



REPUBLIC OF CROATIA



CROATIAN BUREAU OF STATISTICS

**QUALITY REPORT FOR STATISTICAL SURVEY**  
**Annual Survey on the Usage of Information and Communication**  
**Technologies in Households and by Individuals (IKT-DOM)**  
**For 2015**

Organisational unit: Education, Culture and Information Society  
Statistics Department

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## 0. Basic information

- Purpose, goal, and subject of the survey

Information and communication technology (ICT) forms a significant part of the productivity and development of the European Union and fundamentally transform information societies and economies. Statistics measure the use of computers and ICT in households and by individuals, as well as in business processes, in order to continuously revise and improve productivity. The European Commission has designed an annual survey on information society, which measures the use of ICT in households and by individuals by selecting an appropriate set of variables.

The purpose of the survey is to collect data on the use of ICT in households and by individuals, to measure the level of information infrastructure in households and to monitor the habits of individuals when using the internet and computers.

- Reference period

Calendar year

- Legal acts and other agreements

Official Statistics Act (NN, No 25/20)

Annual Implementation Plan of Statistical Activities of the Republic of Croatia for 2015

Regulation (EC) No 808/2004 of the European Parliament and of the Council of 21 April 2004 concerning Community statistics on the information society

- Classification system

International Standard Classification of Occupations – ISCO-08

International Standard Classification of Education – ISCED

Degree of Urbanisation – DEGURBA

Nomenclature of Territorial Units for Statistics – NUTS

- Concepts and definitions

Main statistical variables:

- access to a computer and the internet
- manner of access to the internet
- frequency of using a computer and the internet
- activities when using the internet
- use of cloud computing services
- electronic exchange of information and services with public administration institutions (e-Government)
- purchase of goods and services via the internet
- digital literacy (e-skills)
- use of social media
- internet safety

- Statistical units

The observed statistical units are households and individuals.

- Statistical population

Statistical population consists of all households with at least one individual aged 16 to 74.

## **1. Relevance**

### **1.1. Data users**

External users:

- ministries and state administration bodies – on request
- scientists and researchers – on request
- business entities – on request

#### 1.1.1. User needs

External users mostly require data more detailed than those that are already published.

#### 1.1.2. User satisfaction

User satisfaction survey is not conducted. There is no feedback information.

### **1.2. Completeness**

The data collected by the survey are fully harmonised with the Eurostat guidelines and Regulations.

#### 1.2.1. Data completeness rate

Data completeness rate is 25%.

## **2. Accuracy and reliability**

### **2.1. Sampling error**

The standard error for key statistics is calculated using the SAS SURVEYMEANS procedure, which ensured that the following sample design was taken into account: 42 strata, PSU and final weights. Standard errors are calculated using the Taylor linearisation method in the SAS SURVEYMEANS procedure. The impact of unit non-response was taken into account by taking only the units that responded as the final sample size and re-weighting for non-response. The influence of calibration on variance was taken into account when calculating the final weights.

### 2.1.1. Sampling error indicators

#### Sampling error indicators for particular statistics

Statistics	Coverage	Value of coverage	Value
E-buyers	Croatia		1.308
Households with internet access	Croatia		1.012
Households with broadband internet access	Croatia		1.018
Individuals who downloaded e-forms	Croatia		1.133
Regular internet users	Age	16 – 24	2.29
Regular internet users	Age	25 – 34	3.061
Regular internet users	Age	35 – 44	2.883
Regular internet users	Age	45 – 54	2.988
Regular internet users	Age	55 – 64	2.55
Regular internet users	Age	65 – 74	1.783
Regular internet users	Education	Elementary school	2.906
Regular internet users	Education	Secondary school	1.586
Regular internet users	Education	University	2.568
Regular internet users	Sex	Croatia	1.438
Regular internet users	Sex	Male	2.073
Regular internet users	Sex	Female	1.805
Regular internet users	Employment	Unemployed	2.337
Regular internet users	Employment	Other	1.837
Regular internet users	Employment	Students	1.908
Regular internet users	Employment	Employed	3.087

### 2.1.2. Bias in sample selection process

The indicator for this survey is not applicable.

## 2.2. Non-sampling error

Non-sampling errors include coverage errors and non-response errors. Non-response errors are caused by unit non-response and item non-response. The non-response rate to variables is negligibly small.

### 2.2.1. Coverage error

The sample frame is based on data from the Census of Population in 2011. The rate of valid units is 96.5%. Coverage-errors include non-existent households and households whose all members are older than 74.

### 2.2.2. Over-coverage rate

Over-coverage rate is 3.5%.

### 2.2.3. Measurement errors

Logical errors are avoided by designing questionnaires to prevent incorrect entries and by additional explanations provided by the interviewer to the user in case the user is not technically competent enough to give an accurate answer. Interviewers attend a training before the data collection. Interviewers are specifically warned of and trained in asking sensitive questions. After the data collection, random checks of the accuracy of the coding of variables in the set of microdata are performed.

### 2.2.4. Non-response errors

The non-response error shows the number of statistical units that did not respond to the questionnaire. The non-response rate is 53.2%.

### 2.2.5. Unit non-response rate

Unweighted non-response rate is 53.2%.

Weighted non-response rate is 63.8%.

### 2.2.6. Item non-response rate

Unweighted item non-response rate

Variable	Coverage	Value %
Household income	Croatia	21.99

Weighted item non-response rate

Variable	Coverage	Value %
Household income	Croatia	26.36

### 2.2.7. Processing errors

No errors were observed after the data collection that would require further processing.

### 2.2.8. Imputation rate

The indicator for this survey is not applicable.

### 2.2.9. Editing rate

Unweighted editing rate for particular variables is 0%.

### 2.2.10. Hit rate

Hit rate is 0%.

#### 2.2.11. Model assumption error

Not applicable.

### **2.3. Data revision**

#### 2.3.1. Data revision – policy

The users of statistical data are informed about revisions (provisional, final data) on the website of the Croatian Bureau of Statistics.

#### 2.3.2. Data revision – practice

Provisional data are not published in the survey; therefore, there are no data revisions.

#### 2.3.3. Data revision – average size

The indicator for this survey is not applicable.

### **2.4. Seasonal adjustment**

Not applicable.

## **3. Timeliness and punctuality**

### **3.1. Timeliness**

#### 3.1.1. Time lag – first results

Time lag – final results is T + 3 months.

#### 3.1.2. Time lag – final results

Time lag – final results is T + 5 months.

### **3.2. Punctuality**

#### 3.2.1. Punctuality – delivery and publication

Delivery and publication is 0.

## **4. Accessibility and clarity**

Printed publications – First Releases, Statistical Yearbook

Website of the Croatian Bureau of Statistics – electronic version of First Releases and the Statistical Yearbook

User requests by order

#### **4.1. News release**

2.3.2. Usage of Information and Communication Technologies (ICT) in Households and by Individuals

#### **4.2. Other publications**

Statistical Yearbook

#### **4.3. Online database**

Not applicable.

#### **4.4. Micro-data access**

The conditions under which certain users can access microdata are regulated by the Ordinance on the Conditions and Manner of Using Confidential Statistical Data for Scientific Purposes (NN, No. 137/13). Microdata are available at the level of variables defined in the EU methodology.

#### **4.5. Documentation on methodology**

Printed publications of the Croatian Bureau of Statistics  
Website of the Croatian Bureau of Statistics

### **5. Comparability**

#### **5.1. Asymmetry for mirror flows statistics**

Not applicable.

#### **5.2. Comparability over time**

5.2.1. Length of comparable time series

Length of comparable time series is 9.

5.2.2. Reasons for break in time series

Not applicable.

### **6. Coherence**

#### **6.1. Coherence – short-term and structural data**

The indicator for this survey is not applicable.

#### **6.2. Coherence – national accounts**

The indicator for this survey is not applicable.

### **6.3. Coherence – administrative sources**

The indicator for this survey is not applicable.

## **7. Cost and burden**

### **7.1. Cost**

Total costs of conducting the survey – 47 800 euros.

Personnel costs – 14 000 euros.

Interviewers costs – 15 400 euros

Sub-contracting costs – 16 600 euros

Other costs – 1 800 euros

### **7.2. Burden**

The design of the questionnaire and the compilation of special instructions for the interviewers is aimed at reducing the burden on statistical units so that the interviewers can get the requested answer as easily as possible. The time needed to complete the questionnaire is 7 to 15 minutes.