F Education and digital skills

Numbers of desktop computers, tablets and laptops both with and without Internet connection calculated per 100 students in different levels of schools have been collected by **Ministry of Education**, **Youth and Sports**. Numbers of schools equipped with school wireless network and school intranet come from the same source. These indicators have been collected from nursery, basic, secondary and higher professional schools every year since 2005 (nursery school since 2014). The indicators have been also available in regional breakdown. This publication presents only data for the latest two years of this survey since the methodology has changed in 2014.

Notes:

Reference period: 30/9 of reference year

PISA 2012, survey conducted by OECD, have been used for international comparison. Questionnaires targeted on schools and questionnaires targeted on students have been used. Data presented in this chapter come from questionnaire targeted on 15-year-old students and present information on their usage of the Internet at schools.

Sample Survey on ICT Use in Households and by Individuals has been used as a source for data on **computer skills** of individuals (this survey is described in details in the opening text of chapter C). Eurostat database has been used for international comparison. Data contained in this chapter present mainly information about usage of different kinds of software.

Sample Survey on ICT Use in Households and by Individuals has been also used as a source for data on different activities carried out by students. Eurostat database has been used for international comparison. *Data from this database were extracted in March 2016.*

Comparability of data published by the CZSO and Eurostat: The data for the Czech Republic published by Eurostat slightly differs from the data published by the CZSO. This difference is due to the fact that Eurostat includes solely individuals aged between 16 and 74 years. The CZSO provides as standard data for the whole adult population aged 16 and over. *This is the reason why the tables in this publication give for the Czech Republic dual total values: total of aged 16 and over and total aged 16-74.*

Reference period (data for all individuals and students): last 3 months before the time of answering the questions (unless otherwise stated)

Notes:

- **Student** is a person in age of 16 years and more who was in the time of survey in a formal education and designated education as his/her main occupation.
- **School intranet** is an internal communication network in schools using an Internet protocol allowing communications within a school building.

For more information on Eurostat database see:
http://ec.europa.eu/eurostat/web/information-society *and*
http://ec.europa.eu/eurostat/web/information-society/methodology

Further information on ICT use by individuals can be found at:
https://www.czso.cz/csu/czso/domacnosti_a_jednotlivci

Further information on ICT use by students can be found at:
https://www.czso.cz/csu/czso/information_technologies_in_schools

F Education and digital skills

Tab. F1 Computers available to students in the Czech Republic during the school year 2015/16

number of devices per 100 students*

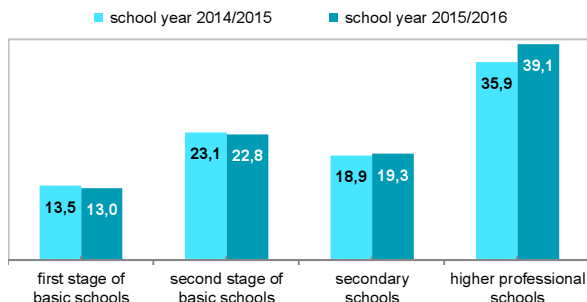|	Desktop computer	Portable computer	Tablet
Total			
First stage of basic schools	13,3	1,8	0,9
Second stage of basic schools	23,0	2,6	1,4
Secondary schools	19,6	2,2	0,9
Higher professional schools	40,9	3,0	0,5
with Internet access			
First stage of basic schools	13,0	1,7	0,9
Second stage of basic schools	22,8	2,5	1,4
Secondary schools	19,3	2,2	0,9
Higher professional schools	39,1	3,0	0,3

* devices privately owned by students are not included

Tab. F2 Schools equipped with School wireless network (Wi-fi) and Intranet during the school year 2015/16

	Number of schools	% of schools*
School wireless network (Wi-fi)		
First stage of basic schools	3 227	78,7
Second stage of basic schools	2 211	81,6
Secondary schools	1 135	87,0
Higher professional schools	167	83,9
School Intranet		
First stage of basic schools	586	14,3
Second stage of basic schools	550	20,3
Secondary schools	601	46,1
Higher professional schools	108	54,3

* percentage of all schools of a given type

Figure F1 The number of desktop computers with Internet connection (per 100 students) in a given type of schools

■ school year 2014/2015　■ school year 2015/2016

	first stage of basic schools	second stage of basic schools	secondary schools	higher professional schools
2014/2015	13,5	23,1	18,9	35,9
2015/2016	13,0	22,8	19,3	39,1

Source: Ministry of Education, Youth and Sports of the Czech Republic, 2016

Figure F2 Students aged 15 in EU countries with the Internet access at school; 2012

- have access to the Internet and use it
- have access to the Internet but do not use it
- do not have access to the Internet

Country	have access and use it	have access but do not use it	do not have access
Denmark	97%		
Netherlands	89%		8%
Finland	89%	7%	
Sweden	87%	9%	
Czech Rep.	81%	12%	7%
Austria	79%	15%	6%
Portugal	76%	21%	
Slovakia	75%	14%	11%
Spain	73%	18%	8%
Estonia	72%	22%	6%
Hungary	69%	22%	9%
Greece	68%	25%	7%
Slovenia	66%	19%	15%
Germany	66%	26%	9%
Poland	63%	25%	11%
Belgium	62%	19%	19%
Ireland	61%	32%	7%
Italy	53%	23%	24%

Source: OECD, PISA Survey, 2012

Tab. F3 Individuals in the Czech Republic with selected computer skills; 2015

%

	Copying files	Editing photos	Program-ming
Total (aged 16+)	**55,4**	**25,3**	**3,3**
Total (aged 16-74)	*59,8*	*27,4*	*3,6*
Gender:			
Males (aged 16+)	58,8	31,5	6,1
Females (aged 16+)	52,1	19,4	0,6
Age group:			
16-24 year-olds	85,7	51,2	8,2
25-34 year-olds	78,8	43,1	6,5
35-44 year-olds	72,4	31,4	3,3
45-54 year-olds	58,5	20,8	3,3
55-64 year-olds	39,3	11,8	0,5
65 year-olds and over	13,7	4,5	0,2
Education attainment level (aged 25+):			
Primary (ISCED 0, 1 or 2)	12,8	5,3	0,2
Lower secondary (ISCED 3C)	32,7	10,6	0,5
Upper secondary (ISCED 3A or 4)	67,8	30,9	3,5
Tertiary (ISCED 5 or 6)	86,0	44,9	9,1
Specific groups:			
Women on maternity leave	72,8	32,0	0,7
Students (aged 16+)	91,2	56,9	9,7
Pensioners	15,0	5,3	0,2

as a percentage of all individuals in a given socio-demographic group

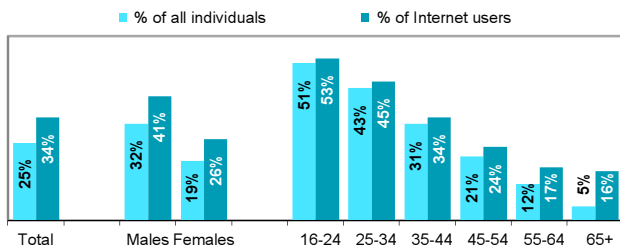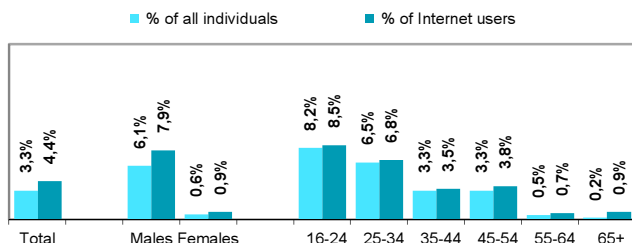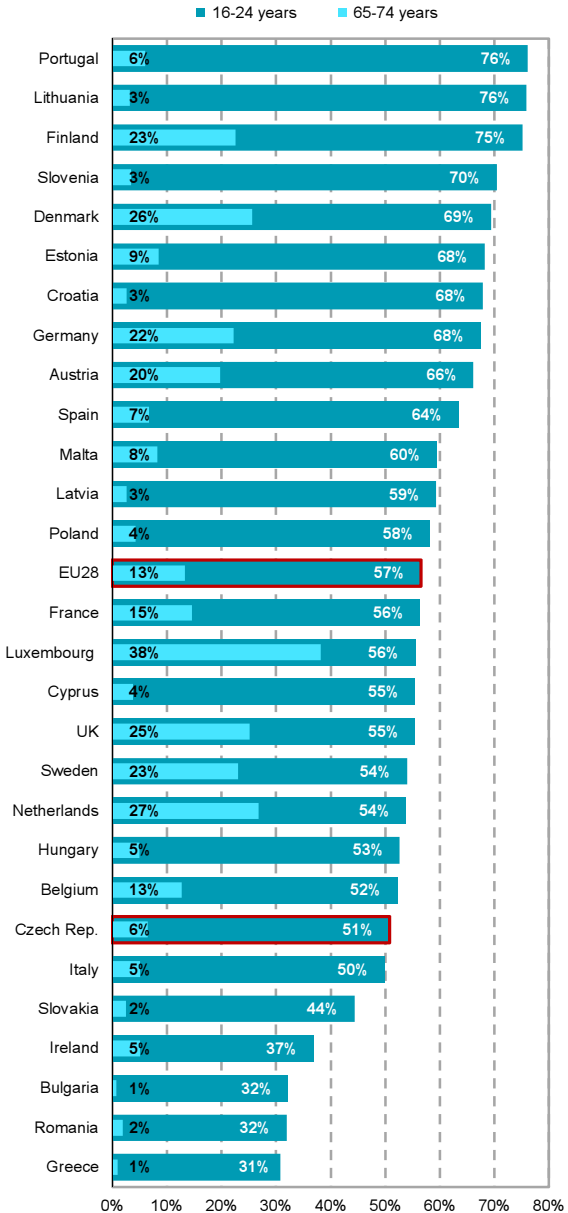**Figure F3 Photo editing software use by sex and age, 2015**

■ % of all individuals   ■ % of Internet users

Figure F4 Programming by sex and age; 2015

■ % of all individuals   ■ % of Internet users

Source: Czech Statistical Office, ICT use survey in households

Figure F5 Individuals aged 16 to 24 and 65 to 74 in EU countries who used software to edit photos, 2015

Legend: ■ 16-24 years ■ 65-74 years

Country	65-74 years	16-24 years
Portugal	6%	76%
Lithuania	3%	76%
Finland	23%	75%
Slovenia	3%	70%
Denmark	26%	69%
Estonia	9%	68%
Croatia	3%	68%
Germany	22%	68%
Austria	20%	66%
Spain	7%	64%
Malta	8%	60%
Latvia	3%	59%
Poland	4%	58%
EU28	13%	57%
France	15%	56%
Luxembourg	38%	56%
Cyprus	4%	55%
UK	25%	55%
Sweden	23%	54%
Netherlands	27%	54%
Hungary	5%	53%
Belgium	13%	52%
Czech Rep.	6%	51%
Italy	5%	50%
Slovakia	2%	44%
Ireland	5%	37%
Bulgaria	1%	32%
Romania	2%	32%
Greece	1%	31%

as a percentage of all individuals in a given age group and country

Source: Eurostat 2015

Tab. F4 Individuals in the Czech Republic who declared they used selected Office software, 2015

%

	Word process. software	Spread sheet software	Present. software
Total (aged 16+)	**52,9**	**41,5**	**29,3**
Total (aged 16-74)	57,0	44,9	31,8
Gender:			
Males (aged 16+)	54,7	43,7	32,1
Females (aged 16+)	51,2	39,4	26,6
Age group:			
16-24 year-olds	83,7	74,3	65,5
25-34 year-olds	73,7	59,6	46,2
35-44 year-olds	69,6	52,5	35,8
45-54 year-olds	56,8	43,3	27,1
55-64 year-olds	37,1	27,7	12,8
65 year-olds and over	12,4	7,4	3,8
Education attainment level (aged 25+):			
Primary (ISCED 0, 1 or 2)	11,3	6,9	4,5
Lower secondary (ISCED 3C)	28,9	16,2	8,6
Upper secondary (ISCED 3A or 4)	65,5	52,8	33,8
Tertiary (ISCED 5 or 6)	86,0	76,3	63,9
Specific groups:			
Women on maternity leave	68,0	47,7	38,5
Students (aged 16+)	91,1	83,1	74,8
Pensioners	14,5	8,6	3,9

as a percentage of all individuals in a given socio-demographic group

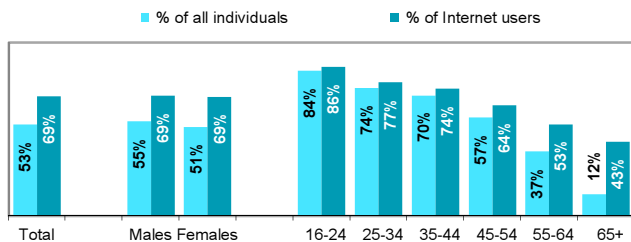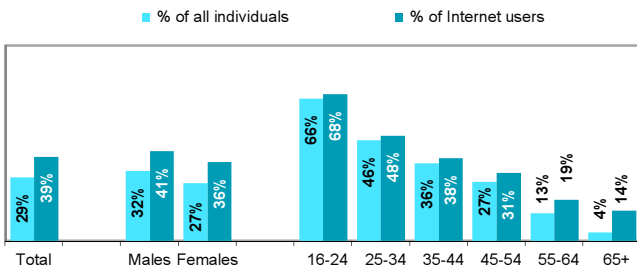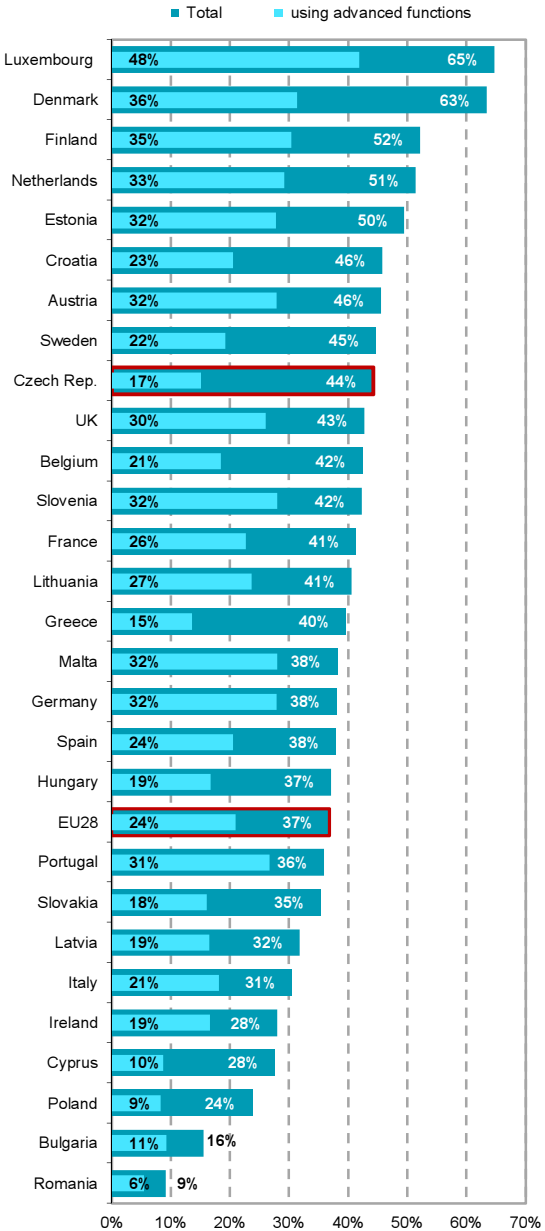**Figure F6 Word processing software use by sex and age, 2015**

■ % of all individuals   ■ % of Internet users

	Total	Males	Females	16-24	25-34	35-44	45-54	55-64	65+
% of all individuals	53%	55%	51%	84%	74%	70%	57%	37%	12%
% of Internet users	69%	69%	69%	86%	77%	74%	64%	53%	43%

Figure F7 Presentation software use by sex and age, 2015

■ % of all individuals   ■ % of Internet users

	Total	Males	Females	16-24	25-34	35-44	45-54	55-64	65+
% of all individuals	29%	32%	27%	66%	46%	36%	27%	13%	4%
% of Internet users	39%	41%	36%	68%	48%	38%	31%	19%	14%

Source: Czech Statistical Office, ICT use survey in households

**Figure F8 Individuals in EU countries
who used Word processing software, 2015**

■ Total ■ using advanced functions

Country	Total	using advanced functions
Luxembourg	65%	48%
Denmark	63%	36%
Finland	52%	35%
Netherlands	51%	33%
Estonia	50%	32%
Croatia	46%	23%
Austria	46%	32%
Sweden	45%	22%
Czech Rep.	44%	17%
UK	43%	30%
Belgium	42%	21%
Slovenia	42%	32%
France	41%	26%
Lithuania	41%	27%
Greece	40%	15%
Malta	38%	32%
Germany	38%	32%
Spain	38%	24%
Hungary	37%	19%
EU28	37%	24%
Portugal	36%	31%
Slovakia	35%	18%
Latvia	32%	19%
Italy	31%	21%
Ireland	28%	19%
Cyprus	28%	10%
Poland	24%	9%
Bulgaria	16%	11%
Romania	9%	6%

as a percentage of all individuals aged 16 to 74 in a given country

Source: Eurostat 2015

Tab. F5 Individuals in the Czech Republic using the Internet for selected educational activities, 2015

%

	Looking for information about education	Consulting wikis	Doing an on-line course
Total (aged 16+)	**19,3**	**34,7**	**2,6**
Total (aged 16-74)	*20,9*	*37,3*	*2,8*
Gender:			
Males (aged 16+)	18,1	34,8	2,4
Females (aged 16+)	20,4	34,6	2,8
Age group:			
16-24 year-olds	43,7	67,5	4,4
25-34 year-olds	30,6	49,8	3,9
35-44 year-olds	23,6	39,7	4,0
45-54 year-olds	16,5	32,3	2,4
55-64 year-olds	9,6	23,6	1,4
65 year-olds and over	2,1	10,0	0,3
Education attainment level (aged 25+):			
Primary (ISCED 0, 1 or 2)	1,6	4,8	0,0
Lower secondary (ISCED 3C)	5,4	15,2	0,5
Upper secondary (ISCED 3A or 4	23,7	41,4	3,6
Tertiary (ISCED 5 or 6)	39,9	64,2	6,0
Specific groups:			
Women on maternity leave	27,0	45,4	3,7
Students (aged 16+)	53,3	80,6	5,2
Pensioners	2,0	10,9	0,2

as a percentage of all individuals in a given socio-demographic group

Figure F9 Looking for information about education by sex and age, 2015
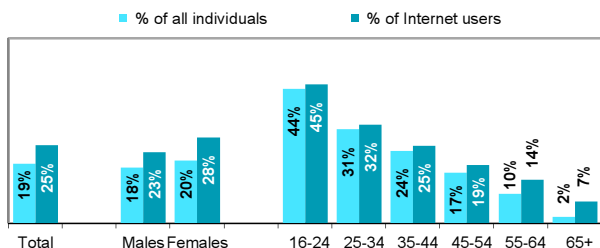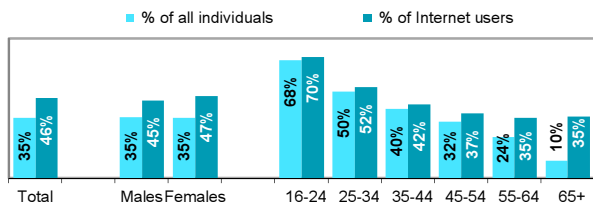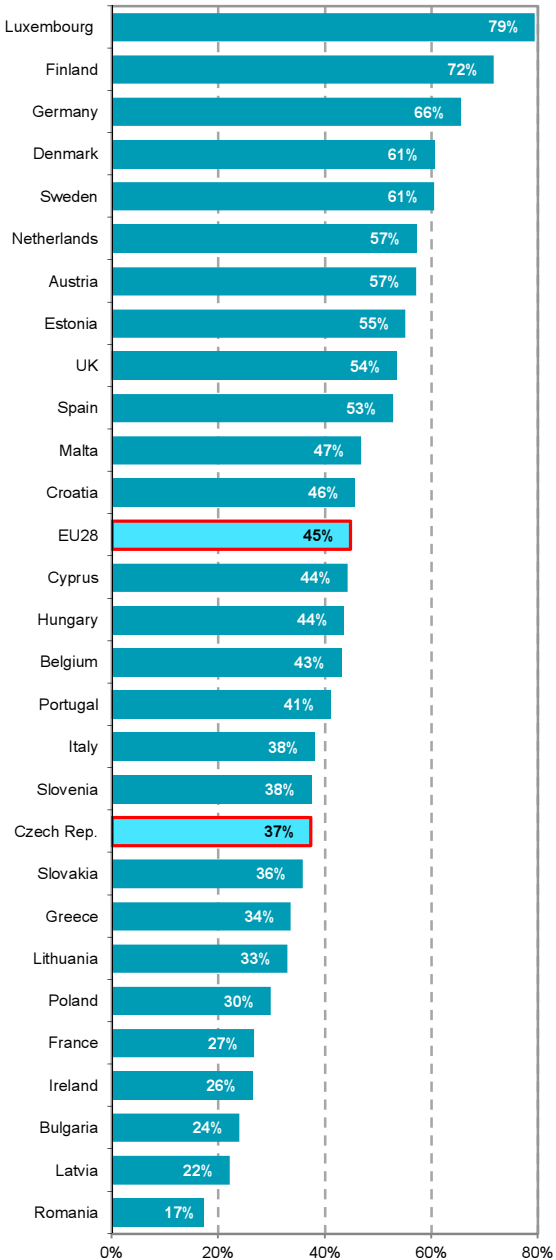

Figure F10 Consulting wikis to obtain knowledge on any subject by sex and age, 2015

Source: Czech Statistical Office, ICT use survey in households

Figure F11 Individuals in EU countries consulting wikis to obtain knowledge on any subject, 2015

Country	Percentage
Luxembourg	79%
Finland	72%
Germany	66%
Denmark	61%
Sweden	61%
Netherlands	57%
Austria	57%
Estonia	55%
UK	54%
Spain	53%
Malta	47%
Croatia	46%
EU28	45%
Cyprus	44%
Hungary	44%
Belgium	43%
Portugal	41%
Italy	38%
Slovenia	38%
Czech Rep.	37%
Slovakia	36%
Greece	34%
Lithuania	33%
Poland	30%
France	27%
Ireland	26%
Bulgaria	24%
Latvia	22%
Romania	17%

as a percentage of all individuals aged 16 to 74 in a given country

Source: Eurostat 2015

Tab. F6 Students in the Czech Republic using the Internet; 2013-2015*

%

	Total	Males	Females
Total	**98,2**	**98,3**	**98,0**
using mobile connections	67,0	69,6	64,4
Usage of the Internet for selected activities:			
Participating in social networks	91,3	92,2	90,5
Playing music, movies or videos	87,5	88,9	86,0
Reading online news	82,8	83,6	81,9
Telephoning over the Internet	68,9	68,2	69,7
Playing games	62,4	76,7	47,7
Searching for travel-related information	60,1	56,4	63,9
Watching TV	47,5	51,5	43,4
Online shopping	34,9	35,2	34,6
Internet banking	30,1	30,0	30,3

as a percentage of all students aged 16+ in a given group

Figure F12 Students and individuals aged 16+ using the Internet for selected activities, 2013-2015*

■ students   ■ all individuals

participating in social networks	watching videos	reading online news	playing games	online shopping	using internet banking
93% / 49%	89% / 52%	84% / 86%	64% / 25%	36% / 31%	31% / 58%
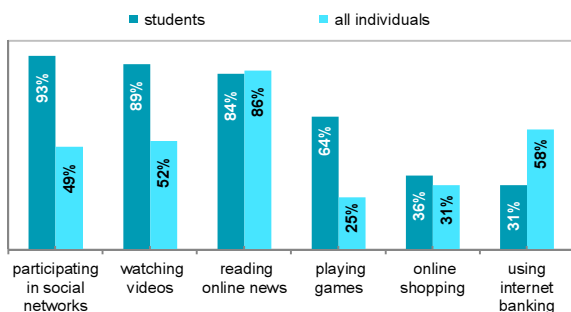
*numbers are moving averages calculated for years 2013-2015
as a percentage of students and all individuals who have used the Internet in the last 3 months

Figure F13 Students and individuals aged 16+ accessing the Internet through a mobile phone
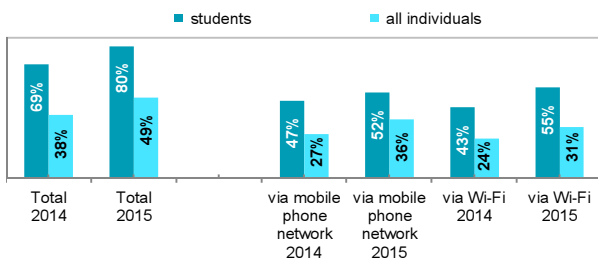
■ students   ■ all individuals

| Total 2014	Total 2015	via mobile phone network 2014	via mobile phone network 2015	via Wi-Fi 2014	via Wi-Fi 2015
69% / 38%	80% / 49%	47% / 27%	52% / 36%	43% / 24%	55% / 31%

as a percentage of students and all individuals who have used the Internet in the last 3 months

Source: Czech Statistical Office, ICT use survey in households

Figure F14 Students in EU countries using Social networks and Shopping online, 2015

■ participation in social networks
■ online shopping
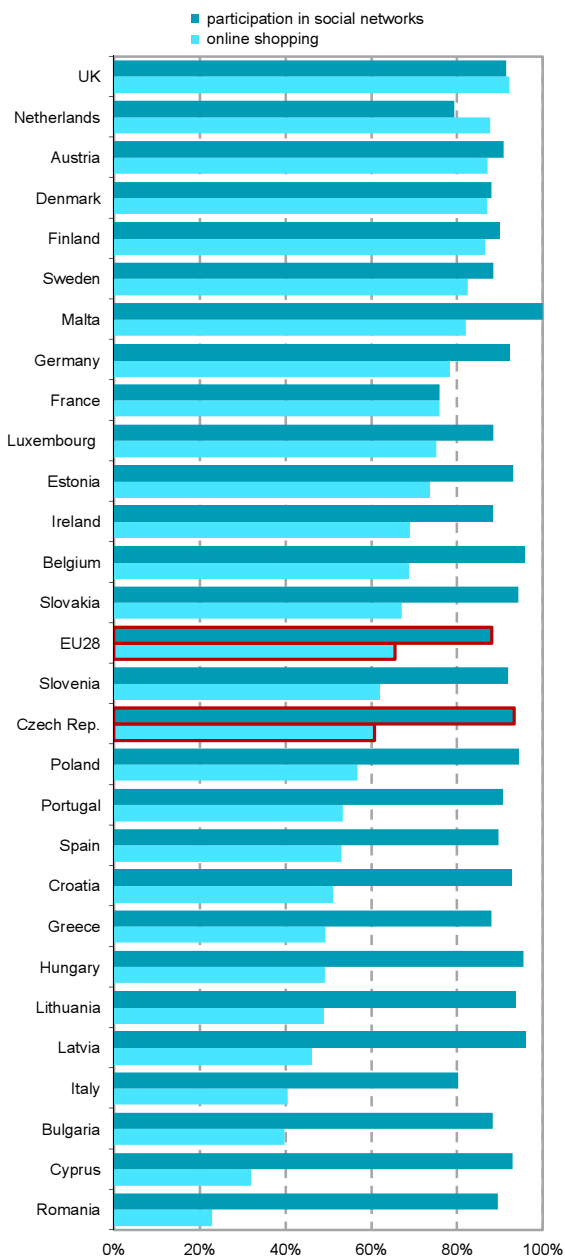
as a percentage of students 16+ in a given country

Source: Eurostat 2015