



## ~ 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 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-D) 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 a new BiH Master sample.

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.).

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## **METHOD AND PERIOD OF DATA COLLECTION**

Data collection is carried out once a year, based on a sample, through the computer assisted telephone interviewing (CATI). The sample is designed as a stratified two-stage random sample. In the first stage preliminary sample units are selected. Selection of households is done in the second stage. Stratification in the selection of households is done also by type of settlement (urban and other), hence it is a stratified two-stage random sample. 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.

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**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.

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. Until the conditions for using auxiliary information for the calibration process are met, the classic weight correction for each stratum is applied to compensate for the total non-response, assuming that the units that did not respond are in every sense similar to the units that responded taking into account the survey objectives.

By means of the aggregation of weighted data across domains of interest, estimates of unknown population parameters 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 and EU regulations on Information Society Statistics, published annually, as well as with the basic EU Parliament and Council Regulation (EC) no. 2019/1700 on European statistics relating to persons and households, based on data at individual level collected from samples.

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## ORGANISATION OF SURVEY IMPLEMENTATION

### *AUTHORITIES IMPLEMENTING THE STATISTICAL SURVEY*

Pursuant to the Statistical Programme of Republika Srpska 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 April/May 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- D.
- Manual.

## PUBLISHING

Data are published for the Republika Srpska level, in an annual release, at the [official website of the Institute](#). Interpretation of the published data is the sole responsibility of the Republika Srpska Institute of Statistics

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