

Statistical survey on the use of information and communication technologies in households and by individuals

IS_IKT.3_A_EN_2021_1

Reference Metadata in ESMS 2.0 structure

1	Contact
1.1	Contact organisation
State Statistical Office	
1.2	Contact organisation unit
Department for research and development, innovation and ICT.	
1.3	Contact name
Aida Jakupi	
1.4	Contact person function
Associate	
1.5	Contact mail address
Dame Gruev 4, 1000 Skopje, Republic of North Macedonia	
1.6	Contact email address
aida.jakupi@stat.gov.mk	
1.7	Contact phone number
3295-751	
1.8	Contact fax number
2	Metadata update
2.1	Metadata last certified
31/10/2022	
2.2	Metadata last posted
31/10/2022	
2.3	Metadata last update

31/10/2022	
3	Statistical presentation
3.1	Data description
The data for use of computers, mobile devices, Internet, frequency and purpose of their usage, information literacy of the population of the Republic of Macedonia.	
3.2	Classification system
National Classification of Activities - NKD Rev.2 National Classification of Occupations - NKZ System of education in the country in terms of ISCED 2011 - International Standard Classification of Education MSKOB (2013) Nomenclature of Territorial Units for Statistics - NTES	
3.3	Sector coverage
3.4	Statistical concepts and definitions
The definitions refer to the general areas: General information about ICT systems; Access to and use of the Internet; E-commerce and e-business and new themes (modules) are added according to the regulations. Detailed definitions can be found on link given in concept 11.1	
3.5	Statistical unit
Households having at least one member aged 15-74, and individuals, members of the household, who at the time of data collection are aged 15 to 74 years.	
3.6	Statistical population
Households having at least one member aged 15-74, and individuals, members of the household, who at the time of data collection are aged 15 to 74 years.	
3.7	Reference area
Republic of North Macedonia	
3.8	Time coverage
Since 2007.	
3.9	Base period
4	Unit of measure
Percentages.	
5	Reference period
01.01.2020-31.03.2020. 2019 - for questions about e-commerce and usage of e-government services.	
6	Institutional mandate

6.1	Legal acts and other agreements
<p>NATIONAL LEGISLATION</p> <p>Law on State Statistics ("Official Gazette of the Republic of Macedonia" No. 54/1997, 21/2007, 51/2011, 104/2013, 42/2014, 192/2015, 27/16, 83/18, 220/18 and "Official Gazette of the Republic of North Macedonia" No. 31/20) (https://www.stat.gov.mk/ZakonZaStatistika_en.aspx)</p> <p>Programme of Statistical Surveys 2018-2022 ("Official Gazette of RM" No. 22/18, 224/18 and "Official Gazette of the Republic of North Macedonia" No. 18/20 and 300/20.) (https://www.stat.gov.mk/ZaNas_en.aspx?id=8)</p>	
6.2	Data sharing
Time series for annual data: from 2007 transmitted to Eurostat via eDAMIS.	
7	Confidentiality
7.1	Confidentiality - policy
<p>Individual data are protected by the Law on State Statistics. Data collected with statistical surveys from the reporting units or indirectly from administrative or other sources are confidential data and are used only for statistical purposes. Results from the statistical processing may also generate information considered as confidential, for example: anonymised individual data, tables with low level of aggregation, as well as unreleased data. The Policy on Statistical Confidentiality contains the basic principles used in the SSO.</p>	
7.2	Confidentiality - data treatment
<p>Pursuant to Article 38 of the Law on State Statistics (https://www.stat.gov.mk/ZakonZaStatistika_en.aspx) and the Policy on Statistical Confidentiality (https://www.stat.gov.mk/pdf/PolicyOnStatisticalConfidentiality.pdf), individual data are not published.</p>	
8	Release policy
8.1	Release calendar
The date of data publication is determined in the Advance Release Calendar, which is updated quarterly.	
8.2	Release calendar access
https://www.stat.gov.mk/Kalendar_en.aspx	
8.3	User access
<p>All users have equal access to statistics at the same time: this means that the publication dates are announced in advance and no user has access to official statistics before they are published. Statistical data are first published in the "News Releases" edition on the website of the State Statistical Office at 12:00.</p>	

9	Frequency of dissemination
Yearly.	
10	Accessibility and clarity
10.1	News release
In accordance with the Dissemination Strategy (http://www.stat.gov.mk/Dokumenti/strategii/StrategijaDiseminacija2014-2016en.pdf), news releases are published (indicate the periodicity: monthly, quarterly) and they are available on the website of the SSO in the section: "News Releases".	
10.2	Publications
Statistical Yearbook (link: https://www.stat.gov.mk/PrikaziPublikacija_1_en.aspx?rbr=845)	
10.3	On-line database
MakStat database is available on the web site. Number of views of the tables in the MakStat database: 319 http://makstat.stat.gov.mk/PXWeb/pxweb/en/MakStat/?rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef	
10.4	Micro-data access
The use of microdata by external users is possible only for research purposes and is done in accordance with the Law on State Statistics (Article 41, Article 42 and Article 43). Access to anonymised microdata is defined by an internal procedure of the State Statistical Office "Access to anonymised microdata for scientific research purposes" (https://www.stat.gov.mk/ZaNas_en.aspx?id=22).	
10.5	Other
At the request of users, data are also prepared in a form according to their needs.	
10.6	Documentation on methodology
The methodological notes are available on the web site of the State Statistical Office. http://www.stat.gov.mk/MetodoloskiObjasSoop_en.aspx?id=77&rbrObl=27	
10.7	Quality documentation
Quality report is making by fulfilling Eurostat's form - Report template, that is not available in public, it is only sent to Eurostat via eDAMIS.	
11	Quality management
11.1	Quality assurance

The quality of the processes and products in the State Statistical Office is ensured by adhering to the European Statistics Code of Practice (https://www.stat.gov.mk/ZaNas_en.aspx?id=2) and the Quality Assurance Framework within the European Statistical System (ESS Quality Assurance Framework – <https://ec.europa.eu/eurostat/documents/64157/4392716/ESS-QAF-V2.0-final.pdf>). The quality criteria are also determined in the Law on State Statistics in Article 4b and Article 4c (https://www.stat.gov.mk/ZakonZaStatistika_en.aspx).

11.2 Quality assessment

The State Statistical Office carries out statistical activities in accordance with the Statistical Business Process Model, which is based on the international model - Generic Statistical Business Process Model (GSBPM). The application of this model and international standards in statistical production ensures a high level of accuracy and comparability of data.

12 Relevance

12.1 User needs

Data are used by various users: citizens, government institutions, Eurostat and other international organisations. Data serve for monitoring the information society development.

12.2 User satisfaction

Starting from 2009, the State Statistical Office conducts a User Satisfaction Survey every three years.

12.3 Completeness

Concerning the indicators required by the Regulation 808/2004, the SSO provides all mandatory data (100%).

13 Accuracy and reliability

13.1 Overall accuracy

The survey methodology and the data collection method ensure good coverage and accuracy of the data.

13.2 Sampling error

Sampling errors could be standard errors and coefficients of variation. The coefficient of variation are calculated for determining the accuracy of data sent to EUROSTAT as well as standard errors for certain topics in standard quality report. Standard errors for some variables are as follows: Households with internet access: 1.05; Households with regular use of internet:1.12; Households with regular use of internet, employed or selfemployed:1.4; Coefficient of variation for some variables are as follows: Households with internet access:1.6; Households with regular use of internet:2.624; Households with regular use of internet, employed or selfemployed:1.61.

13.3 Non-sampling error

Coverage errors are calculated as undercoverage or overcoverage errors. Overcoverage:0.7%. Measurement errors: before the field operations a training was organised for survey participants (interviewers and supervisors) while the households were informed by letters prior to the survey. During the survey operations, daily reports were collected in order to control the coverage and timely eliminate the errors. The collected data were controlled by supervisors in regional offices, as well as in central statistical office. Processing errors: the data entry was in Blaise with automatic logical controls and some controls were made after the data entry phase. In case of some data inconsistencies the imputation was used by method of expert estimation (manual imputation). Non response rate: 16.3%.

14	Timeliness and punctuality
14.1	Timeliness
T+210.	
14.2	Punctuality
The data are published on the day announced in the Advance Release Calendar.	
15	Coherence and comparability
15.1	Comparability - geographical
The data are produced at national level. Comparability is provided at international level.	
15.2	Comparability - over time
Comparability over time is provided since 2007 with no gap in the time series (for variables which are constant and not changed in definitions). The number of reference periods in the time series is 9.	
15.3	Coherence - cross domain
Cross domain coherence is not ensured.	
15.4	Coherence - internal
Internal coherence of data is ensured.	
16	Cost and burden
17	Data revision
17.1	Data revision - policy
Data revision is made in accordance with the Statistical Data Revision Policy of the SSO: (https://www.stat.gov.mk/ZaNas_en.aspx?id=25).	
17.2	Data revision - practice
Survey data are published as final data.	

18	Statistical processing
18.1	Source data
<p>The source data is a survey based on a sample of households.. The sample frame is the statistical population registrar. The sample size is 2000 households. In every household, one member of the household aged 15-74 is interviewed via a questionnaire (ICT.3).</p>	
18.2	Frequency of data collection
<p>Annually.</p>	
18.3	Data collection
<p>Data are collected by method of personal interview PAPI, (face-to-face) by interviewers, who fulfill data into the questionnaire ICT.3. The interviewers visits the households from the sample and collect data based on information provided by the holuseholds. The data collection was in strict time predicted for this survey.</p>	
18.4	Data validation
<p>Data validation is made in accordance with defined control criteria. Validation of data quality is performed through the whole process, from the phase of collection to the phase of preparing aggregated data. Data are checked before and after publishing. Validation of data is also done by Eurostat according to established validation rules.</p>	
18.5	Data compilation
<p>Editing: the data editing is done in central statistical office. Weights: weighting of responses obtained from statistical units is made with the Horwitz-Thompson (HT) estimator of reverse probabilities, by strata, adjusted to non response and calibrated with the latest population estimations in six age groups and by sex. SAS statistical procedures are used.</p>	
18.6	Adjustment
<p>There is no data adjustment.</p>	
19	Comment
A.1	Annexes