

9. INFORMATION SOCIETY

Notes on Tables 9-1 to 9-18

Since 2002 the Czech Statistical Office has been carrying out a survey on the usage of information and communication technologies in households and by individuals every year. The survey is carried out within the Labour Force Sample Survey (LFSS), which is implemented by the Czech Statistical Office

Since 2006 the survey has been performed according to the Regulation (EC) No 808/2004 of the European Parliament and of the Council of 21 April 2004 concerning Community statistics on the information society, which enables to obtain data comparable with other EU Member States.

In 2020, the survey was carried out in the second quarter of the year. The questionnaire queries were responded by 7 159 individuals aged 16+ years. The questionnaire included 153 questions in total, of which 8 were for households and 145 for individuals.

The **reference period** for the data on persons is the last three months before the survey date (in the Czech Republic it was the 2nd quarter of the reference year). Only as for data on the Internet use in relation to public administration (searching for information on websites of public authorities and sending of filled-in forms online) the reference period is 12 months prior to the survey date.

Educational attainment is published for the age group 25–64 years. Setting of some age groups aside shows the influence of education on information technologies usage better. For example, there is a big share of persons in the age group 16–24 years whose educational paths were not finished when the survey was carried out. Their educational attainment is thus conditioned rather by their age than their educational aspirations. Similarly, the educational attainment of persons aged 65+ years is influenced primarily by the time, in which these persons received the education. Among persons aged 65+ years, there is much higher share of persons with primary education than among younger ones.

The **Internet user** shall mean a person who used the Internet at least once in the last three months.

The **Internet user in the mobile phone** shall mean a person who used the Internet in a mobile phone at least once in the last three months, namely via Wi-Fi or mobile data.

The **purchase over the Internet** shall mean an on-line ordering of goods or services by means of web pages, websites, or web applications. The goods or services ordered via the Internet may and may not be paid via the Internet. It can be paid also by cash, or card on delivery, or at personal pickup. Purchases over the Internet are surveyed as purchases for private use that means goods or services are bought for personal use and the use of family or friends. Purchases for an employer are excluded.

Persons using **social networks on the Internet** are individuals who in the last three months logged into their user profile on such networks at least once and used available services such as, for example, browsing through posts of other users, communication with other users, and/or sharing of their own posts.

Such activities on the Internet (**Internet activities**) are surveyed that respondents performed for their private purposes within the last three months prior to the survey date. Only as for data on the Internet use in relation to public administration, the reference period is the last 12 months prior to the survey date.

Note: Data on respective Internet activities performed by persons are presented as a share in:

- a) the total male and female population surveyed in the given age group; and
- b) groups of male and female Internet users in the given age group.

The data in respective graphs refer to the share in the total male and female population surveyed, unless stated otherwise.

Detailed information on methodology of these themes can be found in the CZSO publication 'Use of ICT by Households and Individuals in 2020', code 062004-20, which is available for free in Czech on the CZSO website at: https://www.czso.cz/csu/czso/domacnosti_a_jednotlivci.

International comparisons

Data for the Czech Republic published by Eurostat slightly differ from the data provided for the CR by the Czech Statistical Office. The difference is caused by the fact that the data published by Eurostat include only persons aged 16–74 years. Eurostat does not publish data for the adult population aged 75+ years. On the other hand, the Czech Statistical Office gives data for the whole adult population, i.e. the whole population aged 16+ years.

Notes on Tables 9-19 to 9-20

Data on **students of and graduates from ICT fields of education** were obtained from data sources of the Ministry of Education, Youth, and Sports, namely from the Union Information from Students' Registers (the "SIMS" database). Data are continually added to the source SIMS database and the database is continually updated, including retrospective corrections. Data published in this Yearbook correspond to the state of processing as at 20 January 2020. Data on university students are always as at 31 December of the relevant year; data on graduates are for the whole school year.

Information and communication studies are defined based on the international standard of the ISCED-F 2013 classification, class 06 Information and Communication Technologies; they include fields of education defined in detail as follows:

Computer use (0611);

Database and network design and administration (0612);

Software and applications development and analysis (0613);

Information and communication technologies not elsewhere classified (0619);

Inter-disciplinary programmes and qualifications involving information and communication technologies (0688).

Numbers of students and graduates are given as headcount, i.e. each student is included in a particular piece of data only once, including students who study in more study programmes concurrently. The total numbers of students and graduates thus do not have to be equal to the sums of students and graduates of respective types of study programmes.

Notes on Tables 9-21 to 9-23

(The occupations of) **ICT specialists** are subdivided into two major groups, namely to ICT managers, engineers and professionals (ICT professionals) and ICT technicians, installers and servicers (ICT technicians). Their breakdown is based on the Classification of Occupations (CZ-ISCO), the corresponding national classification in the Czech Republic based on the International Standard Classification of Occupations (ISCO-08) developed by the International Labour Organisation (ILO). From 2011, ICT specialists are defined and assigned to the major groups, groups, and subgroups of the CZ-ISCO based on recommendations of Eurostat and the International Labour Organization.

The data on **numbers of ICT specialists** are taken from the Labour Force Sample Survey (LFSS). In order to ensure higher reliability and to eliminate considerable year-on-year fluctuations of values for this group of employees, data are provided as three-year moving averages (i.e., for example, the value for 2018 is calculated as an average from the values for 2017, 2018, and 2019).

Data on **wages of the ICT specialists** come from the structural employee wage statistics, which is generated by merging of databases of the sample survey of the Information System on Average Earnings of the Ministry of Labour and Social Affairs, which covers the wage sphere, and from the database of the administrative data source of the Salary Information System of the Ministry of Finance, which exhaustively covers the salary sphere. Data on wages of ICT specialists in this publication are available only for the ICT specialists defined rather narrowly, which includes two sub-major groups of the CZ-ISCO: 25 Information and communications

technology professionals (hereinafter as the ICT professionals) and 35 Information and communications technicians (hereinafter as the ICT technicians).

Data for international comparisons of numbers of ICT specialists in individual Member States of the European Union come from data sources of Eurostat. When comparing the figures of Eurostat with figures from the LFSS, it is necessary to keep in mind the different concepts in terms of the way ISCO codes are aggregated into respective categories. For instance, the Eurostat concept differs slightly from the definitions of ICT professionals and technicians stated above. Eurostat includes people working in positions with following ISCO codes: 2166 - graphic and multimedia designers, 2356 - information technology trainers, 7421 - electronics mechanics and servicers also among ICT specialists. However, in this detailed breakdown, relevant data are not available for most countries. Moreover, data from Eurostat are given for the relevant year and not as three-year moving averages as it is in the case of data for Czechia from the Labour Force Sample Survey (LFSS).

More statistical data and methodological information on ICT specialists are available at:

https://www.czso.cz/csu/czso/lidske_zdroje_pro_informacni_tehnologie (Czech only)