QUALITY REPORT FOR STATISTICAL SURVEY

Annual Survey on the Usage of Information and Communication Technologies (ICT) in Enterprises (IKT-POD) in 2025

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March 2026

0. Basic information

- Purpose, goal, and subject of the survey

  Information and Communications Technologies (ICT) account for a significant part of the EU productivity and growth and are transforming our societies and economies in a profound and unprecedented way. Official statistics are indispensable for an informed understanding of the implications of the transformations underway. The process of measurement of the information society by statistics on society, on business processes and productivity is an area for continuous revision and improvement. The European Commission has established annual information society survey benchmarking the ICT-driven development in enterprises. In this aspect the selection of the appropriate set of variables is crucial. Purpose of the survey is to collect data on the application of information and communication technologies in companies, and their impact on business results.

- Reference period

  Calendar year

- Legal acts and other agreements

  • Official Statistics Act (NN, Nos 25/20, 155/23 and 124/25 – corr.)

  • Annual Implementation Plan of Statistical Activities of the Republic of Croatia 2025

  • Regulation (EU) 2019/2152 of the European Parliament and of the Council of 27 November 2019 on European business statistics, repealing 10 legal acts in the field of business statistics

- Classification system

  National Classification of Activities, 2007 version (NKD 2007)

- Statistical concepts and definitions

  Main statistical variables: use of the Internet and other electronic networks, methods of accessing the Internet, contracted Internet connection speed, ownership of a website, purpose of using cloud computing services, electronic commerce (buying and selling goods and services), value of electronic buying and selling of goods and services in relation to conventional trade, methods of implementing IT security measures, methods of applying artificial intelligence, economic activity of enterprises, number of employees, turnover.

- Statistical units

  The observed statistical unit is enterprise.

- Statistical population

  The survey covers all medium and large enterprises, while the share of small enterprises was selected by random sampling. The condition is that the companies are active and have more than 10 employees.

1. Relevance

1.1 Data users

External users:

  • Ministries and state administration bodies – data on request

  • Scientists and researchers – data on request

- Business entities – data on request
- Journalists.

1.1.1 User needs

External users, in most cases, request more detailed data than those published.

1.1.2 User satisfaction

The first user satisfaction survey of the Croatian Bureau of Statistics was conducted in 2013, then in 2015 and 2022, and the last one at the end of 2024. The results of the satisfaction survey can be checked on the website of the Croatian Bureau of Statistics – User satisfaction surveys.

1.2. Completeness

Data collected in survey are fully compatible with Eurostat regulations and guidelines.

1.2.1 Data completeness rate

The data completeness rate is 32%.

2. Accuracy and reliability

2.1. Sampling error

Standard errors for key statistics were calculated by using SAS SURVEYMEANS procedure which ensured that the sample design characteristics were considered: 42 strata, PSUs and final weights. Standard errors were calculated applying the Taylor linearization method in SAS SURVEYMEANS procedure. The influence of unit non-response was considered by taking only the responding units as the final sample size and re-weighting for non-response. The influence of calibration on variance was considered when calculating the final weights.

2.1.1 Sampling error indicators

Sampling error indicators	Domain	Domain value	Value
Share of company revenue generated by online sales	Croatia	Croatia	0,352476
Share of company revenue generated by its own online sales	Croatia	Croatia	0,44707
Share of company revenue generated by online sales through commercial platforms	Croatia	Croatia	0,819346
Companies selling goods via EDI systems	Croatia	Croatia	0,454357
Companies using cloud computing services	Croatia	Croatia	1,064815
Companies using CRM application	Croatia	Croatia	0,780202
Companies using ERP application	Croatia	Croatia	0,697327
Companies conducting their own data analytics	Croatia	Croatia	1,03246
Companies using IT systems to reduce energy consumption	Croatia	Croatia	1,190995
Companies using artificial intelligence to analyze written text	Croatia	Croatia	0,583557
Businesses using social media	Croatia	Croatia	1,020291
Companies having a website	Croatia	Croatia	1,002255
Companies websites allowing ordering or reservations	Croatia	Croatia	0,729679

2.2. Non-sampling error

Non-sampling errors include coverage errors and non-response errors. Non-response errors arise from the non-response of the statistical unit and non-response to a single variable. The non-response rate on variables is negligible.

2.2.1. Coverage error

The sampling frame is based on data from the Statistical Business Register. The rate of valid units is 99%. Coverage errors include enterprises that are no longer active and enterprises that are misclassified.

2.2.2. Over-coverage rate

Over-coverage rate is 1%.

2.2.3. Measurement error

Logical errors are avoided by designing the questionnaire to prevent incorrect entries and by providing additional explanations to the user by the survey manager in cases where the user is not technically competent enough to give the correct answer. After data collection, random checks are conducted to ensure that the variables in the microdata set are coded correctly.

2.2.4. Non-response error

The non-response error indicates the number of statistical units that did not answer the questionnaire. The non-response rate was 31%.

2.2.5. Unit non-response rate

Unweighted non-response rate is 30.5%.

Weighted non-response rate is -.

2.2.6. Item non-response rate

Indicator was not computed.

2.2.7. Processing error

No errors were detected after collecting data that would require additional processing.

2.2.8. Imputation rate

Indicator is not applicable.

2.2.9. Model assumption error

Not applicable.

2.3. Data revision

2.3.1. Data revision – policy

The users of statistical data are informed about revisions on the website of the Croatian Bureau of Statistics on the link General Revision Policy of the CBS.

2.3.2. Data revision – practice

Interim data are not published and therefore there is no data revision.

2.3.3. Data revision – average size

Indicator is not applicable.

2.4. Seasonal adjustment

Not applicable.

3. Timeliness and Punctuality

3.1. Timeliness

Data transmission to Eurostat: T+4

Publication and availability: T+5

3.1.1. Time lag – first results

Time lag – first results is T + 4.

3.1.2. Time lag – final results

Indicator is not applicable.

3.2. Punctuality

The data was delivered within the given deadline.

3.2.1. Punctuality – delivery and publication

Delivery and publication is 1.

4. Accessibility and clarity

Website of the Croatian Bureau of Statistics – electronic versions of First Releases
Custom user requests

4.1. News release

ZTI-2025-1-1 Usage of Information and Communication Technologies (ICT) in Enterprises, 2025

4.2. On-line database

Not applicable.

4.3. Micro-data access

The conditions under which certain users can access microdata are regulated by the Ordinance on Conditions and Terms of Access and Use of Confidential Statistical Data of the Croatian Bureau of Statistics for Scientific Purposes (NN, No. 5/23). Microdata are available at the level of variables defined by the EU methodology.

4.4. Documentation on methodology

Website of the Croatian Bureau of Statistics – electronic versions of First Releases

5. Comparability over time

5.1. Asymmetry for mirror flows statistics

Not applicable.

5.2. Comparability - over time

The data are completely comparable in the time series from 2011 to 2025.

5.2.1. Length of comparable time series

Length of comparable time series is 15.

5.2.2. Reasons for break in time series

Not applicable.

5.3. Coherence – subannual and annual statistics

Indicator is not applicable.

5.4. Coherence – national accounts

Indicator is not applicable.

5.5. Coherence – administrative sources

Indicator is not applicable.

6. Cost and burden

6.1. Cost

Total implementation costs: 22 250 euro;

- Staff costs: 14 000 euro,

- Subcontracting costs: 6 250 euro,

- Other costs: 2 000 euro.

6.2. Burden

Part of the data is taken from administrative sources in order to reduce the burden on the respondent. The questionnaire design attempts to reduce the burden on the statistical unit, as well as by creating special instructions to make it easier to obtain the required answer. The time required to complete the survey ranges from 10 to 30 minutes.