



- Full view -

INFOSOC_ETNSI_A_CY_2024_0000

National Reference Metadata in SIMS structure for INFOSOC Enterprises
Compiling agency: Statistical Service of Cyprus (CYSTAT)



Eurostat metadata

Reference metadata

- [1. Contact](#)
- [2. Metadata update](#)
- [3. Statistical presentation](#)
- [4. Unit of measure](#)
- [5. Reference Period](#)
- [6. Institutional Mandate](#)
- [7. Confidentiality](#)
- [8. Release policy](#)
- [9. Frequency of dissemination](#)
- [10. Accessibility and clarity](#)
- [11. Quality management](#)
- [12. Relevance](#)
- [13. Accuracy](#)
- [14. Timeliness and punctuality](#)
- [15. Coherence and comparability](#)
- [16. Cost and Burden](#)
- [17. Data revision](#)
- [18. Statistical processing](#)
- [19. Comment](#)
- [Related Metadata](#)
- [Annexes \(including footnotes\)](#)

For any question on data and metadata, please contact: [Eurostat user support](#)

1. Contact

[Top](#)

1.1. Contact organisation	Statistical Service of Cyprus (CYSTAT)
1.2. Contact organisation unit	Business, Energy, Environment, Agriculture, Science and Technology and Information Society Statistics Division
1.3. Contact name	CONSTANTINOS MINA
1.4. Contact person function	STATISTICS OFFICER
1.5. Contact mail address	STATISTICAL SERVICE OF CYPRUS CY-1444, NICOSIA, CYPRUS
1.6. Contact email address	cmina@cystat.mof.gov.cy
1.7. Contact phone number	+357 22602112
1.8. Contact fax number	+357 22661313

2. Metadata update

[Top](#)

2.1. Metadata last certified	29 October 2024
2.2. Metadata last posted	29 October 2024
2.3. Metadata last update	29 October 2024

3. Statistical presentation

[Top](#)

3.1. Data description

Data on the Information and Communication Technologies (ICT) usage and e-commerce in enterprises are survey data. They are collected by the National Statistical Institutes or Ministries and are in principle based on Eurostat's annual model questionnaires on ICT usage and e-commerce in enterprises.

The legal basis for ICT enterprise statistics for survey year 2024 is Commission Implementing Regulation (EU) 2023/1507 of 20 July 2023 laying down the

technical specifications of data requirements for the topic 'ICT usage and e-commerce' for the reference year 2024. Large part of the data collected is used to measure the progress in the implementation of one of the main political priorities of the European Commission for 2019 to 2024 – [A Europe fit for the digital age](#). Furthermore, ICT data facilitate the monitoring of the EU's digital targets for 2030, set by the Digital Decade Policy Programme. Four of the key performance indicators (KPIs) of the current programme stem from the statistics for which the implementing and delegated acts are enclosed for adoption: Artificial Intelligence, cloud, big data (data analytics) and the digital intensity index for businesses (DII) - a composite indicator reflecting the digital transformation of business. The aim of the European survey on ICT usage and e-commerce in enterprises is to collect and disseminate harmonised and comparable information at European level.

Name of data collection

ΕΡΕΥΝΑ ΧΡΗΣΗΣ ΤΕΧΝΟΛΟΓΙΩΝ ΠΛΗΡΟΦΟΡΙΚΗΣ ΚΑΙ ΕΠΙΚΟΙΝΩΝΙΩΝ
ΚΑΙ ΗΛΕΚΤΡΟΝΙΚΟΥ ΕΜΠΟΡΙΟΥ ΣΤΙΣ ΕΠΙΧΕΙΡΗΣΕΙΣ 2024
SURVEY ON ICT USAGE AND E-COMMERCE IN ENTERPRISES 2024 .

3.2. Classification system

[NACE Rev.2 2008](#) - **Statistical classification of economic activities**

3.3. Coverage - sector

All economic activities in the scope of Annex of the Commission Regulation are intended to be included in the general survey, covering enterprises with 10 or more employees and self-employed persons. These activities are:

- Section C – “Manufacturing”
- Section D, E – “Electricity, gas, steam and air conditioning supply”, “Water supply, sewerage, waste management and remediation activities”
- Section F – “Construction”
- Section G – “Wholesale and retail trade; repair of motor vehicles and motorcycles”
- Section H – “Transportation and storage”
- Section I – “Accommodation and food service activities”
- Section J – “Information and communication”
- Section L – “Real estate activities”
- Section M – “Professional, scientific and technical activities”
- Section N – “Administrative and support service activities”
- Group 95.1 – “Repair of computers and communication equipment”.

For micro-enterprises see the sub-concepts below.

3.3.1. Coverage-sector economic activity for micro-enterprises - All NACE Rev. 2 categories are covered

Micro-enterprises are not included in the survey

3.3.2. Coverage sector economic activity for micro-enterprises - If not all activities were covered, which ones were covered?

Not applicable

3.4. Statistical concepts and definitions

The model questionnaire on ICT usage and e-commerce in enterprises provides a large variety of variables covering among others the following topics:

- Access to and use of the Internet
- E-commerce and e-business
- ICT specialists and skills
- ICT security
- Artificial Intelligence.

The annual model questionnaires and the European businesses statistics compilers' manual for ICT usage and e-commerce in enterprises comprise definitions and explanations regarding the topics of the survey.

3.5. Statistical unit

Enterprise

3.6. Statistical population

Target Population

As required by Annex of the Commission Implementing Regulation, enterprises with 10 or more employees and self-employed persons are covered by the survey.

For micro-enterprises see the sub-concepts below.

3.6.1. Coverage of micro-enterprises

No

3.6.2. Breakdown between size classes [0 to 1] and [2 to 9]

No

3.6.3. If for micro-enterprises different size delimitation was used, please indicate it.

Not applicable

3.7. Reference area

Detailed information on the provision of data on NUTS 2 regional level is available in “Annex I. Completeness”.

Government controlled areas of the Republic of Cyprus.

3.8. Coverage - Time

Years 2023 and 2024.

3.9. Base period

Not applicable.

4. Unit of measure [Top](#)

Percentages of enterprises, Percentages of turnover, Percentages of employees and self-employed persons, Million euro (for selected indicators in some countries).

5. Reference Period [Top](#)

The reference periods defined in the model questionnaire were followed in the national survey.

6. Institutional Mandate [Top](#)

6.1. Institutional Mandate - legal acts and other agreements

Complementary national legislation constituting the legal basis for the survey on the use of ICT in enterprises:

Article 3 of the [Official Statistics Law, No. 25\(I\) of 2021](#) defines the functions of the Statistical Service of Cyprus regarding the production and dissemination of official statistics. Moreover, Article 13, explicitly stipulates the mandate for data collection and introduces a mandatory response to statistical enquiries by stipulating the obligation of respondents to reply to surveys and provide the data required. This relates not only to national but also to European statistics which, by virtue of Article 8 of the said Law, are incorporated in the annual and multiannual programmes of work without any further procedure.

6.2. Institutional Mandate - data sharing

Not applicable

7. Confidentiality [Top](#)

7.1. Confidentiality - policy

[Regulation \(EC\) No 223/2009 on European statistics](#) (recital 24 and Article 20(4)) of 11 March 2009 (OJ L 87, p. 164), stipulates the need to establish common principles and guidelines ensuring the confidentiality of data used for the production of European statistics and the access to those confidential data with due account for technical developments and the requirements of users in a democratic society.

At national level:

Official statistics are released in accordance to all confidentiality provisions of the following:

- [Official Statistics Law No. 25\(I\) of 2021](#) (especially Article 16 on statistical confidentiality).
- [Regulation \(EC\) No 223/2009](#) of the European Parliament and of the Council of 11 March 2009 on European statistics and its later amendments (especially Chapter 5 on statistical confidentiality).
- [European Statistics Code of Practice](#) (especially Principle 5 on statistical confidentiality).
- CYSTAT's [Guidelines for the Protection of Confidential Data](#) for the Collection, Publication and Storage of Statistical Data

7.2. Confidentiality - data treatment

Data are transmitted via eDamis (encrypted) and delivered to a secure environment where they are treated. Flags are added for confidentiality in case results must not be disclosed.

At national level:

The treatment of confidential data is regulated by CYSTAT's [Code of Practice for the Collection, Publication and Storage of Statistical Data](#)

8. Release policy [Top](#)

8.1. Release calendar

Notifications about the dissemination of statistics are published in the [release calendar](#), which is available on CYSTAT's website. The annual release calendar, announced during the 4th quarter of the each year, includes provisional dates which are finalised the week before publication.

8.2. Release calendar access

The [release calendar](#) is available on the website of the Statistical Service of Cyprus.

8.3. Release policy - user access

According to the [Dissemination and Pricing Policy](#) of the Statistical Service of Cyprus (section 2.3), CYSTAT's main channel for dissemination of statistics is the website, which offers the same conditions to everyone and is updated at the same time every working day (12:00 noon). No privileged pre-released access is granted.

In addition to the annual release calendar, users are informed of the various statistical releases through the "Alert" service provided by CYSTAT.

Notifications about the dissemination of statistics are published in the release calendar, which is available on CYSTAT's website.

The annual release calendar, announced during the 4th quarter of the each year, includes provisional dates which are finalised the week before publication.

The Release Calendar is updated every Friday and contains the following:

- Confirmed announcements: announcements which are scheduled to be released in the following week,
- Preliminary announcements: announcements to be released until the end of the year, and
- Published announcements: published announcements.

The data release policy of CyStat regarding the ICT data is the same as the general policy.

9. Frequency of dissemination

[Top](#)

Annual

10. Accessibility and clarity

[Top](#)

10.1. Dissemination format - News release

Survey Results ([press / news release](#)) from the survey are available on the website of the Statistical Service of Cyprus under the Statistical Theme "Science and Technology / Information Society".

10.2. Dissemination format - Publications

Survey Results ([publications](#)) from the survey are available on the web portal of the Statistical Service of Cyprus under the Statistical Theme "Science and Technology / Information Society".

10.3. Dissemination format - online database

See *detailed section 10.3.1.*

10.3.1. Data tables - consultations

Results for selected variables collected in the framework of this survey are available for all participating countries on [Digital economy and society](#) of Eurostat website.

At national level:

Survey Results from the survey are available on the web portal of the Statistical Service of Cyprus under the Statistical Theme "[Science and Technology / Information Society](#)".

10.4. Dissemination format - microdata access

Not Applicable.

10.5. Dissemination format - other

Not requested

10.5.1. Metadata - consultations

Not requested

10.6. Documentation on methodology

The European businesses statistics compilers' manual for ICT usage and e-commerce in enterprises provides guidelines and clarifications for the implementation of the surveys.

At national level:

"Summary Results" describing the results of the survey illustrated with figures (see Annexes - Summary Results: ICT usage and e-commerce in enterprises, 2024)

"Enumerators Instructions" (see Annexes - Enumerators Instructions ICT usage and e-commerce in enterprises, 2024)

Annexes:

[ENUMERATORS INSTRUCTIONS ICT ENT 2024](#)

[SUMMARY RESULTS ICT ENT 2024](#)

10.6.1. Metadata completeness - rate

Not requested

10.7. Quality management - documentation

CYSTAT has set its strategic goal to provide high-quality statistical information in an objective, transparent, reliable and timely manner. For this reason, CYSTAT established the "[Quality Policy](#)" which forms the basis of all statistical activities and leads towards continuous improvement of its statistical output.

11. Quality management

[Top](#)

11.1. Quality assurance

The European businesses statistics compilers' manual for ICT usage and e-commerce in enterprises provides guidelines and standards for the implementation of the surveys. It is updated every year according to the changed contents of the model questionnaires.

At national level:

The quality of statistics in CYSTAT is managed in the framework of the [European Statistics Code of Practice](#), which sets the standards for developing, producing and disseminating European Statistics as well as the [ESS Quality Assurance Framework \(QAF\)](#). CYSTAT endorses the [Quality Declaration of the European Statistical System](#). In addition, CYSTAT is guided by the requirements provided for in Article 11 of the [Official Statistics Law No. 25\(I\) of 2021](#), as well as Article 12 of [Regulation \(EC\) No 223/2009](#) on European statistics, which sets out the quality criteria to be applied in the development, production and dissemination of European statistics.

Additionally, CYSTAT has issued "Quality Guidelines for Statistical Processes", aiming to provide guidance on statistical production processes. The two pillars on which the guidelines are based, are the European Statistics Code of Practice which provides the basic principles for the production of high-quality European statistics and the GSPBM which defines and describes the main phases of the statistical production processes. This document provides a description of CYSTAT's Quality Policy, of the phases of statistical production and specific guidelines to be followed in every phase of statistical production. It is available internally to CYSTAT staff.

11.2. Quality management - assessment

At European level, the recommended use of the annual Eurostat model questionnaire aims at improving comparability of the results among the countries that conduct the survey on ICT usage and e-commerce in enterprises. Moreover, the European businesses statistics compilers' manual for ICT usage and e-commerce in enterprises provides guidelines and clarifications for the implementation of the surveys.

At national level:

The Methodological Manual provided by Eurostat includes the guidelines and standards used by CYSTAT for the implementation of the survey. The Eurostat model questionnaire on ICT usage and e-Commerce in enterprises for 2024 was used.

12. Relevance [Top](#)

12.1. Relevance - User Needs

Not available.

12.2. Relevance - User Satisfaction

Since 2008 (with the exception of 2010, 2013 and 2020) CYSTAT carries out an annual online "Users Satisfaction Survey". Available [results](#) of the surveys are on CYSTAT's web portal. Overall, there is a high level of satisfaction of the users of statistical data published by CYSTAT.

12.3. Completeness

Detailed information is available in "Annex I. Completeness" - related to questionnaire, coverage, additional questions, regional data.

Annexes:

[Annex I. Completeness](#)

12.3.1. Data completeness - rate

Not requested

13. Accuracy [Top](#)

13.1. Accuracy - overall

Comments on reliability and representativeness of results and completeness of dataset

These comments reflect overall standard errors reported for the indicators and breakdowns in section 13.2.1 (Sampling error - indicators) and the rest of the breakdowns for national and European aggregates, as well as other accuracy measurements. The estimated standard error should not exceed 2pp for the overall proportions and should not exceed 5pp for the proportions related to the different subgroups of the population (for those NACE aggregates for the calculation and dissemination of national aggregates). If problems were found, these could have implications for future surveys (e.g. need to improve sampling design, to increase sample sizes, to increase the response rates).

More detailed information is available in "Annex II. Accuracy" - related to European aggregates, comments on reliability and use of flag.

Annexes:

[Annex II. Accuracy](#)

13.2. Sampling error

For calculation of the standard error see 13.2.1.1.

13.2.1. Sampling error - indicators

Standard error (for selected indicators and breakdowns)

Precision measures related to variability due to sampling, unit non-response (the size of the subset of respondents is smaller than the size of the original sample) and other (imputation for item non-response, calibration etc.) are not (yet) required from the Member states for all indicators. Eurostat will make basic assumptions to compute these measures for all indicators produced (e.g. stratified random sampling assuming as strata the crossing of the variables "Number of employees and self-employed persons" and "Economic Activity" as it was defined in the 3 tables of section 18.1).

More detailed information is available in "Annex III. Sample and standard error tables 2024" - worksheets starting with "Standard error".

Annexes:

[Annex III. Sample and standard error tables 2024](#)

13.2.1.1. Sampling error indicator calculation

Calculation of the standard error

Various methods can be used for the calculation of the standard error for an estimated proportion. The aim is to incorporate into the standard error the sampling variability but also variability due to unit non-response, item non-response (imputation), calibration etc. In case of census / take-all strata, the aim is to calculate the standard errors comprising the variability due to unit non-response and item non-response.

a) Name and brief description of the applied estimation approach

Standard errors were calculated under the assumption that the enterprises which responded to the survey behave as a stratified simple random sample. The standard error of the ratios' estimators is calculated using Taylor linearization technique.

b) Basic formula

In order to calculate the standard error for variables E_AWSVAL and E_AXSVAL, the function svystatR of the R package ReGenesees is used.

In order to calculate the standard error for variables E_RA_M, E_AWSEU, E_AXSELL, E_ITSP2, E_ITSPRCR2, E_SECPOL2, E_SEC2IUSVF, E_RM, E_AWS_COWN, E_AWS_CMP, E_SECMSPSW and E_AI_TTM the function svystatTM of the R package ReGenesees is used.

c) Main reference in the literature

Not Available

d) **How has the stratification been taken into account?**

In order to take stratification into account, the function e.svydesign of the package ReGenesees is used prior to using the functions svystatTM and svystat^R.

e) Which strata have been considered?

Two variables were used for stratification, NACE group and SIZE. There were 96 strata for the enterprises in sections C10_S951_XK.

13.3. Non-sampling error

See detailed sections below.

13.3.1. Coverage error

See concept 18.1.1. A) Description of frame population.

13.3.1.1. Over-coverage - rate

The un-weighted over - coverage rate defined as the ratio of out of scope enterprises to the total number of enterprises is 4,1%.

13.3.1.2. Common units - proportion

Not requested

13.3.2. Measurement error

- 1) Measurement errors: Not applicable
- 2) Questionnaire design and testing: The questionnaire used was the model questionnaire provided by Eurostat. No additional efforts were made regarding the questionnaire design and testing.
- 3) Interviewer training: The interviewers engaged for the survey were trained before the beginning of the survey about:
 - different aspects of the questionnaire (different topics covered by the survey, concepts and definitions),
 - the use of CAWI and CATI,
 - interview techniques (provide assistance in cases where it was needed),
 - procedures regarding the day to day operation of the survey (contacting enterprises informing them about the survey and when needed requesting clarifications regarding the data collected)

They were also provided with a set of enumerators instructions (see annex attached-Enumerators Instructions - ICT usage and e-commerce in enterprises, 2024). During the survey period they were monitored on a regularly basis by the responsible officer (supervisor).

Annexes:

[ENUMERATORS INSTRUCTIONS ICT ENT 2024](#)

13.3.3. Non response error

See detailed sections below.

13.3.3.1. Unit non-response - rate

See detailed sub-concepts below.

13.3.3.1.1. Unit response

The following table contains the number of units (i.e. enterprises), by type of response to the survey and by the percentage of these values in relation to the gross sample size.

Type of response	Enterprises			
	0-9 (or 2-9) employees and self-employed persons		10 or more employees and self-employed persons	
	Number	%	Number	%
Gross sample size (as in section 3.1 C)		100%	4942	100%
1. Response (questionnaires returned by the enterprise)			4124	83.4
1.1 Used for tabulation and grossing up (Net sample or Final Sample; as in section 3.1 D)			3900	78.9
1.2 Not used for tabulation			224	4.5
1.2.1 Out of scope (deaths, misclassified originally in the target population, etc.)			204	4.1
1.2.2 Other reasons (e.g. unusable questionnaire)			20	0.4

2. Non-response (e.g. non returned mail, returned mail by post office)			818	16.6
--	--	--	-----	------

Comments on unit response, if unit response is below 60%

No comments

13.3.3.1.2. Methods used for minimizing unit non-response

In order to minimize the unit non-response rate the following measures were applied:

- informative e-mail to the IT manager of the enterprise just before the beginning of the data collection period,
- e-mail reminders were sent,
- telephone reminders,
- offer of telephone assistance when needed.

13.3.3.1.3. Methods used for unit non-response treatment

1. No treatment for unit non-response	
2. Treatment by re-weighting	
2.1 Re-weighting by the sampling design strata considering that non-response is ignorable inside each stratum (the naive model)	
2.2 Re-weighting by identified response homogeneity groups (created using sample-level information)	
2.3 Re-weighting through calibration/post-stratification (performed using population information) by the groups used for calibration/post-stratification	
3. Treatment by imputation (done distinctly for each variable/item)	
4. Method(s) and the model(s) corresponding to the above or other method(s) used for the treatment of unit non-response. (e.g. Re-weighting using Horvitz-Thompson estimator, ratio estimator or regression estimator, auxiliary variables)	
Unit non-response is taken into account by calculating the weights as N_i/n_i where N_i =number of enterprises in stratum i of the population and n_i =number of responding enterprises in stratum i of the population.	

13.3.3.1.4. Assessment of unit non-response bias

Not applicable.

13.3.3.2. Item non-response - rate

Item non-response rate was 2.2% only for question X3 on turnover.

13.3.3.2.1. Methods used for item non-response treatment

1. No treatment for item non-response	
2. Deductive imputation An exact value can be derived as a known function of other characteristics.	
3. Deterministic imputation (e.g. mean/median, mean/median by class, ratio-based, regression-based, single donor nearest-neighbour) Deterministic imputation leads to estimators with no random component, that is, if the imputation were to be re-conducted, the outcome would be the same.	X
4. Random imputation (e.g. hot-deck, cold-deck) Random imputation leads to estimators with a random component, that is, if the imputation were re-conducted, it would have led to a different result.	
5. Re-weighting	
6. Multiple imputation In multiple imputation each missing value is replaced (instead of a single value) with a set of plausible values that represent the uncertainty of the right value to impute. Multiple imputation methods offer the possibility of deriving variance estimators by taking imputation into account. The incorporation of imputation into the variance can be easily derived based on variability of estimates among the multiply imputed data sets.	
7. Method(s) and the model(s) corresponding to the above or other method(s) used for the treatment of item non-response.	
Imputation of the mean within classes for item-non-response was used only for question X3 on turnover. For all other variables, no imputation was carried out.	

13.3.3.2.2. Questions or items with item response rates below 90% and other comments

Other comments relating to the item non-response

Additional issues concerning "item non-response" calculation (e.g. method used in national publications).

Not Applicable

Questions and items with low response rates (cut-off value is 90%) and item non-response rate.

No questions or items with response rates below 90% existed.

13.3.4. Processing error

No processing errors were detected.

13.3.5. Model assumption error

Not requested

14. Timeliness and punctuality

[Top](#)

14.1. Timeliness

See detailed section below.

14.1.1. Time lag - first result

Not applicable

14.1.2. Time lag - final result

Data are to be delivered to Eurostat in the fourth quarter of the reference year (due date for the finalised dataset is 5th October). European results are released before the end of the survey year or in the beginning of the year following the survey year (T=reference year, T+0 for indicators referring to the current year, T+12 months for other indicators referring to the previous year e.g. e-commerce).

At national level:

No deviation from the above statement. Data (finalised dataset) were delivered to Eurostat before the due date (5th October).

14.2. Punctuality

See detailed section below.

14.2.1. Punctuality - delivery and publication

Data were delivered to Eurostat on the 30th of September, 2024; 5 days before the deadline.

15. Coherence and comparability

[Top](#)

15.1. Comparability - geographical

The model questionnaire is generally used by the countries that conduct the survey on ICT usage and e-commerce in enterprises. Due to (small) differences in translation, in the used survey vehicle, in non-response treatment or different routing through the questionnaire, some results for some countries may be of reduced comparability. In these cases, notes are added in the data.

Detailed information on differences in the wording of the questions in the national questionnaires is available in “Annex I. Completeness” - worksheets related to questionnaire, coverage, additional questions.

There were no deviations from the model questionnaire or the concepts described in the Methodological manual that would affect the comparability of data.

Comparability between regions:

Data on NUTS 2 regional level were not delivered.

Detailed information on the provision of data on NUTS 2 regional level is available in “Annex I. Completeness” – worksheets related to regional data.

Annexes:

[Annex I. Completeness](#)

15.1.1. Asymmetry for mirror flow statistics - coefficient

Not applicable

15.2. Comparability - over time

See section below.

15.2.1. Length of comparable time series

The length of comparable time series depends on the module and the variable considered within each survey module. Additional information is available in annexes attached to the [European metadata](#).

No changes were made in the survey which may have an impact on the comparability of the results.

15.3. Coherence - cross domain

Not applicable

15.3.1. Coherence - sub annual and annual statistics

Not applicable

15.3.2. Coherence - National Accounts

Not applicable

15.4. Coherence - internal

Not applicable

16. Cost and Burden

[Top](#)

Cost: Not available.

Burden: Not available

The average time used for answering the survey questionnaire was approximately 17 minutes per enterprise.

In order to reduce the costs and the burden imposed to the enterprises information and communication technology was used to a great extent.

The use of a web questionnaire contributed to a great extent to the reduction of the cost of the survey and the improvement of efficiency. Although the response burden remains the approximately the same over the last years, the use of CAWI minimizes the time needed to fill in the questionnaire.

17. Data revision [Top](#)

17.1. Data revision - policy

A [data revision policy](#) is in place at CYSTAT. It is published on CYSTAT's web portal. CYSTAT also publishes a [list of scheduled revisions](#) (regular or major revisions), also published on its website.

17.2. Data revision - practice

Not Applicable: there are no revisions to report

17.2.1. Data revision - average size

Not requested

18. Statistical processing [Top](#)

18.1. Source data

A) Frame population description and distribution

For more information see concept 18.1.1.

B) Sampling design - Sampling method

Description of the sampling method used (e.g. stratified random sample, quota sampling, cluster sampling; one-stage or two-stage sampling) and information which variables were used to stratify, the categories of those variables, in particular for the NACE Rev. 2 categories related to the "possible calculation of European aggregates", and the final number of strata:

Not Applicable since for the year 2024 it has been decided to cover all enterprises with 10 or more employees (census of enterprises). In the frame there were 32 NACE groups and 3 size groups.

C) Gross sample distribution

More detailed information is available in "Annex III. Sample and standard error tables 2024" (Worksheet: GROSS SAMPLE)

D) Net sample distribution

More detailed information is available in "Annex III. Sample and standard error tables 2024" (Worksheet: NET SAMPLE)

Annexes:

[Annex III. Sample and standard error tables 2024](#)

18.1.1. Population frame

A) Description of frame population

a) When was the sample for the ICT usage and e-commerce in enterprise survey drawn?	Not applicable, since a census was carried out for the survey year 2024.
b) Last update of the Business register that was used for drawing the sample of enterprises for the survey:	The last update of the Business Register was in September 2023 for the reference period of December 2022.
c) Indication if the frame population is the same as, or is in some way coordinated with, the one used for the Structural Business Statistics (different snapshots):	The frame population is the Business Register which is the same for both ICT and SBS surveys. However, different snapshots of the frame are used for ICT and SBS due to the continuous updating of the Business Register.
d) Description if different frames are used during different stages of the statistical process (e.g. frame used for sampling vs. frame used for grossing up):	The frame population is extracted from the Business Register which is updated using administrative data (V.A.T. Services, Social Insurance Services and the Department of Registrar of Companies and Intellectual Property) and data from the surveys conducted by the Statistical Service of Cyprus. Due to the continuous updating of the Business Register, the frames used for sampling and grossing up are different.
e) Indication the shortcomings in terms of timeliness (e.g. time lag between last update of the sampling frame and the moment of the actual sampling), geographical coverage, coverage of different subpopulations, data available etc., and any measures taken to correct it, for this survey.	The frame used for the survey compared to the data reference year, is T-2 years. Measures taken: Updated Business Register data is provided.

B) Frame population distribution

More detailed information is available in "Annex III. Sample and standard error tables 2024" (Worksheet: FRAME POPULATION)

Annexes:

[Annex III. Sample and standard error tables 2024](#)

18.2. Frequency of data collection

Annual

18.3. Data collection

See detailed sections below.

18.3.1. Survey period

Survey / Collection	Date of sending out questionnaires	Date of reception of the last questionnaire treated
General survey	14/02/2024	30/06/2024
Micro-enterprises	Not applicable	Not applicable

18.3.2. Survey vehicle – general survey

General survey - Stand-alone survey

18.3.3. Survey vehicle – micro-enterprises

Not applicable

18.3.4. Survey type

Web-survey. The web questionnaire was available online during the entire survey period. The enterprises were informed about the web survey by email and by telephone. When needed (by the enterprise), telephone assistance was provided by trained CYPSTAT interviewers.

18.3.5. Survey participation

Mandatory

18.4. Data validation

Data have been validated according to Eurostat's standards.

Year to year checks were also carried out before data transmission.

18.5. Data compilation

Grossing-up procedures

To gross up the number of enterprises, the following factor is applied:

$$\text{Factor}_i = N_i / n_i$$

where

 N_i = total number of enterprises in stratum i of the population

 n_i = total number of enterprises in stratum i of the sample
sample = the enterprises that responded in stratum i

To gross up the number of employed persons the following factor is applied:

$$\text{Factor_employees}_i = \text{EMPLOYEES}_i / \text{employees}_i$$

where

 EMPLOYEES_i = total number of employed persons in stratum i of the population

 employees_i = total number of employed persons in stratum i of the sample
sample = the enterprises that responded in stratum i

To gross up the turnover and purchases the following factor is applied:

$$\text{Factor_monetary}_i = \text{TURNOVER}_i / \text{turnover}_i$$

where

 TURNOVER_i = total turnover in stratum i of the population

 turnover_i = total turnover in stratum i of the sample
sample = the enterprises that responded in stratum i

Note:

For the results according to NACE Rev.2 the population figures N_i , EMPLOYEES_i and TURNOVER_i for the different strata were obtained from the updated version of Business Register.

18.5.1. Imputation - rate

Imputation of the mean within classes for item-non-response was used only for question X3 on turnover, where the item non-response was 2,2%. For all other variables, no imputation was carried out.

18.6. Adjustment

Not applicable

18.6.1. Seasonal adjustment

Not applicable

19. Comment

[Top](#)

Problems encountered and lessons to be learnt: No other comments

19.1. Documents

Questionnaire in national language	X
Questionnaire in English (if available)	X
National reports on methodology (if available)	
Analysis of key results, backed up by tables and graphs in English (if available)	X
Other Annexes (ENT ENUMERATORS INSTRUCTIONS - set of guidelines/instructions given to the enumerators during training)	X

Related metadata

[Top](#)

Annexes

[Top](#)[ICT ENT2024 QUESTIONNAIRE ENGLISH LANGUAGE](#)[ICT ENT2024 QUESTIONNAIRE GREEK LANGUAGE](#)[ENUMERATORS INSTRUCTIONS](#)[Annex I. Completeness](#)[Annex II. Accuracy](#)[SUMMARY RESULTS ICT ENT 2024](#)[Annex III. Sample and standard error tables 2024](#)