

SURVEY ON USE OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)

1. Contact

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2. Statistical presentation

2.1. Data description:	The main objective of the Information and Communication Technology (ICT) Survey on Households and Individuals in Kosovo 2017 is to collect information about the use of computers and internet for personal purposes in our society. Through this survey we have information on access to various electronic devices, the type of internet connection, and the barriers to using the Internet; information about computer usage, internet usage, e-commerce and e-skills.
2.2. Classification system:	Classification system used is ISCO-08.
2.3. Sector coverage:	Statistics covers household sector by households and individuals, the use of information and communication technology.
2.4. Statistical concepts and definitions:	Provide the data related to access to information and communication technology, use of computers, use of the Internet, use of e-government, use of purchases or trade, technological or computer skills, and other socio-demographic features.
2.5. Statistical unit:	Households and individual.
2.6. Statistical population:	The target population consists of the households that represents the resident population living in Kosovo and the individual living in that household who is 16-74 years old. The first part of the questionnaire is filled by an individual in the family who has the family perspective in mind and may be the head of the family while the person who answers the individual questions should be aged 16-74 years old.
2.7. Reference area:	Kosovo (National level).
2.8. Time coverage:	The survey is annual and it was conducted for the first time in our country.
2.9. Base period:	No index used.

3. Statistical processing

3.1. Source data:	The data set is based on survey. The sampling frame was based on the data and cartography from the 2011 Kosovo Census. For the purposes of the census enumeration, Kosovo was subdivided into enumeration areas (EAs),
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	which are relatively small operational segments defined for the census enumeration. A total of 4,626 EAs were defined for Kosovo, and these were used as the primary sampling units (PSUs) selected at the first sampling stage 750 EA for the ICT.
3.2. Frequency of data collection :	This survey was held for the first time in our country and is carried out during April-June 2017.
3.3. Data collection:	To collect the data for interview it was used Paper-Assisted Personal Interview (PAPI). The methodology used for compiling questionnaires is based on the Eurostat methodology which is used by all EU countries. The questionnaire is customized to the case of our country by storing the questions for which the information must be collected.
3.4. Data validation:	Checking by re-contacting in the field in households after interviewers finished by supervisors, logical control in office before putting in data entry, checking data after data entry, comparing data on aggregate level, calculating of response rate.
3.5. Data compilation:	The basic weight for each household in the sample is equal to the inverse of its selection probability (it's calculated by multiplying the probabilities at each stage of sampling). A household is attached to each sample household record to the data files. The probabilities of selection are based on the stratified two stage sample design. At the first stage a sample of 750 EAs was selected with PPS within each stratum (region, urban/rural) and at the second stage a sample of 5 households was selected with random systematic method in each sample EAs.
3.6. Adjustment:	The basic weights are adjusted taking into account the nonresponse of households in each sample EA.
4. Quality management	
4.1. Quality assurance:	KAS is committed to quality assurance in the production of official statistics. Based on the "Law On Official Statistics, Law 04 / L-036", KAS uses statistical methods and processes in accordance with internationally accepted scientific principles and standards and conducts ongoing analyzes in order to improve the quality and delivery of updated statistics. In carrying out its duties, KAS follows the overall quality management principles, in line with the European Statistics Code of Practice. KAS has developed a Quality Statement which is available on the ASK website: http://ask.rks-gov.net/media/1890/statement-of-quality.pdf . The document lists eleven principles, much in line with the CoP principles like professional independence and statistical confidentiality, on which the work of KAS is based.
4.2. Quality assessment:	During July 2017 in Kosovo Agency of Statistics was conducted the process of assessment of the Kosovo Statistical System through the "Peer Review" approach.
5. Relevance	
5.1. User needs:	The survey of ICT are developed in close collaboration with Member States and the OECD, and is adapted for users' needs and policy makers.

5.2. User satisfaction:	One of the key elements to ensure the quality of statistical data is the measurement of the satisfaction of users. The survey aims to gather comprehensive information on the needs and requirements of users of official statistical data. Through this survey the users of statistical data have expressed their thoughts and opinions regarding statistical views, they have provided advice and suggestions regarding their needs for statistics and how to improve these statistical data in the future. This year was conducted for the second time User satisfaction Survey. The purpose of this survey is to measure the level of satisfaction of data users and to have complete information on the needs and requirements of users. The questionnaire was filled by 34 users, consisting of 14 questions. The results of this survey will be available in KAS website.
5.3. Completeness:	Not available.
5.3.1. Data completeness - rate:	Not available.
6. Accuracy and reliability	
6.1. Overall accuracy:	Survey on Information and Communication Technologies (ICT) include all households and a person living in that household covered the age 16-74 living in private households. As the results are based on a sample of population they are subject to the usual types of errors associated with sampling techniques and interviews, such as sampling errors, non-sampling errors, measurement errors, processing errors and non-response. The sampling errors are accompanied by statistical deviations. For this reason, the standard deviations of the choice used for interpreting the results of the survey were calculated.
6.2. Sampling error:	The odd effect due to sampling means that the results calculated from different samples deviate somewhat from each other. Non-accuracy due to design and sample selection is assessed by the standard error of estimation. The size of the standard error is influenced by the size of the sample and variance of the variables that are the subject of the study. The standard error can be used to calculate the confidence interval within which the value of the population stands at a certain probability.
6.2.1. Sampling error - indicators:	The sampled households are used to calculate estimates of the certain indicators related to the use of information and communication technology in households. If the sample is big enough, and selected in a scientific way, the uncertainty of the estimates will generally be small. The uncertainty is often expressed by a confidence interval. Estimates related to the given indicators are expressed by the proportional percentage as well as the standard error expressed in the following table:

<i>Indicator or subindicator - on households and individuals in the general scope (16-74) and related subgroups -</i>	<i>Number of respondents</i>	<i>Estimated proportion (%)</i>	<i>Standard error (% points)</i>
Proportion of households having access to the Internet at home	2380	88,80%	0,62
Proportion of households using a broadband connection	2380	88,80%	0,62
Proportion of individuals regularly using the Internet: overall	2141	99,10%	0,22
Proportion of ind. regularly using the Internet: males (as % of all men)	1156	98,70%	0,32
Proportion of ind. regularly using the Internet: females (as % of all women)	985	99,30%	0,26
Proportion of individuals having submitted completed forms in the last 12 months	114	5,40%	0,6
Proportion of individuals having ordered goods or services for private use over the internet in the last 12 months	345	16,80%	1,1

6.3. Non-sampling error:	The non-sampling errors are the error that happened during the other phases of the survey: The coverage error are the errors related to the frame; the divergences between the frame and the target population. The errors which occur during data collection, the processing errors and the non-response error when the survey fails to get a response to one or possibly all of the questions.
6.3.1. Coverage error:	The coverage errors include both over coverage and under coverage error. The last updated from 2011 Census Population and the households created are not well represented and the errors arise due to divergences between the frame and the target population. The under coverage error are the target population units are not accessible via the frame and those error are difficult to measure. The over coverage error are the error due units accessible via the frame which do not belong to the target population. The main focus was on over coverage error.
6.3.1.1. Over-coverage - rate:	Over coverage consist of households which are empty houses, the houses are destroyed, the selected households are not in the target population (the individuals do not belong to age 16-74) etc. Over coverage rate is 10,4%.
6.3.1.2. Common units - proportion:	Not applicable.
6.3.2. Measurement error:	The data are collected through Paper-Assisted Personal Interview (PAPI) supervised by regional offices. Interview was made by professional staff - permanent employer; Adequate Training of interviewers - for avoiding refusal and errors; Audit fieldwork for quality; Re contacting households after interviewing etc.
6.3.3. Non response error:	Non response error are the errors when the survey fails to get a response to one or possibly all of the questions.
6.3.3.1. Unit non-response - rate:	The unit non response rate is 17,5%.

6.3.3.2. Item non-response - rate:	Not available.
6.3.4. Processing error:	The processing error mostly are due to technical mistakes.
6.3.4.1. Imputation - rate:	Not available.
6.3.5. Model assumption error:	Not available.
6.4. Seasonal adjustment:	Not available.
6.5. Data revision - policy:	There is no revision policy at KAS.
6.6. Data revision - practice:	No revisions have been carried out.
6.6.1. Data revision - average size:	Not available.

7. Timeliness and punctuality

7.1. Timeliness:	The reference period is from April 2017 - June 2017.
7.1.1. Time lag - first result:	Not available.
7.1.2. Time lag - final result:	The results of survey are published in 25 January 2018. The time lag is 7 months.
7.2. Punctuality:	The data for ICT are published in time.
7.2.1. Punctuality - delivery and publication:	Delay in time is 0.

8. Coherence and comparability

8.1. Comparability - geographical:	The statistics refer only to the national level. The ICT survey was conducted based on European standards and recommendations.
8.1.1. Asymmetry for mirror flow statistics - coefficient:	Not available.
8.2. Comparability - over time:	Not available.
8.2.1. Length of comparable time series:	Not available.
8.3. Coherence - cross domain:	Not available.
8.4. Coherence - sub annual and annual statistics:	Not available.
8.5. Coherence - National Accounts:	Not available.
8.6. Coherence - internal:	The internal consistency of the data is checked before it is finalized. The links between variables are checked.

9. Accessibility and clarity

9.1. News release:	News releases on-line at the time of data dissemination. Brief description is in the documentation methodology which includes consumption, income and other similar issues related to household standard of living in Kosovo.
9.2. Publications:	KAS publications, tables and material for press release are always available in three languages: Albanian, English and Serbian.
9.3. On-line database:	KAS has online database: http://askdata.rks-gov.net/PXWeb/pxweb/en/askdata/
9.3.1. Data tables - consultations:	Not available.

9.4. Micro-data access:	Users do not have direct access to micro-data, but by law researchers and institutions can request access through KAS.
9.5. Other:	Not available.
9.6. Documentation on methodology:	Methodology for ICT will be described in the publication part of the survey methodology: http://ask.rks-gov.net/en/kosovo-agency-of-statistics/social/living-conditions
9.7. Quality documentation:	Quality report is sent to Eurostat.
9.7.1. Metadata completeness - rate:	Not available.
9.7.2. Metadata - consultations:	Not available.

10. Cost and burden

From the central office 3 employees (1 unit leader and 2 senior officer).

11. Confidentiality

11.1. Confidentiality - policy:	<p>“Agency shall ensure that individual data collected for statistical purposes, whether collected from natural or legal persons, or bodies and organizations of the public administration (hereinafter “Respondents”), are handled in a strictly confidential manner and used exclusively for statistical purposes. Law 04/L-036, Article 34.</p> <p>“All respondents shall be obliged, in accordance with the applicable law, to cooperate and provide timely and accurately statistical data to the Agency, and to cooperate with the Agency to verify the accuracy of the collected data. Law 04/L-036, Article 21: http://ask.rks-gov.net/media/2024/law-on-official-statistics.pdf</p>
11.2. Confidentiality - data treatment:	<p>Access to confidential data shall be permitted only to persons who are in charge of producing the official statistics up to that level that these data are necessary for producing statistics. Article 37, Law No. 04/L-036: http://ask.rks-gov.net/media/2024/law-on-official-statistics.pdf</p>

12. Comment

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