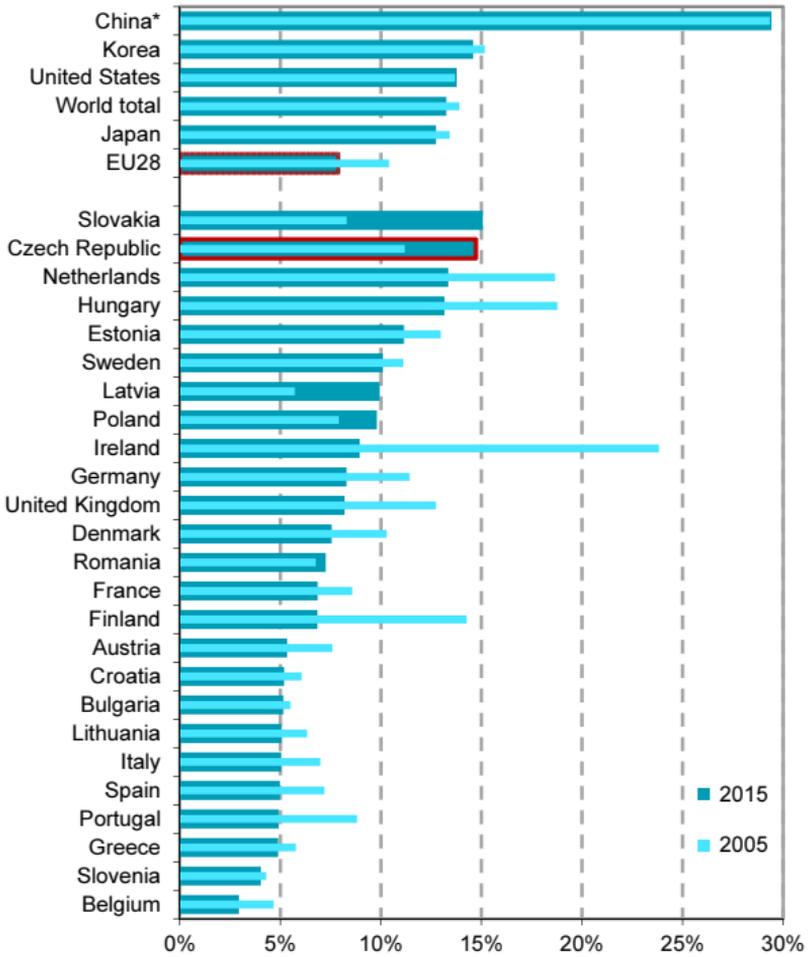
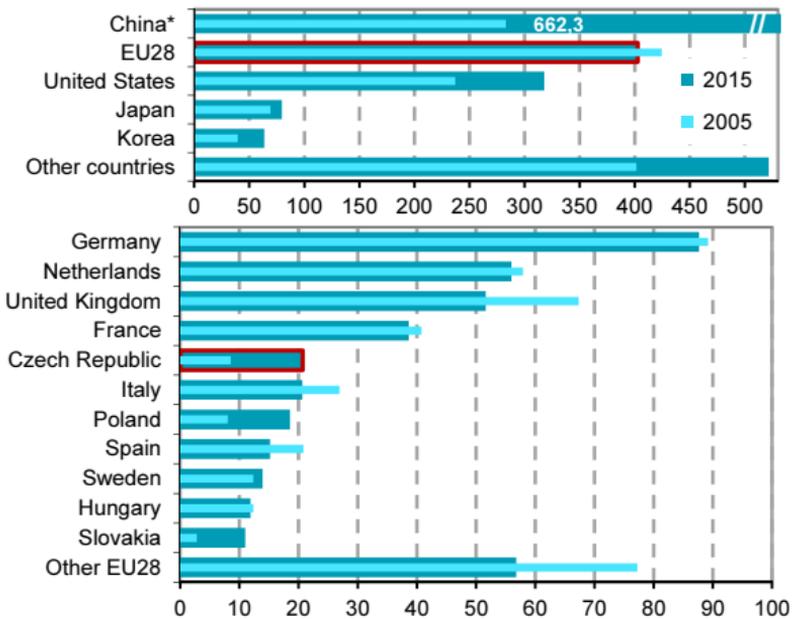


Figure D10 ICT goods imports (US\$ billion)

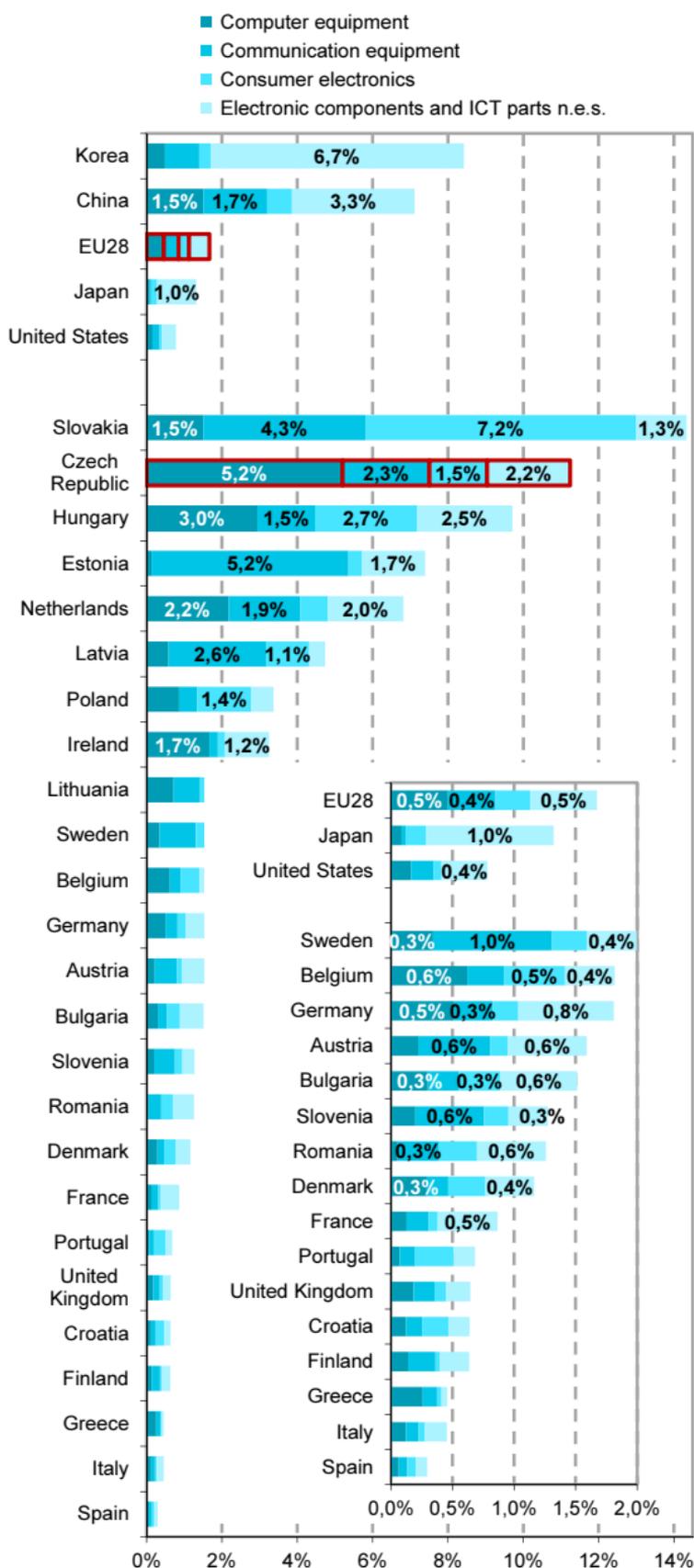


China\* = (China; Hong Kong China; Macao China; China Taiwan)

Source: CZSO calculations based on UNCTAD and UN Comtrade data, 2016

## D ICT external trade

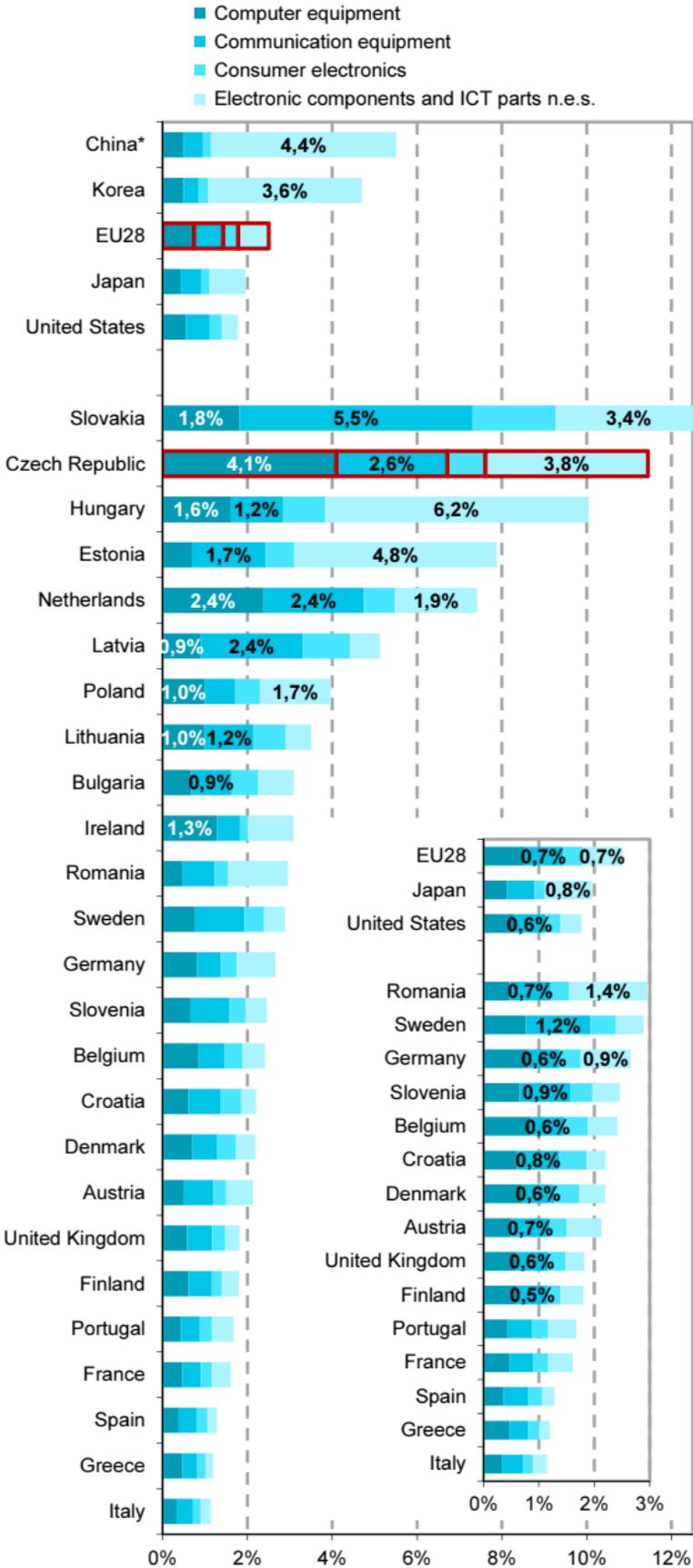
Figure D11 ICT goods exports; 2015 (as a % of GDP)



Source: CZSO calculations based on UNCTAD and UN Comtrade data, 2016

## D ICT external trade

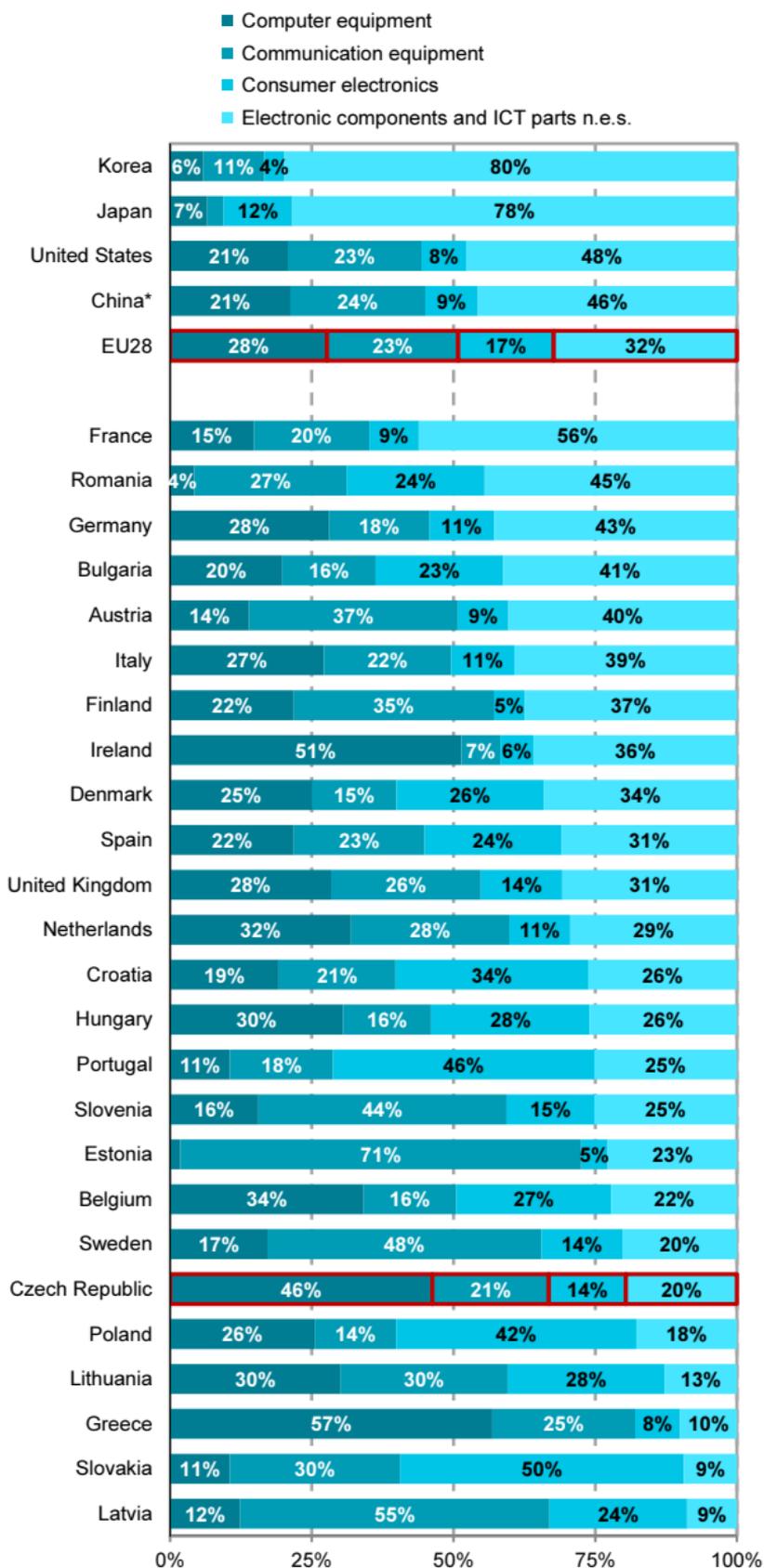
Figure D12 ICT goods imports; 2015 (as a % of GDP)



Source: CZSO calculations based on UNCTAD and UN Comtrade data, 2016

## D ICT external trade

Figure D13 ICT goods exports by commodities; 2015

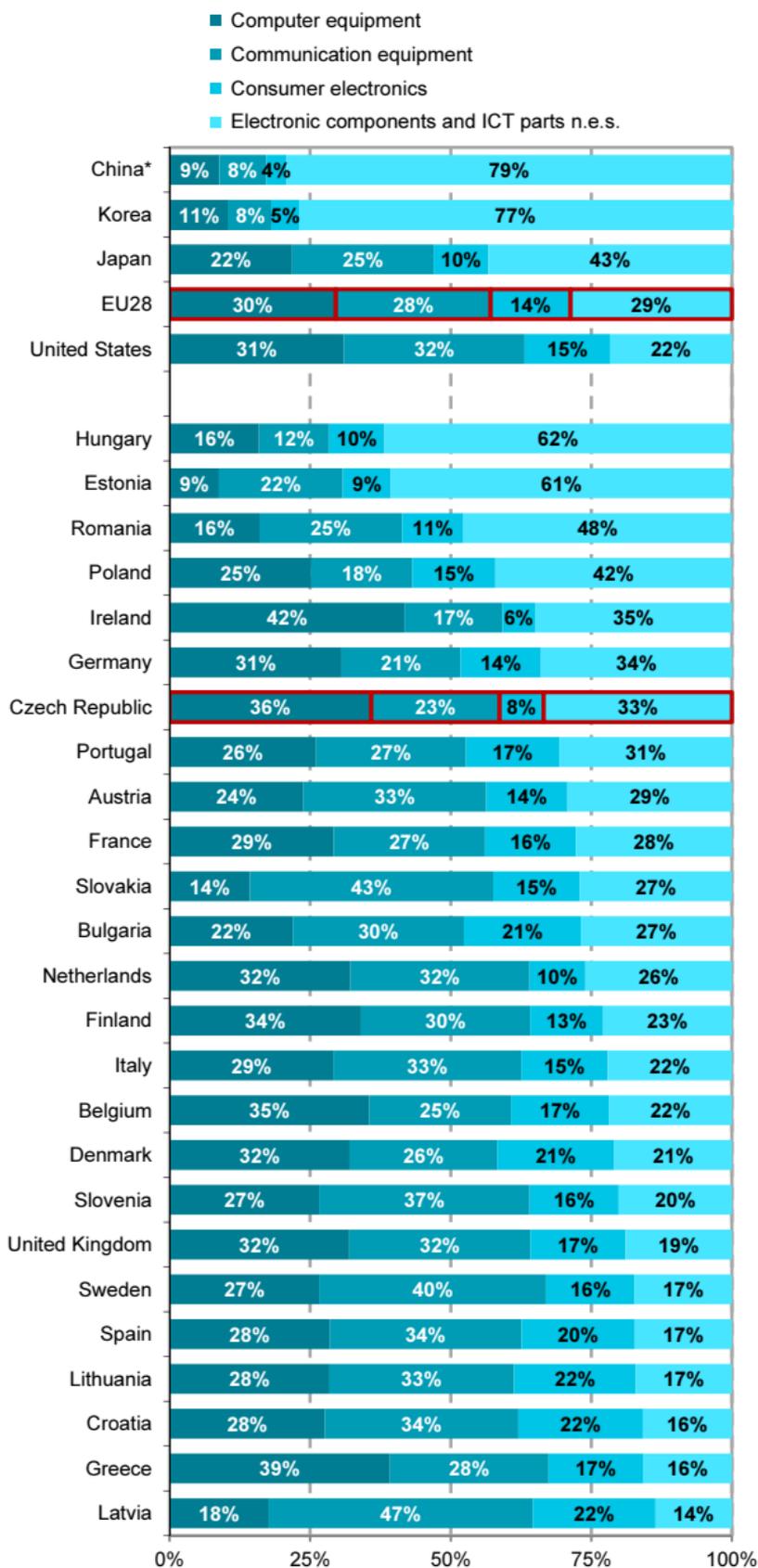


China\* = (China; Hong Kong China; Macao China; China Taiwan)

Source: CZSO calculations based on UNCTAD and UN Comtrade data, 2016

## D ICT external trade

Figure D14 ICT goods imports by commodities; 2015



China\* = (China; Hong Kong China; Macao China; China Taiwan)

Source: CZSO calculations based on UNCTAD and UN Comtrade data, 2016

## D ICT external trade

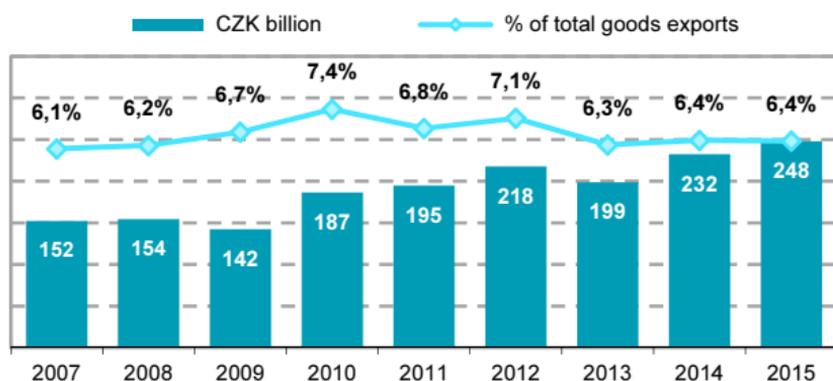
**Table D3 Computer equipment exports from the Czech Republic**

CZK million

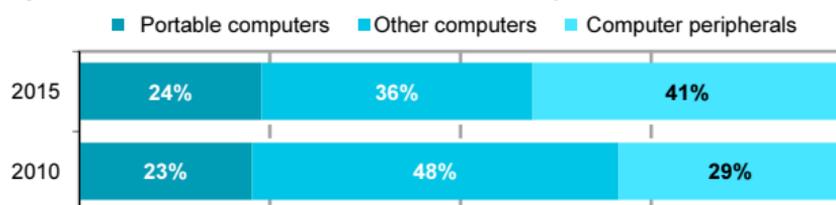
	2013	2014	2015
<b>Total</b>	<b>198 836</b>	<b>232 424</b>	<b>247 779</b>
Portable computers	55 663	60 266	59 233
Other computers	78 730	93 090	88 059
Computer peripherals, total	64 443	79 068	100 486
Storage units	41 444	45 330	60 690
Sound, video, network and similar cards	7 135	8 119	8 874
Monitors used with computers	3 855	11 662	15 858
Printers, copying or faxing machines	5 776	6 565	7 037
Other input or output peripherals*	6 234	7 392	8 028

\* Keyboards; joystick, computer mice, scanners or optical readers

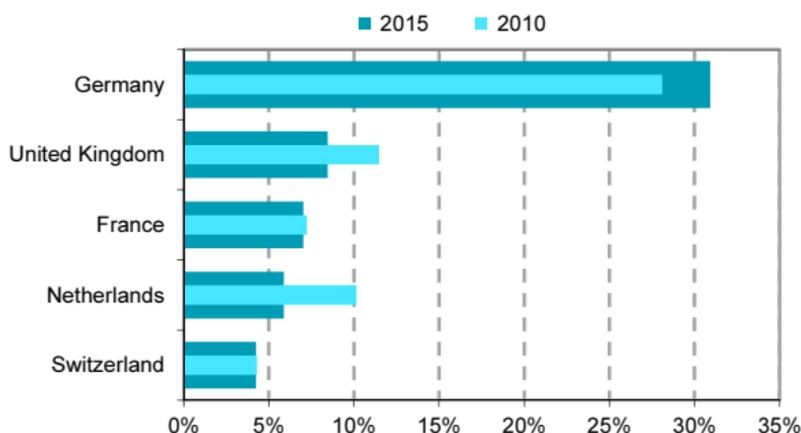
**Figure D15 Computer equipment exports**



**Figure D16 Computer equipment exports by commodities**



**Figure D17 Computer equipment exports by countries**



Source: CZSO, External Trade Statistics Database

## D ICT external trade

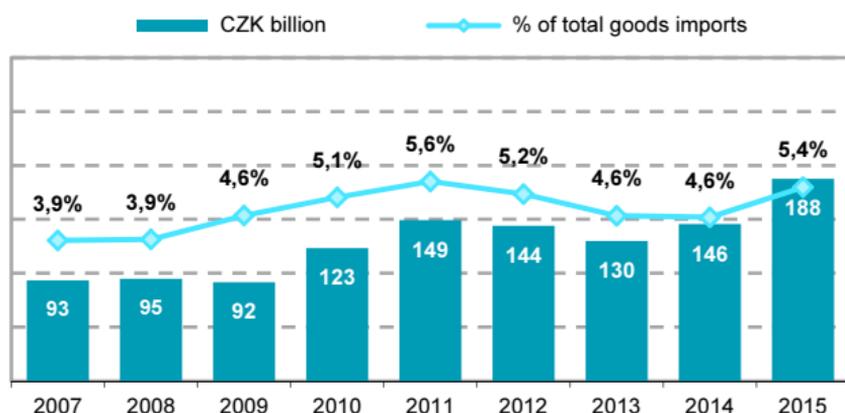
**Table D4 Computer equipment imports to the Czech Republic**

CZK million

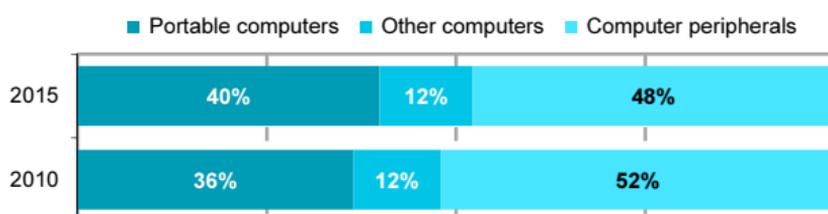
	2013	2014	2015
<b>Total</b>	<b>129 839</b>	<b>145 750</b>	<b>187 555</b>
Portable computers	52 536	55 391	74 796
Other computers	13 515	20 520	23 130
Computer peripherals total	63 788	69 838	89 629
Storage units	35 616	37 875	50 105
Sound, video, network and similar cards	11 605	7 943	8 824
Monitors used with computers	4 876	10 746	15 141
Printers, copying or faxing machines	7 304	8 368	8 795
Other input or output peripherals*	4 388	4 906	6 764

\* Keyboards; joystick, computer mice, scanners or optical readers

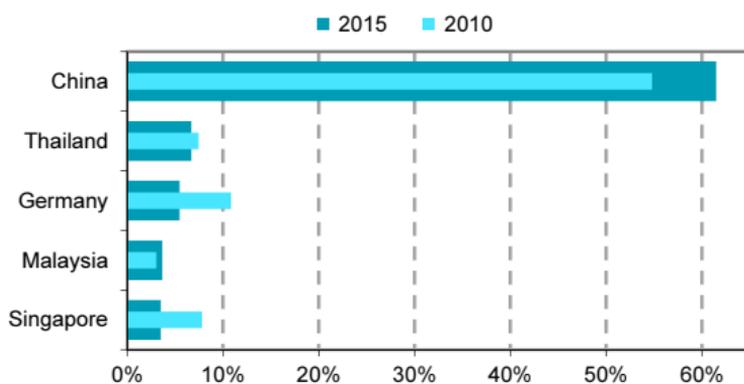
**Figure D18 Computer equipment imports**



**Figure D19 Computer equipment imports by commodities**



**Figure D20 Computer equipment imports by countries**



## D ICT external trade

Table D5 Communication equipment exports from the Czech Rep.

CZK million

	2013	2014	2015
<b>Total</b>	<b>71 383</b>	<b>88 432</b>	<b>103 728</b>
Mobile phones	47 473	59 345	67 721
Other communication equipment*	23 910	29 087	36 006

\* Switching, routing and similiar apparatus such as routers, bridges, hubs or modems; Base stations and other apparatus for transmission or reception of voice, images or other data; Radio or television transmission apparatus

Figure D21 Communication equipment exports



Figure D22 Communication equipment exports by commodities

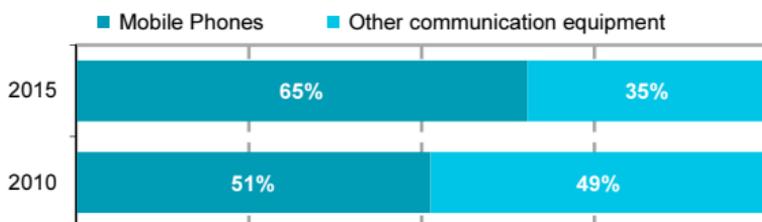
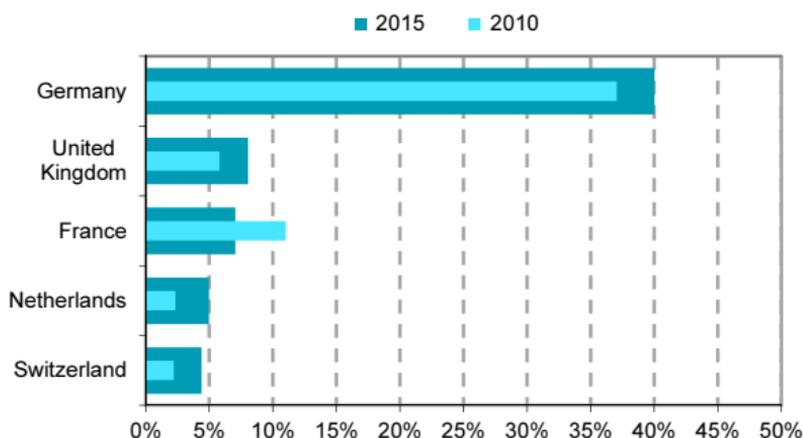


Figure D23 Communication equipment exports by countries



Source: CZSO, External Trade Statistics Database

## D ICT external trade

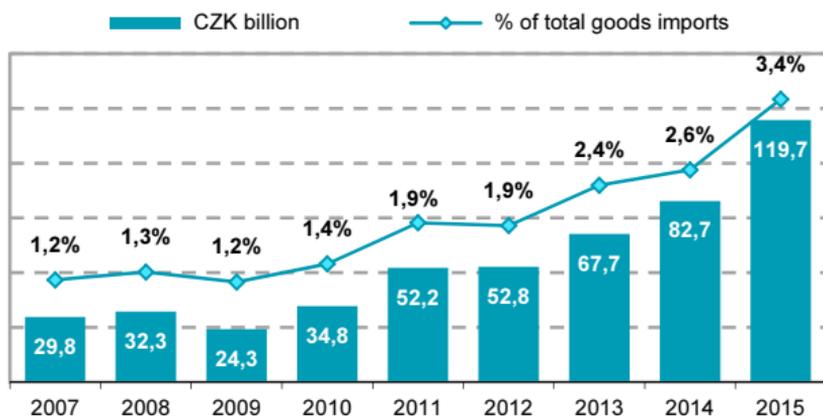
**Table D6 Communication equipment imports to the Czech Rep.**

CZK million

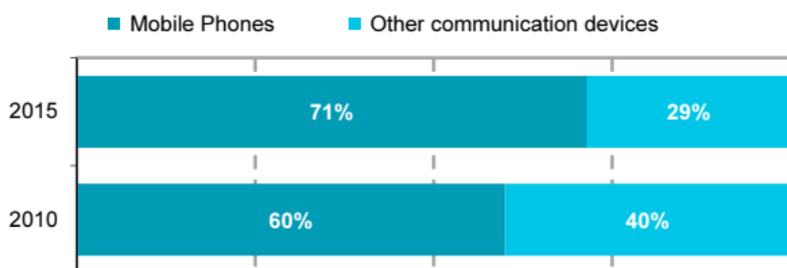
	2013	2014	2015
<b>Total</b>	<b>67 707</b>	<b>82 719</b>	<b>119 738</b>
Mobile phones	46 854	56 211	85 524
Other communication equipment*	20 853	26 508	34 214

\* Switching, routing and similar apparatus such as routers, bridges, hubs or modems; Base stations and other apparatus for transmission or reception of voice, images or other data; Radio or television transmission apparatus

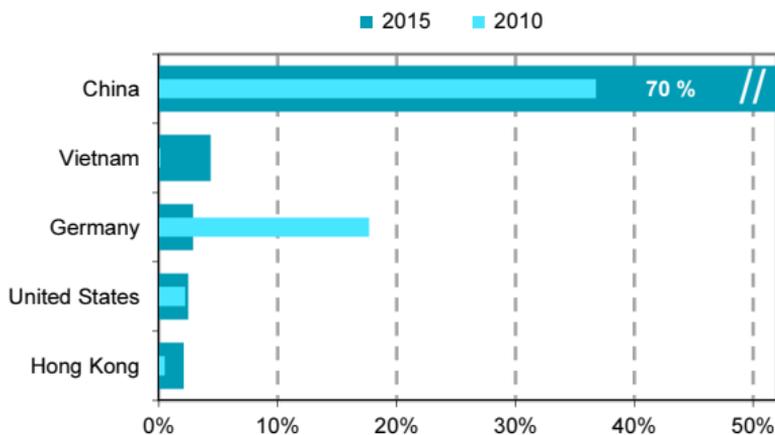
**Figure D24 Communication equipment imports**



**Figure D25 Communication equipment imports by commodities**



**Figure D26 Communication equipment imports by countries**



Source: CZSO, External Trade Statistics Database

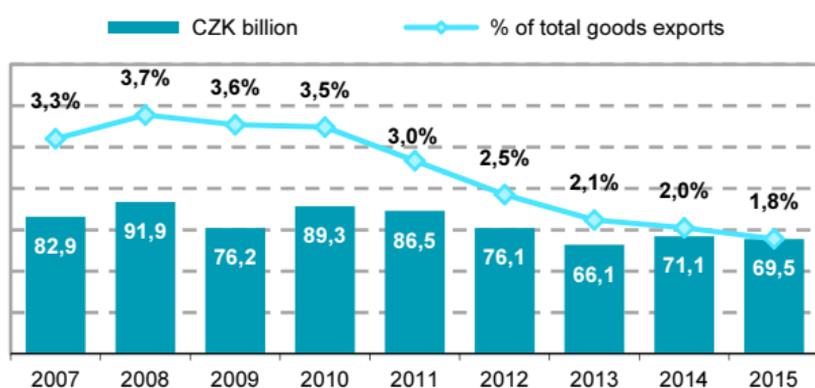
## D ICT external trade

**Table D7 Consumer electronics exports from the Czech Republic**

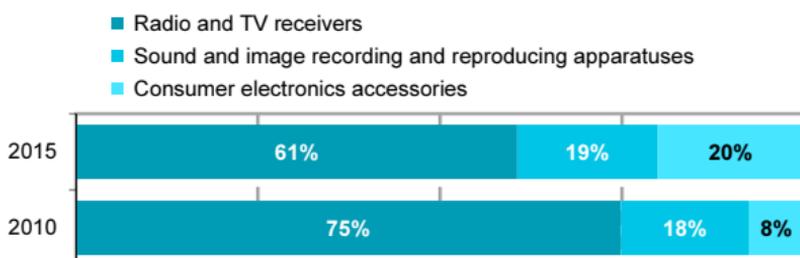
	CZK million		
	2013	2014	2015
<b>Total</b>	<b>66 078</b>	<b>71 144</b>	<b>69 489</b>
Radio and TV receivers	46 819	50 320	42 129
Sound and image recording and reproducing apparatuses	8 856	8 149	13 362
Consumer electronics accessories*	10 403	12 675	13 998

\* Monitors and projectors; Microphones and stands there for; Loudspeakers; Headphones, earphones and combined microphone/speaker sets; Audio-frequency electric amplifiers; Electric sound amplifier sets; Non-recorded media

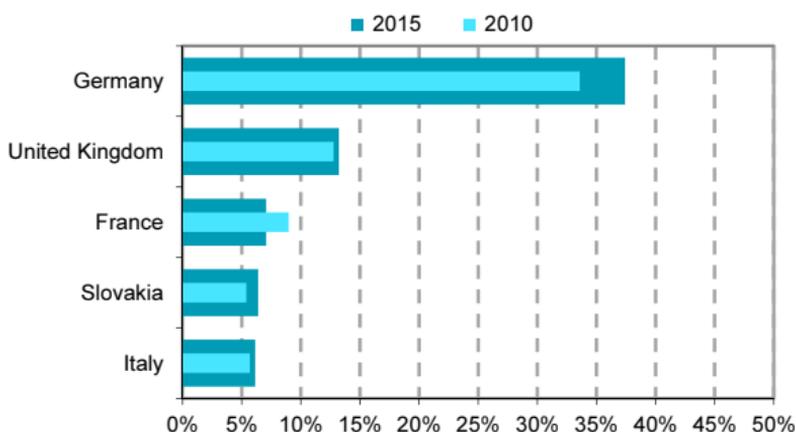
**Figure D27 Consumer electronics exports**



**Figure D28 Consumer electronics exports by commodities**



**Figure D29 Consumer electronics exports by countries**



Source: CZSO, External Trade Statistics Database

## D ICT external trade

**Table D8 Consumer electronics imports to the Czech Republic**

CZK million

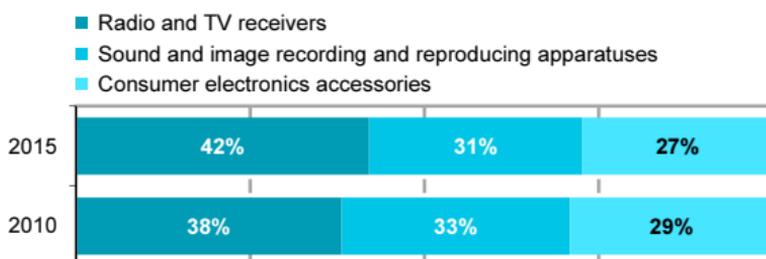
	2013	2014	2015
<b>Total</b>	<b>27 003</b>	<b>33 108</b>	<b>41 873</b>
Radio and TV receivers	12 498	14 707	17 619
Sound and image recording and reproducing apparatuses	8 487	9 296	12 785
Consumer electronics accessories*	6 018	9 105	11 469

\* Monitors and projectors; Microphones and stands there for; Loudspeakers; Headphones, earphones and combined microphone/speaker sets; Audio-frequency electric amplifiers; Electric sound amplifier sets; Non-recorded media

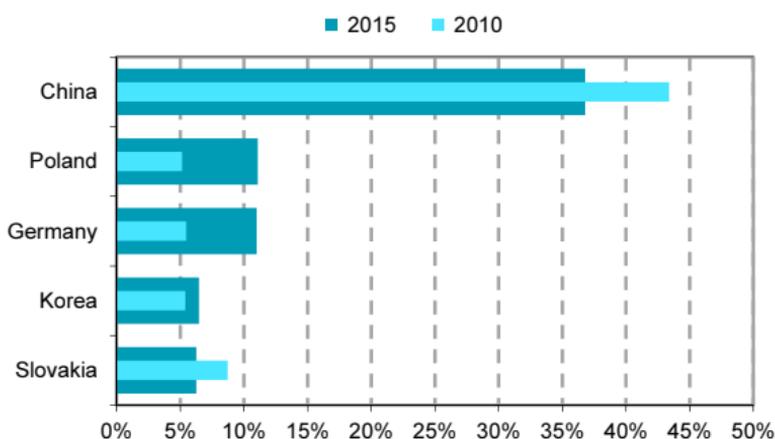
**Figure D30 Consumer electronics imports**



**Figure D31 Consumer electronics imports by commodities**



**Figure D32 Consumer electronics imports by countries**



Source: CZSO, External Trade Statistics Database

## D ICT external trade

Table D9 Electronic components exports from the Czech Rep.

CZK million

	2013	2014	2015
<b>Total</b>	<b>33 610</b>	<b>35 112</b>	<b>42 237</b>
Electronic integrated circuits	23 641	22 938	30 420
<i>of which Processors</i>	19 483	18 185	25 078
Printed circuits	3 539	4 548	4 614
Other electronic components	6 429	7 626	7 203

Figure D33 Electronic components exports



Figure D34 Electronic components exports by commodities

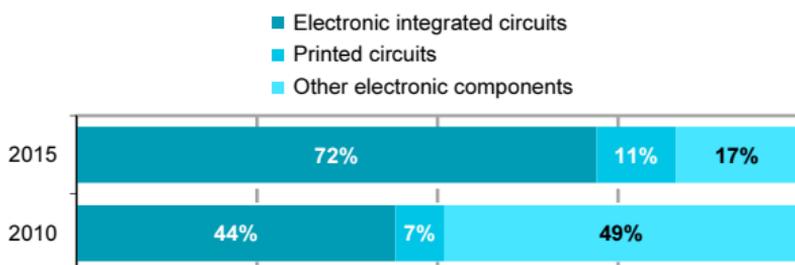
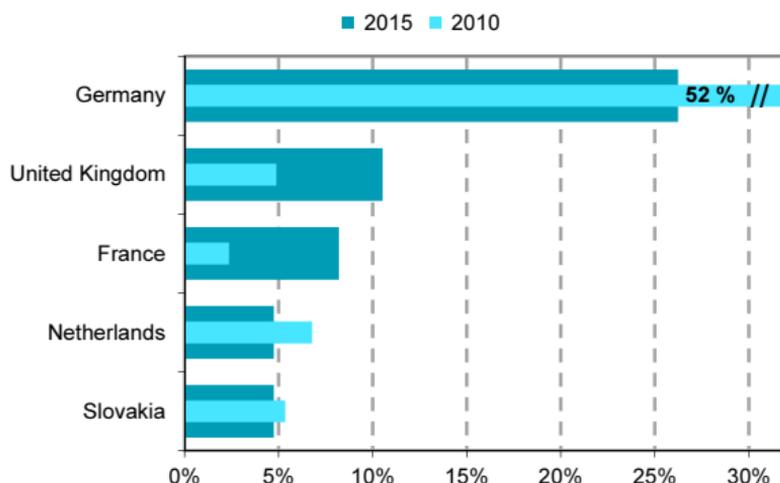


Figure D35 Electronic components exports by countries



Source: CZSO, External Trade Statistics Database

## D ICT external trade

Table D10 Electronic components imports to the Czech Rep.

CZK million

	2013	2014	2015
<b>Total</b>	<b>69 362</b>	<b>83 906</b>	<b>74 038</b>
Electronic integrated circuits, total	52 130	64 141	52 946
<i>of which Processors</i>	43 616	53 981	42 608
Printed circuits	7 563	8 746	9 966
Other electronic components	9 670	11 019	11 125

Figure D36 Electronic components imports



Figure D37 Electronic components imports by commodities

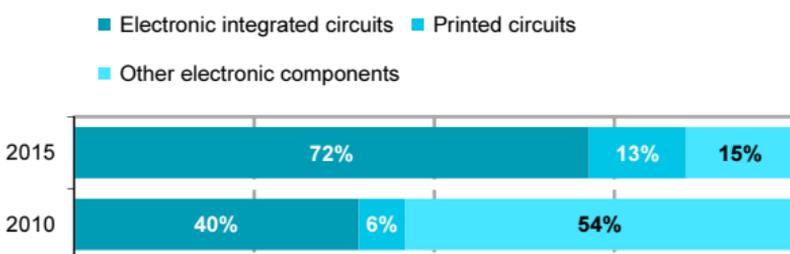
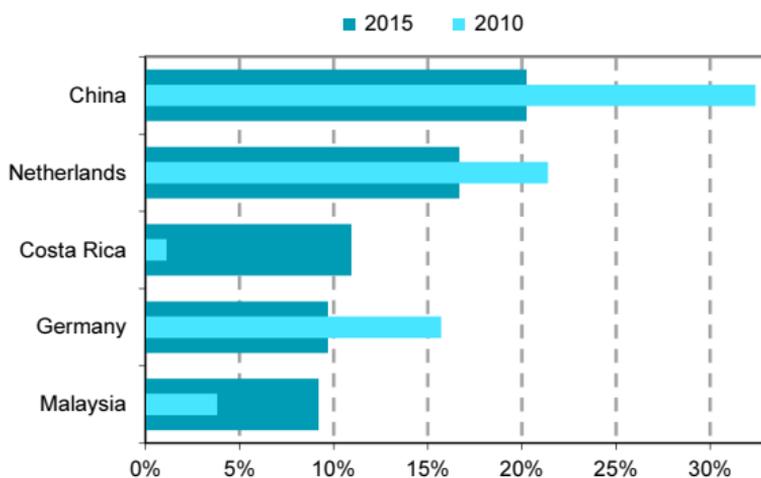


Figure D38 Electronic components imports by countries



Source: CZSO, External Trade Statistics Database

## D ICT external trade

Table D11 Export of ICT parts n.e.s. from the Czech Republic

CZK million

	2013	2014	2015
<b>Total</b>	<b>44 498</b>	<b>60 349</b>	<b>59 703</b>
Parts and accessories n.e.s. of			
- computers	29 753	40 413	34 927
- telecommunication equipment	10 369	14 909	19 001
- consumer electronics	4 376	5 028	5 774

n.e.s. - not else specified

Figure D39 Export of ICT parts and accessories n.e.s.

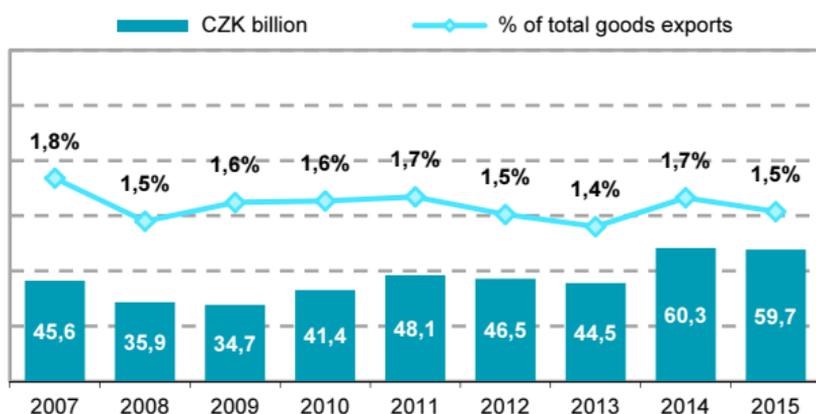


Figure D40 Export of ICT parts n.e.s. by commodities

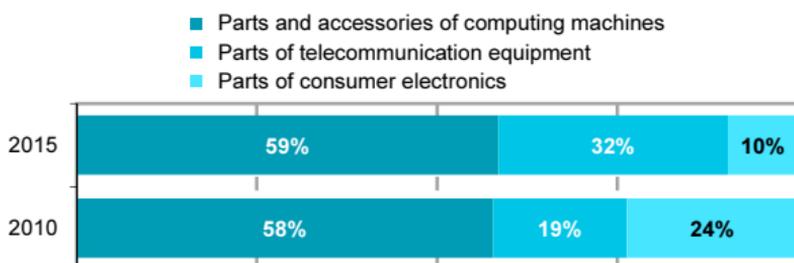
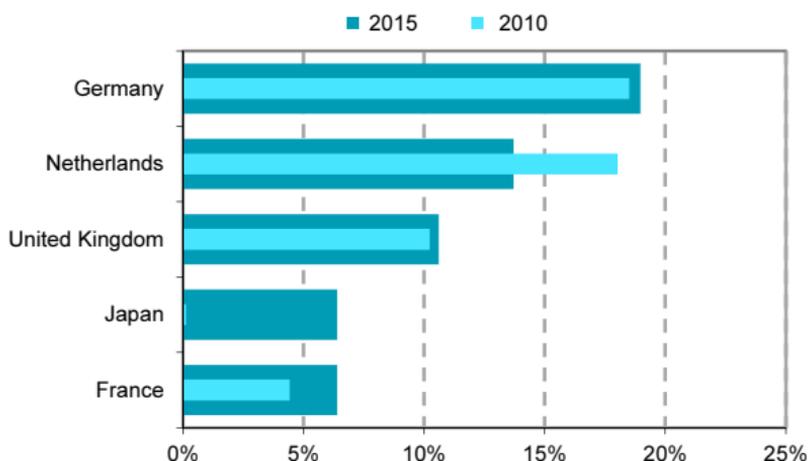


Figure D41 Export of ICT parts n.e.s. by countries



Source: CZSO, External Trade Statistics Database

## D ICT external trade

Table D12 Imports of ICT parts n.e.s. to the Czech Republic

CZK million

	2013	2014	2015
<b>Total</b>	<b>89 099</b>	<b>105 096</b>	<b>101 711</b>
Parts and accessories n.e.s. of			
- computers	50 290	63 719	57 982
- telecommunication equipment	12 018	15 412	19 714
- consumer electronics	26 792	25 966	24 016

n.e.s. - not else specified

Figure D42 Imports of ICT parts and accessories n.e.s.



Figure D43 Imports of ICT parts n.e.s. by commodities

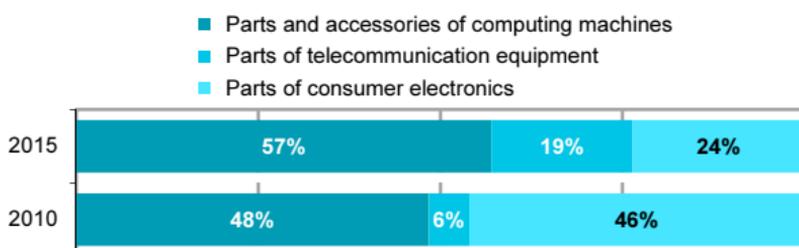
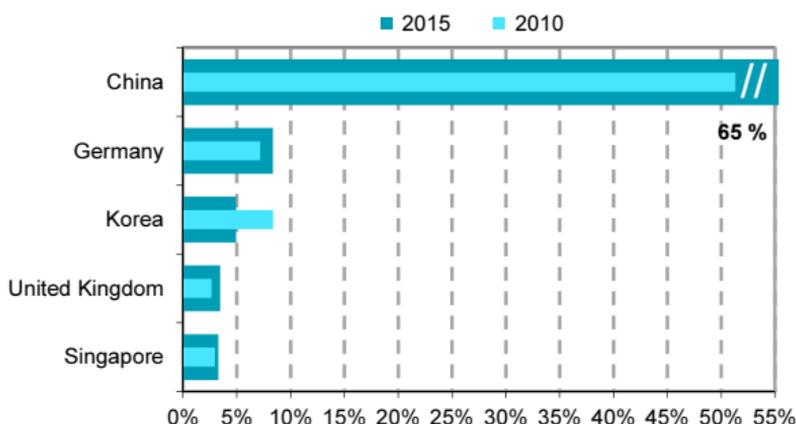


Figure D44 Imports of ICT parts n.e.s. by countries



Source: CZSO, External Trade Statistics Database

## D ICT external trade

Table D13 ICT services exports from the Czech Republic

CZK million

	2013	2014	2015
<b>Total</b>	<b>51 021</b>	<b>60 444</b>	<b>67 390</b>
Telecommunication services	9 531	11 554	11 299
Computer services	32 934	35 867	38 934
Computer software	8 556	13 023	17 157
<b>Ownership of exporting enterprises</b>			
Private national enterprises	10 900	15 322	19 742
Foreign-controlled enterprises	40 120	45 122	47 647
<b>Size of exporting enterprises</b>			
Small (0-49 employees)	5 199	9 185	8 042
Medium (50-249 employees)	8 841	11 824	11 876
Large (250+ employees)	36 980	39 435	47 472

Figure D45 ICT services exports

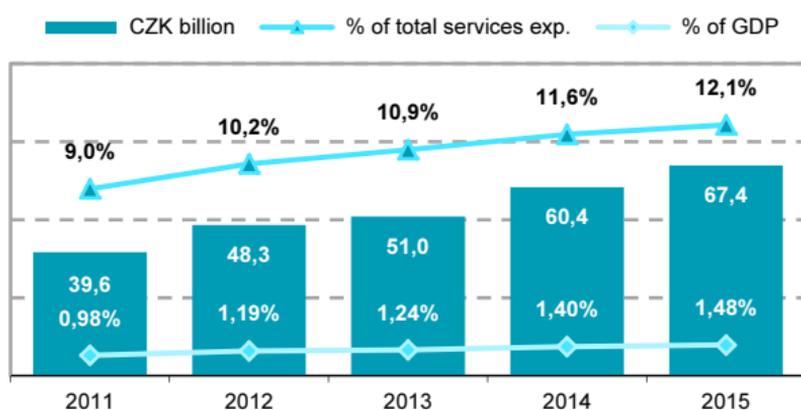


Figure D46 ICT services exports by type of service

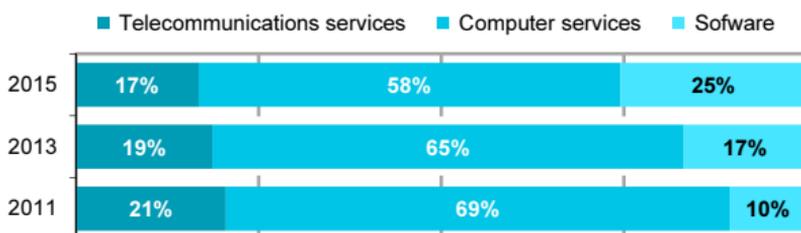
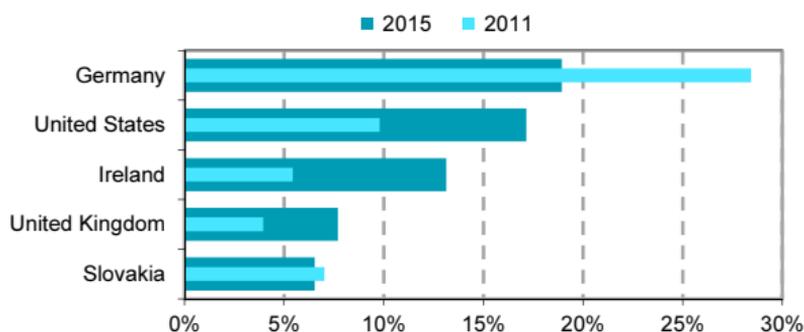


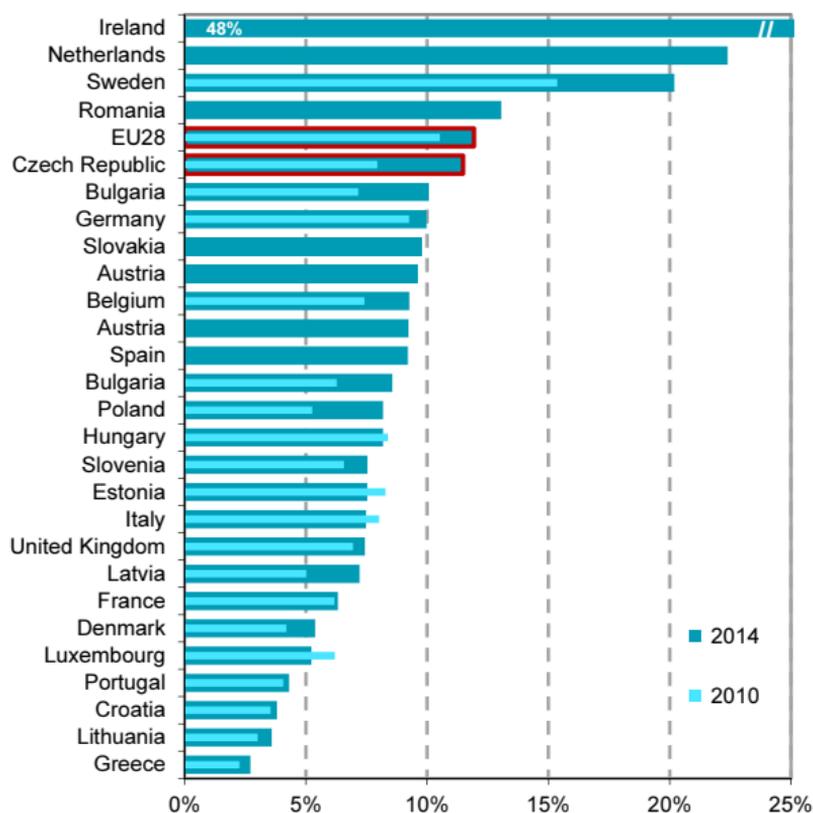
Figure D47 ICT services exports by countries



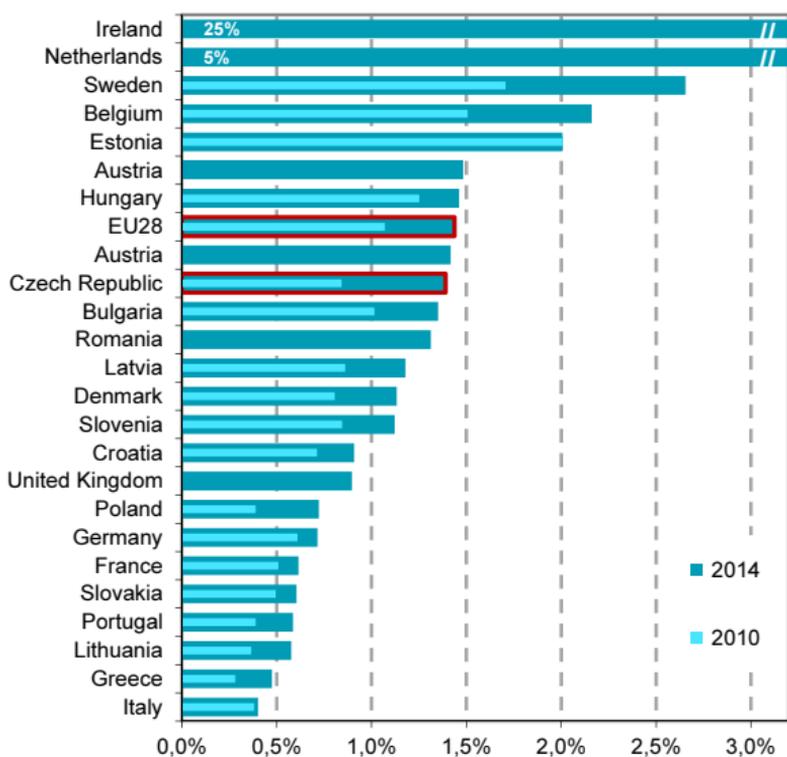
Source: CZSO, Survey on exports and imports of services

## D ICT external trade

**Figure D48 ICT services exports  
(as a percentage of total services exports)**



**Figure D49 ICT services exports (as a % of GDP)**



Source: CZSO calculations based on EUROSTAT data, 2016

## D ICT external trade

Table D14 Total ICT services imports to the Czech Republic

CZK million

	2013	2014	2015
<b>Total</b>	<b>38 381</b>	<b>38 232</b>	<b>39 732</b>
Telecommunication services	11 371	11 227	11 881
Computer services	21 425	21 551	21 079
Computer software	5 586	5 454	6 772
<b>Ownership of importing enterprises</b>			
Private national enterprises	4 222	4 300	11 025
Foreign-controlled enterprises	34 160	33 932	28 707
<b>Size of importing enterprises</b>			
Small (0-49 employees)	3 235	2 993	5 029
Medium-sized (50-249 employees)	7 123	6 379	7 388
Large (250+ employees)	28 023	28 860	27 316

Figure D50 Total ICT services imports

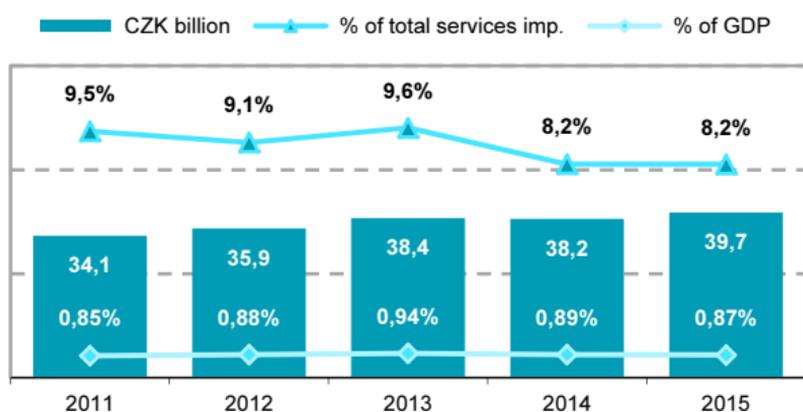


Figure D51 ICT services imports by type of service

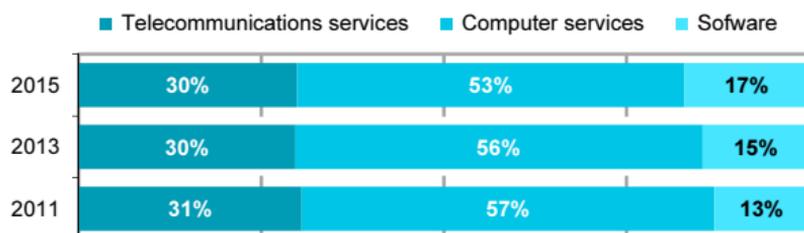
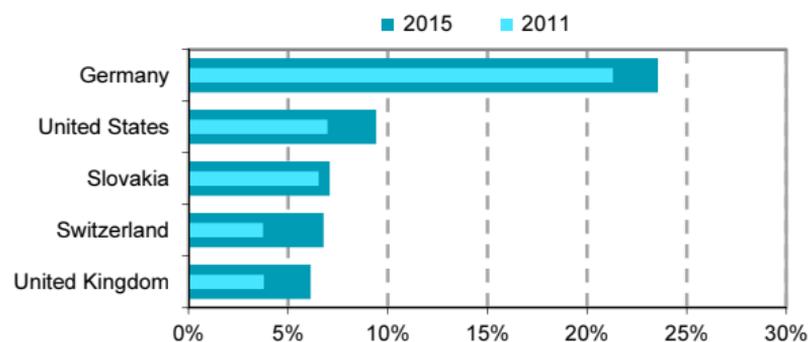


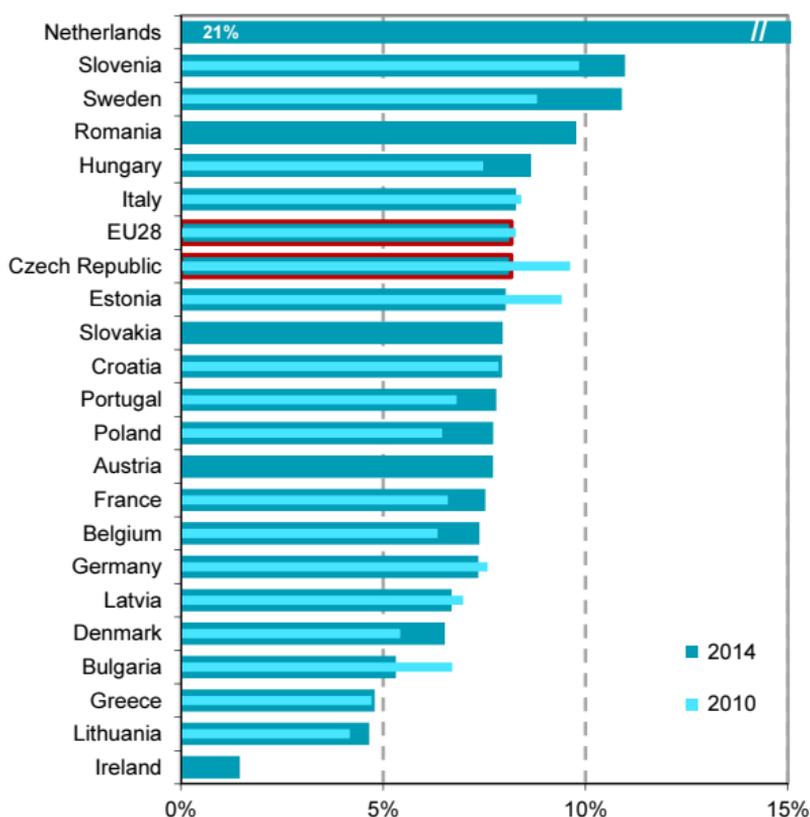
Figure D52 ICT services imports by countries



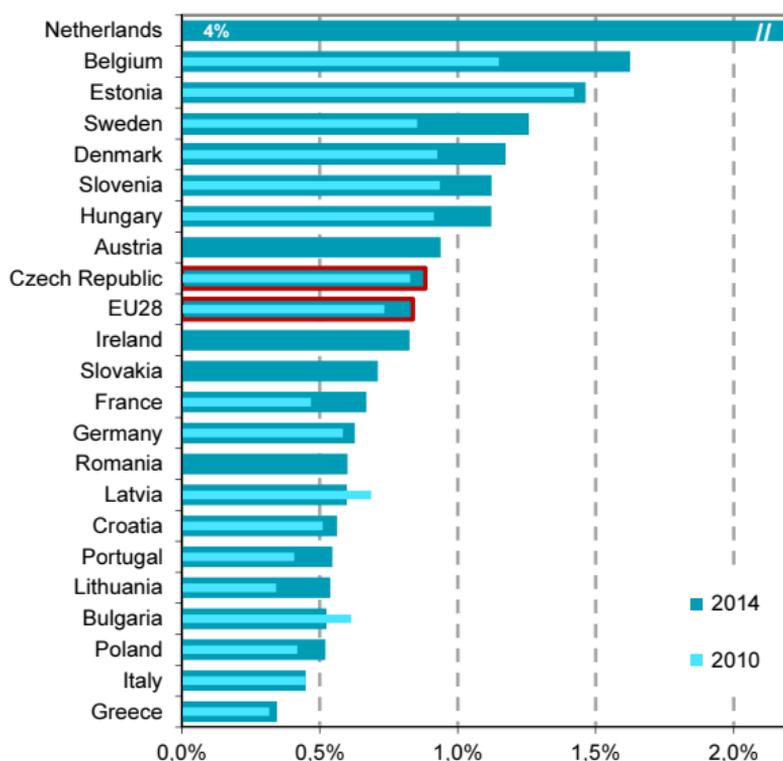
Source: CZSO, Survey on exports and imports of services

## D ICT external trade

**Figure D53 ICT services imports  
(as a percentage of total services imports)**



**Figure D54 ICT services imports (as a % of GDP)**



Source: CZSO calculations based on EUROSTAT data, 2016

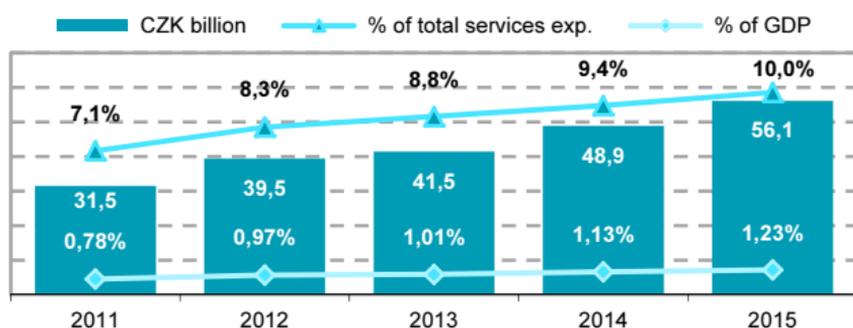
## D ICT external trade

**Table D15 Computer services and software exports from the Czech Republic**

CZK million

	2013	2014	2015
<b>Total</b>	<b>41 490</b>	<b>48 891</b>	<b>56 091</b>
Computer services, total	32 934	35 867	38 934
Computer HW&SW consulting and support	19 466	19 538	20 439
Data processing, hosting and related services	9 366	10 009	11 037
Maintenance and repair of computers	4 102	6 320	7 457
Computer software, total	8 556	13 023	17 157
Software originals: tailor-made sw&apps	3 703	3 703	4 312
Standard software supplied over the Internet	4 371	7 888	11 158
License to reproduce or distribute software	481	1 433	1 688
<b>Ownership of exporting enterprises</b>			
Private national enterprises	10 283	14 184	12 964
Foreign-controlled enterprises	31 207	34 707	43 127
<b>Size of exporting enterprises</b>			
Small (0-49 employees)	4 098	7 636	5 890
Medium-sized (50-249 employees)	8 779	11 712	11 762
Large (250+ employees)	28 613	29 542	38 439

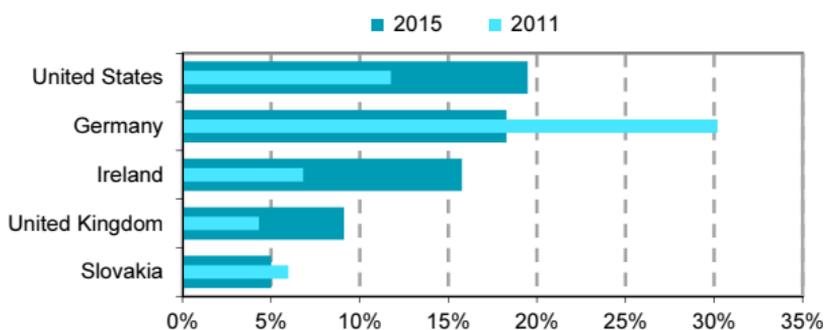
**Figure D55 Computer services and software exports**



**Figure D56 Computer services and software exports by ownership of exporting enterprises**



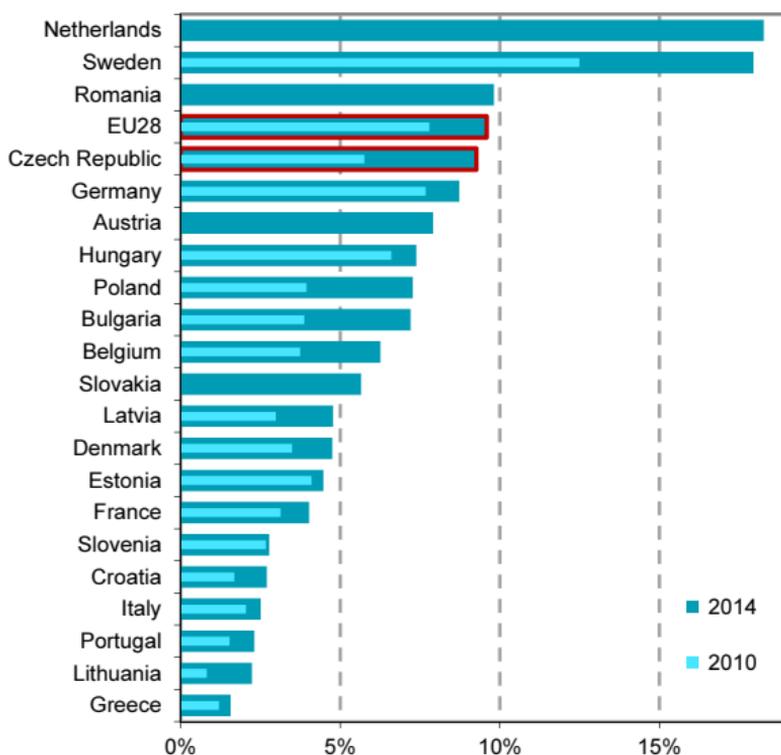
**Figure D57 Computer services and sw exports by countries**



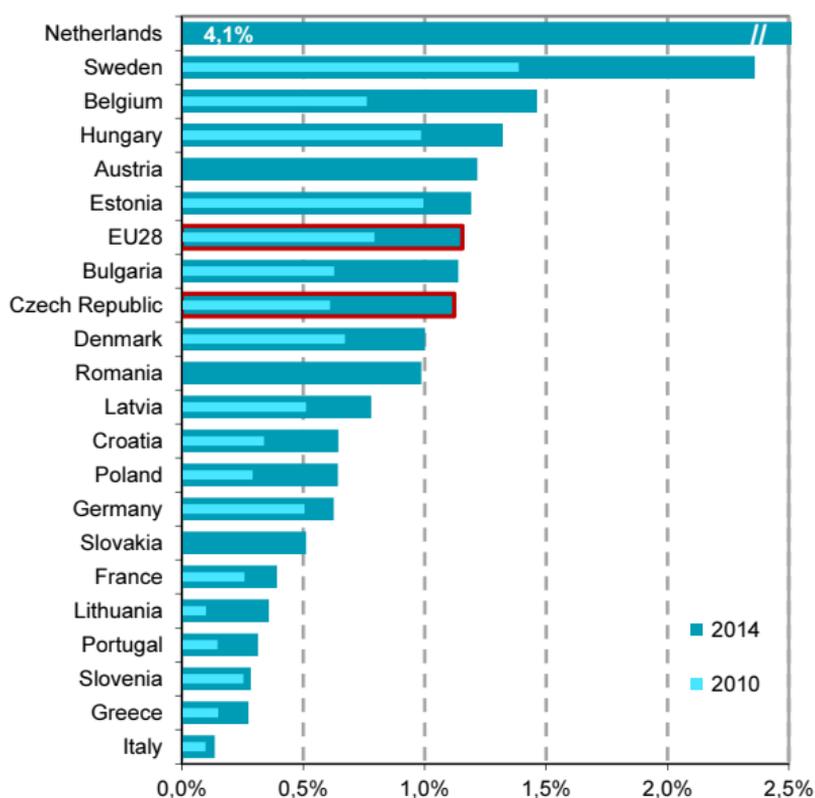
Source: CZSO, Survey on exports and imports of services

## D ICT external trade

**Figure D58 Computer services and software exports (as percentage of total services exports)**



**Figure D59 Computer services and software exports (as a percentage of GDP)**



Source: CZSO calculations based on EUROSTAT data, 2016

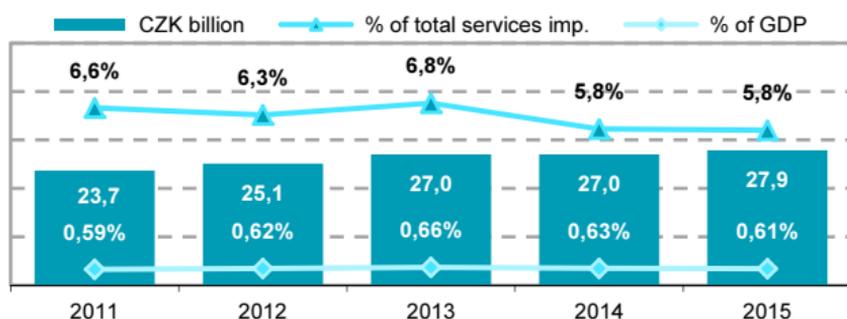
## D ICT external trade

**Table D16 Computer services and software imports to the Czech Republic**

CZK million

	2013	2014	2015
<b>Total</b>	<b>27 010</b>	<b>27 005</b>	<b>27 851</b>
Computer services, total	21 425	21 551	21 079
Computer HW&SW consulting and support	13 380	12 831	13 330
Data processing, hosting and related services	6 187	6 415	5 475
Maintenance and repair of computers	1 858	2 305	2 273
Computer software, total	5 586	5 454	6 772
Software originals: tailor-made sw&apps	1 821	2 182	2 295
Standard software supplied over the Internet	2 308	2 133	2 209
License to reproduce or distribute software	1 457	1 139	2 268
<b>Ownership of importing enterprises</b>			
Private national enterprises	3 574	3 278	4 108
Foreign-controlled enterprises	23 437	23 727	23 743
<b>Size of importing enterprises</b>			
Small (0-49 employees)	2 235	1 630	3 010
Medium-sized (50-249 employees)	6 247	5 740	6 669
Large (250+ employees)	18 528	19 636	18 172

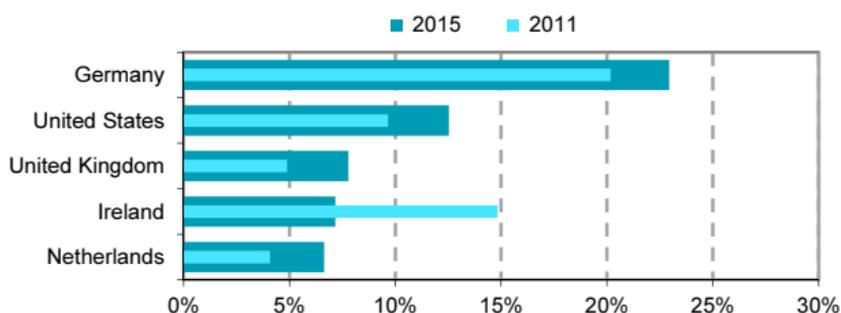
**Figure D60 Computer services and software imports**



**Figure D61 Computer services and software imports by ownership of importing enterprises**



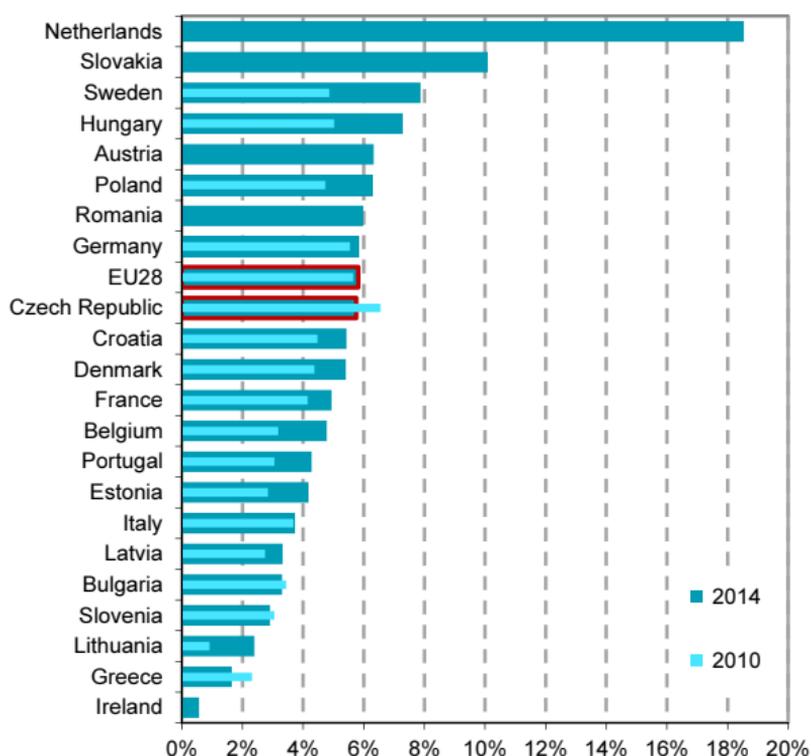
**Figure D62 Computer services and sw imports by countries**



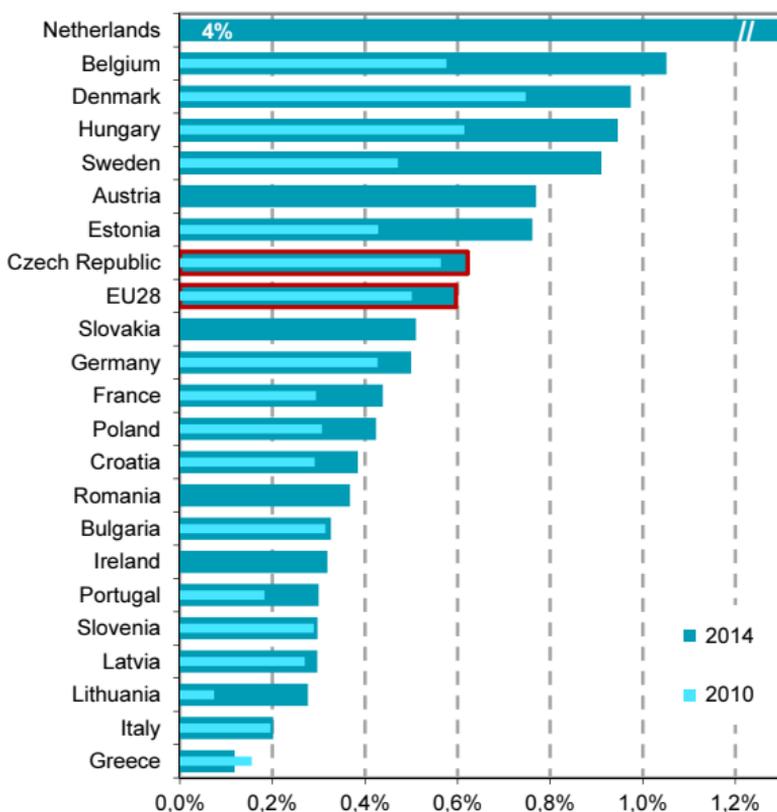
Source: CZSO, Survey on exports and imports of services

## D ICT external trade

**Figure D63 Computer services and software imports (as a percentage of total services imports)**



**Figure D64 Computer services and software imports (as a percentage of GDP)**



Source: CZSO calculations based on EUROSTAT data, 2016