РЕПУБЛИКА СРПСКА
РЕПУБЛИЧКИ ЗАВОД ЗА СТАТИСТИКУ
REPUBLIKA SRPSKA
INSTITUTE OF STATISTICS

~ Methodology ~

SURVEY ON THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN HOUSEHOLDS AND INDIVIDUALLY

LEGAL BASIS

The survey is carried out in accordance with the Law on Statistics of Republika Srpska ("Official Gazette of Republika Srpska", No. 85/03) and pursuant to the Statistical Programme of Republika Srpska for the period 2018-2021 and current Work plan of the Republika Srpska Institute Statistics..

METHODOLOGICAL BASIS

AIM AND CONTENT OF THE STATISTICAL SURVEY

The survey on the use of information and communication technologies in households and individually (IKT-DOM) is carried out by the Republika Srpska Institute of Statistics, as an annual survey, in order to obtain a more comprehensive overview of the level of development of information society in Republika Srpska. Results of this survey are data on the presence of information and communication technologies in households, as well as data on the use of personal computers and Internet and data on computer literacy of the population. These data represent an important source for the creation, realisation and improvement of policies in the field of information society in Republika Srpska.

OBSERVATION UNITS / SURVEY UNITS

Observation units are persons aged between 16 and 74 and their households. Survey unit is a member of a selected household. Selected persons provide answers to questions in the questionnaire for themselves, while another household member is also allowed to provide answers for them.

COVERAGE

In accordance with the Eurostat's methodology, the survey covers households with at least one member aged between 16 and 74, as well as individuals of the same age. The frame for the ICT sample is BiH Master sample from 2009. For sample for ICT in households and individuals, it was decided to use LFS sample, i.e. that the sample of ICT is equal to LFS sample, with the exception of households that do not have at least one member of the age 16-74 years, that is, they do not belong to a defined target population. The advantage of this sampling is that the process of data collection for ICT takes place after the field work of the LFS, so that when collecting data for ICT takes place, there are updated household telephone numbers, which is very important for the use of the CATI method.

The survey does not cover collective households (home or hotel for single persons, residence for students and boarding school for pupils, home for children and youth with special needs, home for socially vulnerable children, old people's home, home for old and vulnerable persons, other homes for nursing and care, convents, monasteries, boarding schools, etc.).

METHOD AND PERIOD OF DATA COLLECTION

Data collection is carried out once a year, based on a sample, through combination of computer assisted telephone interviewing (CATI) and "face to face" interview using paper questionnaires (PAPI) or using laptops (CAPI). The sample is designed as a two-stage random sample, stratified by type of settlements. Units of the first stage are enumeration areas, while units of the second stage are households. The reference period represents the period for which data were collected. Main reference period covers three months preceding the interview. For certain number of question the reference period covers 12 months preceding the interview.

PROTECTION OF CONFIDENTIAL DATA

Confidentiality of data and protection of personal data are guaranteed by Articles 25 and 27 of the Law on Statistics of Republika Srpska ("Official Gazette of the Republika Srpska", No. 85/03) and the Rulebook on Protection of Confidential Data of the Republika Srpska Institute for Statistics. The confidentiality of statistical data is also ensured by the Law on the Protection of Personal Data ("Official Gazette of BiH" No. 49/06).

Thus, the Institute must not use data collected for statistical purposes for any other purposes nor publish them as individual data.

DEFINITIONS

Information Technology (IT): A technology that uses computers to collect, process, store, protect and transmit information. Under modern conditions, computers are usually connected to the network, and that is what is considered **Information and Communications Technology (ICT).**

Computer (from Latin *computare*: compile, calculate): A complex device consisting of hardware - physical parts of computers, tangible, visible parts and programs (software), i.e. software support - a set of commands "understandable" to computers that run its work, instructions to tangible parts, orders what to do. Computers include personal computers (PCs), laptops, tablets and other portable devices (except smartphones).

Internet: A global electronic communication system made up of many interconnected computer networks and devices that exchange information using a common set of communication protocols.

Broadband Internet connection: A type of Internet connection which provides high-speed data transfer. It represents a communication system in which the transmission medium (e.g. optical fiber cable) simultaneously transmits multiplied data, while individual data are modulated on separate frequencies

Browser: A software solution used to search the Internet. It is a programme/application used to **ADSL (Asymmetric Digital Subscriber Line)**: Broadband digital transmission technology which uses the existing telephone line, allowing simultaneous transmission of data and voice calls.

Download: The process of copying documents to the user's computer from another computer of from a computer within an Internet service.

Electronic commerce (e-commerce): Purchase or sale of goods or services using the Internet.

Electronic mail: Electronic transfer of messages, including text and attachments, from one computer to another computer, via the Internet.

Electronic Public Services (e-government): electronic contacts through the Internet with public institutions for the purpose of obtaining the necessary information and services.

Information security: preserving confidentiality, integrity and availability of information, and provided by data protection rules at the physical, technical and organizational level.

GPRS (General Packet Radio Service): A protocol which enables wireless transfer through GSM networks.

Virus is a computer programme, whose running and loading damages or deletes data on a computer.

WiFi is a wireless network in which data between two or more devices are transmitted using radio frequencies and corresponding antennas.

DATA PROCESSING

Control and processing of statistical material after interviewing are organised at the headquarters of the Republika Srpska Institute of Statistics.

When persons are interviewed as members of sampled households, data are entered into the BLAISE application directly. The application used for data entry includes controls which prevent computationally and logically incorrect data being entered into the database. These are "HARD" and "SOFT" controls that prompt and stop the entry until correct data are entered. Such method of data entry provides a database containing logically and computationally correct data.

Data collected from respondents represent a basis for estimates of data for the entire population, through weighting. Weights are calculated in two steps. In the first step, each sampled household is assigned a sample weight, calculated as the reciprocal of the probability of selection for each household. In the second step, adjustments are made based on non-response. Since there is no agreement between the three statistical institutions on the use of auxiliary information for the calibration process, the classic weighting correction for each stratum is applied in order to compensate for the total non-response, assuming that units that did not respond in any sense to similar units responding, taking into account goals of the survey.

By means of the aggregation of weighted data across domains of interest, estimates of unknown population parametres are calculated. After the database is formed, data are analysed, tabulated and published.

COMPLIANCE WITH INTERNATIONAL RECOMMENDATIONS AND STANDARDS

The survey on the use of ICT in households and individually is harmonised with the Eurostat Methodology for Information Society Statistics, published annually, as well as with the basic EU Parliament and Council Regulation (EC) no. 808/2004.

ORGANISATION OF SURVEY IMPLEMENTATION

AUTHORITIES IMPLEMENTING THE STATISTICAL SURVEY

Pursuant to the Statistical Programme of Republika Srpska for the period 2018-2021, the preparation, organisation and implementation of the survey, as well as the processing of collected data, are carried out by the Republika Srpska Institute of Statistics.

OBLIGATION TO PROVIDE DATA

The obligation to submit data to the Institute is based on Article 8 of the Law on Statistics of Republika Srpska ("Official Gazette of Republika Srpska", No. 85/03).

PERIOD OF DATA COLLECTION

Data collection through computer assisted telephone interviewing (CATI) is carried out in May, and the fieldwork of the survey (PAPI/CAPI) is carried out in June/July of the current year.

INSTRUMENTS

The following methodological instruments were designed for the implementation of survey on the use of information and communication technologies in households and individually:
- List of sampled households
- Questionnaire – IKT- DOM.
- Manual.

PUBLISHING

Data are published for the Republika Srpska level, in an annual release, at the official website of the Institute www.rzs.rs.ba. Interpretation of the published data is the sole responsibility of the Republika Srpska Institute of Statistics

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