

JVS_ESQRS_A_CY_2023_0000

National Reference Metadata in ESS Standard for Quality
Reports Structure (ESQRS)
Compiling agency: Statistical Service of Cyprus (CYSTAT)

**Eurostat metadata****Reference metadata**

- [1. Contact](#)
- [2. Statistical presentation](#)
- [3. Statistical processing](#)
- [4. Quality management](#)
- [5. Relevance](#)
- [6. Accuracy and reliability](#)
- [7. Timeliness and punctuality](#)
- [8. Coherence and comparability](#)
- [9. Accessibility and clarity](#)
- [10. Cost and Burden](#)
- [11. Confidentiality](#)
- [12. 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	Labour
1.5. Contact mail address	Statistical Service of Cyprus CY-1444 Nicosia Cyprus

2. Statistical presentation[Top](#)**2.1. Data description**

Job vacancy statistics (JVS) provide information on the level and structure of labour demand. The country transmits to Eurostat the quarterly data on the number of job vacancies and the number of occupied posts, as well as provides the quality report under the [JVS framework regulation](#) and the two implementing regulations: the [implementing regulation on the definition of a job vacancy, the reference dates for data collection, data transmission specifications and feasibility studies](#), as well as the [implementing regulation on seasonal adjustment procedures and quality reports](#).

2.2. Classification system

The quarterly data are broken down by economic activity (at section level) in accordance with NACE Rev. 2 - Statistical classification of economic activities in the European Community.

2.3. Coverage - sector

The survey covers enterprises with one and more employees classified in all sectors of economic activities defined by NACE Rev., except Sectors A (Agriculture, Forestry and Fishing), T (Activities of Households as Employers; Undifferentiated Goods- and Services-Producing Activities of Households for own use) and U (Activities of Extraterritorial Organizations and Bodies).

2.4. Statistical concepts and definitions

A 'job vacancy' is defined as a paid post that is newly created, unoccupied, or about to become vacant:

(a) for which the employer is taking active steps and is prepared to take further steps to find a suitable candidate from outside the enterprise concerned; and

(b) which the employer intends to fill either immediately or within a specific period of time.

'Active steps to find a suitable candidate' include:

- notifying the job vacancy to the public employment services,
- contacting a private employment agency/head hunters,
- advertising the vacancy in the media (for example internet, newspapers, magazines),
- advertising the vacancy on a public notice board,
- approaching, interviewing or selecting possible candidates/potential recruits directly,
- approaching employees and/or personal contacts,
- using internships.

'Specific period of time' refers to the maximum time the vacancy is open and intended to be filled. That period shall be unlimited; all vacancies for which active steps are continuing on the reference date shall be reported.

An 'occupied post' means a paid post within the organisation to which an employee has been assigned.

2.5. Statistical unit

The statistical unit for the data collection is the enterprise.

2.6. Statistical population

Enterprises with one and more employees.

2.7. Reference area

Government controlled areas of the Republic of Cyprus.

2.8. Coverage - Time

Time series classified by NACE Rev. 2 are available from the first quarter 2009 onwards.

2.9. Base period

Not applicable

3. Statistical processing

[Top](#)

3.1. Source data

Identification of the source of the data	The data source for job vacancies statistics is the Employment and Job Vacancies Survey, a survey carried out in enterprises by the Statistical Service of Cyprus since 2005 on a quarterly basis.
Coverage	
- Geographical	Government controlled areas of the Republic of Cyprus were covered and were considered one region.
- NACE	All NACE sections were covered (except sections A - Agriculture, Forestry and Fishing, T - Activities of Households as Employers and U - Activities of Extraterritorial Organizations and Bodies). Data was collected at division level and disseminated at section level (B to S including O, excluding armed forces).
- Enterprise size	Enterprises with one and more employees are covered in the survey.
Definition of the statistical unit	The statistical unit was the enterprise. According to the communitarian rules was defined as the smallest combination of legal units that is an organisational unit producing goods or services, which benefits from a certain degree of autonomy in decision-making, especially for the allocation of its current

	resources. An enterprise carries out one or more activities at one or more locations. An enterprise may be a sole legal unit.
Remarks	None
Sampling design	
Base used for the sample	The sampling frame used for the sample selection was drawn from the Business Register of CYSTAT which is updated on an annual basis using administrative sources and contains the latest information on each enterprise in the statistical population such as the identification items (unique identification number, address etc.), economic activity codes (NACE Rev.2) and number of employees (giving the enterprise size class).
Sampling design	A stratified sampling was used for the sample selection. The sample covered the entire country (government controlled areas of the Republic of Cyprus). The public units from the public administration (O), education (P), human health and social work activities (Q) were exhaustively included in the survey, except local public authorities units, for which data was collected based on a representative sample. The private units from the education (P), human health and social work (Q) activities were sampled.
Retention/renewal of sampling units	The same sample was used every quarter for year 2023.
Sample size	The sample size of each quarter was 3303 enterprises.
Stratification	The stratification variables were given by the economic activity (2 digit - division level) and the size classes of the enterprise (1 employee, 1.5-5 employees, 5.5-10 employees, 10.5-15 employees, 15.5-19.5 employees, 20-49.5 employees and 50 and more employees (full coverage)).
Other sources	
Maintenance agency	Not applicable
Updating frequency	Not applicable
Rules for clearance (of outdated information)	Not applicable
Voluntary/compulsory reporting and sanctions	Not applicable
Remarks	None
3.2. Frequency of data collection	
Reference dates	
Quarterly - The reference period was the whole quarter.	
3.3. Data collection	
Brief description of the data collection method(s)	Remarks
An electronic questionnaire developed in Blaise was completed using telephone interview for private sector, semigovernment sector, municipalities and local authorities. There is also a web-form questionnaire (CAWI) also developed in Blaise that can be filled in electronically by the enterprises and submitted to the Statistical Service.	Data concerning Job Vacancies for the government sector was collected from administrative sources. For the case of permanent employees the number of job vacancies, the occupation and the economic activity of the Department/Ministry is derived from the Official Gazette of the Republic of Cyprus.
3.4. Data validation	
Validation and consistency checks are incorporated in Blaise program. At the end of data collection extra checks regarding the validity of the data are done using SPSS.	
3.5. Data compilation	

Brief description of the weighting method	Weighting dimensions
The weights for job vacancies and occupied posts are calculated for each NACE and size group.	Weights are based on the employment of each NACE and size group. For enterprises with 50+ employees, the weight is equal to 1.
3.6. Adjustment	
Not applicable	

4. Quality management [Top](#)

4.1. Quality assurance

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(l) 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 GSBPM which defines and describes the main phases of the statistical production process. 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 and ONAs.

Annexes:

[European Statistics Code of Practice](#)

[ESS Quality Assurance Framework \(QAF\)](#)

[Quality Declaration of the European Statistical System](#)

[Official Statistics Law No. 25\(l\) of 2021](#)

[Regulation \(EC\) No 223/2009 on European statistics \(consolidated text\)](#)

4.2. Quality management - assessment

The output quality in the ESS is assessed in terms of the following 5 quality criteria: relevance, accuracy & reliability, timeliness & punctuality, coherence & comparability and accessibility & clarity. The quality indicators are assessed taking into account EUROSTAT's defined methodology and recommendations. Taking into account the above criteria, the overall quality of the statistics produced is very high. For further details and information please refer to the relevant sections of this quality report.

5. Relevance [Top](#)

5.1. Relevance - User Needs

Description of the national users and their main needs	Remarks
<p>The main national users are grouped as following:</p> <ul style="list-style-type: none"> • Governmental bodies (i.e. National Central Bank) • The Human Resource Development Authority (HRDA) • Businessmen and especially Human Resource Managers • Trade unions/ Employers Association • International Bodies • Academia • The press • The General Public 	None

The main information that the users need is the Job Vacancies Rate and the number of job vacancies.

5.2. Relevance - User Satisfaction

Extent to which the needs of national users are satisfied (voluntary)	Remarks
<p>Since 2008 (with the exception of 2010, 2013 and 2020) CYSTAT carries out an annual online "Users Satisfaction Survey". The results of the surveys are available on CYSTAT's web portal at the link attached below.</p> <p>Overall, there is a high level of satisfaction of the users of statistical data published by CYSTAT.</p>	None

Annexes:

[Results of CYSTAT's User Satisfaction Surveys](#)

5.3. Completeness

Description of missing variables and missing breakdowns of the variables	Report progress on the implementation measures regarding quarterly job vacancies statistics of Regulation (EC) No 453/2008, including :
No variables or breakdowns were missing.	<p>- a detailed plan and timetable for completing implementation</p> <p>- a summary of the remaining deviations from EU concepts</p>
	There was no deviation from EU concepts. The regulation was fully implemented into the national survey. The data are transmitted to Eurostat on quarterly basis on T+70.

5.3.1. Data completeness - rate

100%. No variables or breakdowns are missing.

6. Accuracy and reliability

[Top](#)

6.1. Accuracy - overall

-

6.2. Sampling error

See 6.2.1.

6.2.1. Sampling error - indicators

Coefficient of variation (taking into account the sampling design) or estimated sampling error for the number of job vacancies (see guidelines).
<p>Job Vacancies Statistics are based on the Employment and Job Vacancies Survey, a survey which is carried out in enterprises on a quarterly basis. Stratified sampling design has been used for sample selection, where the strata were the main economic division in two digits coded according to NACE Rev.2 and size class given by the number of employees.</p> <p>All sections were included (except sections A – Agriculture, Forestry and Fishing, T - activities of households as employers and U - Activities of Extraterritorial Organizations and Bodies). The strata were defined by the cross-classification of NACE divisions with size classes (enterprise with no more than 1 employee, enterprises with 1,5 - 49,5 employees and enterprises with 50+ employees).</p> <p>All enterprises employing 50+ employees were selected for the Survey whereas for the other size categories, the sample within each stratum was selected using simple random sample. The sample size in categories with no more than 49,5 employees was based on the number of enterprises in each category in the population.</p> <p>For the case of public sector and the publicly owned enterprises, they were fully covered.</p> <p>Coefficients of variation:</p> <p>The formulas used in order to compute the coefficients of variation in any stratum is:</p>

$$CV = \frac{V(x)^{1/2}}{x} * 100$$

Where x is the estimate of job vacancies in a stratum.

For combination of stratum to obtain a CV for an aggregate the formula used is the following:

$$CV = \frac{[V(x_1 + x_2 + \dots + x_h)]^{1/2}}{\Sigma(x_1 + x_2 + \dots + x_h)} * 100$$

Please note that the values of the coefficients of variation are given in the Annex attached below.

Annexes:

[CY_Coefficients of Variation_JVS2023](#)

6.3. Non-sampling error

Information on variables with non-negligible measurement and processing errors	Information on main sources of (non-negligible) measurement and processing errors and, if available, on methods applied for correction	Estimation bias: An assessment of the non-sampling errors, in terms of the absolute number of vacant posts, for the total number of job vacancies and, where possible, for aggregation level of NACE Rev. 2 specified in Annex 1 to this Regulation and size classes (1-9, 10 + employees).	Remarks
<p>The software for the Job Vacancy Survey was developed to find out the measurement and processing errors occurred at different stages of the survey.</p> <p>The application was designed in Blaise and included the following checks after the data entry:</p> <ul style="list-style-type: none"> • the logical flows among the questionnaire chapters; • the data comparability with the data of previous quarter; • the identification of the outliers or non-logical values. <p>No variables with non-negligible measurement or processing errors were identified through this process.</p>	<p>None</p>	<p>No model was used.</p>	<p>None</p>

6.3.1. Coverage error

Description of any difference between the	Description of classification errors	Description of any difference between the reference dates and the reference quarter	Any other relevant information

reference population and the study population			
There is no difference between the reference population and the study population.	Classification errors regarding the economic activity were minimal and did not affect the classification at the 2-digit level of NACE Rev.2, which is the dissemination level.	The reference period is the whole quarter.	None
6.3.1.1. Over-coverage - rate			
-			
6.3.1.2. Common units - proportion			
-			
6.3.2. Measurement error			
[see 6.3. non-sampling error]			
6.3.3. Non response error			
See 6.3.3.1.			
6.3.3.1. Unit non-response - rate			
Unit response rate			
Q1 2023	81.38%		
Q2 2023	85.32%		
Q3 2023	85.68%		
Q4 2023	85.35%		
Please note that the following figures represent the Unit Non-Response rates:			
Q1 2023	18.62%		
Q2 2023	14.68%		
Q3 2023	14.32%		
Q4 2023	14.65%		
6.3.3.2. Item non-response - rate			
-			
6.3.4. Processing error			
[see 6.3. non-sampling error]			
6.3.4.1. Imputation - rate			
Item imputation rate and methods and, where possible, the effect of imputation on the estimates for the variables transmitted			
No imputation made for any of the variables.			
6.3.5. Model assumption error			
If modelling is used, include a description of the models used. Particular emphasis should be given to models for imputation or grossing-up to correct for unit non-response.			
Not applicable			
6.4. Seasonal adjustment			
Brief description of seasonal adjustment procedures, in particular with regard to the European Statistical System guidelines on seasonal adjustment which have been endorsed and supported by the SPC.			
Seasonal adjustment is performed using J Demetra+.			

Timeseries data from 2009-2023 are used and the methodological information is described in the excel file provided by EUROSTAT, which is attached below.

Annexes:

[CY Quality Reporting on SA of JVS 2023](#)

6.5. Data revision - policy

A data revision policy is in place at CYSTAT. It is published on CYSTAT's web portal, at the following link: <https://www.cystat.gov.cy/en/StaticPage?id=1072>

CYSTAT also publishes a list of scheduled revisions (regular or major revisions), also published on its web portal, at the following link:

<https://www.cystat.gov.cy/en/AnnouncementList>

6.6. Data revision - practice

Provide a revision history, including the revisions in the published number of job vacancies and a summary of the reasons for the revisions.

No revision has been made on the data.

6.6.1. Data revision - average size

Not applicable

7. Timeliness and punctuality

[Top](#)

7.1. Timeliness

See 7.1.1.

7.1.1. Time lag - first result

Information on the time span between the release of data at national level and the reference period of the data.

Data are published at national level 75 days after the end of the quarter (5 days later after transmitted to EUROSTAT).

7.1.2. Time lag - final result

JVS data are published as final data.

7.2. Punctuality

See 7.2.1.

7.2.1. Punctuality - delivery and publication

Deadlines for the respondents to reply, also covering recalls and follow-ups	Period of the fieldwork	Period of data processing	Dates of publication of first results	Remarks
The process concerning the deadlines for the respondents to reply was performed as follows: Enumerators have to collect the data within four weeks after the end of the reference quarter and during the two following weeks recalls, follow-ups, replacements and checks must be	The field work was undertaken for four weeks after the end of the reference quarter.	The data are being processed after the end of the data collection period and the final checks performed for the verification of the information collected. This usually happens at the second half of the middle month of the next quarter	The publication dates for the quarterly and annual JVS 2023 results were set in accordance with the legal requirements. The data are published on the Statistical Service of Cyprus web portal 75 days after the end of	The data were delivered / released on the target date on which they were scheduled for delivery / release without

performed. Finally, data must be transmitted to Eurostat 70 days after the end of the reference quarters.	(e.g. for Q12023 in May 2023).	the reference quarter.	any delay (for all quarters of 2023).
---	--------------------------------	------------------------	---------------------------------------

8. Coherence and comparability

[Top](#)

8.1. Comparability - geographical

Information on differences between national and European concepts, and — to the extent possible — their effects on the estimation.

Comparability between national and European concepts on:

Definition of statistical units - There is no deviation from European concepts: The unit of selection was the **enterprise** defined according to the communitarian rules for enterprises statistics as the smallest combination of legal units that is an organisational unit producing goods or services, which benefits from a certain degree of autonomy in decision-making, especially for the allocation of its current resources. An enterprise carries out one or more activities at one or more locations. An enterprise may be a sole legal unit. The **observation unit** of the Employment and Job Vacancies Survey was the **local unit**. If the enterprise had local units, which were situated in other cities than the one where the headquarter is located the enterprise reported data for all local units.

Populations - There is no deviation from European concepts: The frame population is the Business Register. It is updated using information from administrative sources (V.A.T. Department, Social Insurance Department, and Department of the Registrar of Companies) so as to take into account changes in the structure of employment by industry, occupation and size of the establishment. After relevant sample surveys are completed, the updated information of sampled enterprises is provided to the Business Register. Due to the continuous updating of the Business Register, the frames used for sampling and grossing up are different.

Reference times - There is no deviation from European concepts: The statistics on job vacancies were produced, with a quarterly periodicity as requested in the European regulations.

Classifications - There is no deviation from European concepts: The national classification of economic activities is covered by NACE Rev.2. The size classes of enterprises correspond to the size classes requested.

Definitions of variables - There is no deviation from European concepts: The definitions of Employment and Job Vacancies Survey variables were developed and adopted in accordance with European standards (Commission Regulation (EC) no 19/2009 implementing Regulation (EC) No 453/2008 of the European Parliament and of the Council on quarterly statistics on Community job vacancies, as regards the definition of a job vacancy, the reference dates for data collection, data transmission specifications and feasibility studies).

8.1.1. Asymmetry for mirror flow statistics - coefficient

-

8.2. Comparability - over time

Information on changes in definitions, coverage and methods in any two consecutive quarters, and their effects on the estimation.

Remarks

The Employment and Job Vacancies Survey in Cyprus has been carried out quarterly since 2005. No changes in definitions, coverage and methods in any two consecutive quarters have occurred and thus, comparability over time is ensured.

None

8.2.1. Length of comparable time series

Quarterly data from 2009 to 2023.

8.3. Coherence - cross domain

Comparisons of data on the number of vacant jobs from other relevant sources when available, in total and broken down by NACE at section level when relevant, and reasons if the values differ considerably.

Comparison with LFS data is provided in Annex (Relative difference between the numbers of employees and posts and Beveridge Curve). The differences in the two datasets are due to the

different methodologies used to produce the data.

Annexes:

[CY Beveridge curve 2023](#)

[CY Comparison of JVS with LFS Data](#)

8.4. Coherence - sub annual and annual statistics

-

8.5. Coherence - National Accounts

-

8.6. Coherence - internal

-

9. Accessibility and clarity

[Top](#)

9.1. Dissemination format - News release

The quarterly Job Vacancies are published on CYSTAT's web portal. The press releases for 2023 can be found at the following links:

<https://www.cystat.gov.cy/en/PressRelease?id=66858>

<https://www.cystat.gov.cy/en/PressRelease?id=66860>

<https://www.cystat.gov.cy/en/PressRelease?id=66862>

<https://www.cystat.gov.cy/en/PressRelease?id=68653>

-

9.2. Dissemination format - Publications

Dissemination scheme, including to whom the results are sent	Periodicity of national publication	References for publications of core results, including those with commentary in the form of text, graphs, maps, etc.	Information on what results, if any, are sent to reporting units included in the sample
Data are disseminated quarterly to Eurostat 70 calendar days after the end of the reference period.	Data are disseminated quarterly on the website of CYSTAT 75 calendar days after the end of the reference period.	https://www.cystat.gov.cy/en/PressRelease?id=68653 -	Not applicable

9.3. Dissemination format - online database

JVS data are published on CYSTAT's online database, available at the link attached below.

Annexes:

[CYSTAT's online database](#)

9.3.1. Data tables - consultations

-

9.4. Dissemination format - microdata access

Statistical micro-data from CYSTAT's surveys are accessible for research purposes only and under strict provisions as described below:

Under the provisions of the Official Statistics Law, CYSTAT may release microdata for the sole use of scientific research. Applicants have to submit the request form "APPLICATION FOR DATA FOR RESEARCH PURPOSES" giving thorough information on the project for which micro-data are needed.

The application is evaluated by CYSTAT's Confidentiality Committee and if the application is approved, a charge is fixed according to the volume and time consumed for preparation of the data. Micro-data may then be released after an anonymization process which ensures no direct identification of the statistical units but, at the same time, ensures usability of the data. The link for the application is attached below.

Annexes:

[Link to the application for access to microdata on CYSTAT's website](#)

9.5. Dissemination format - other

-

9.6. Documentation on methodology

-

9.7. Quality management - documentation

Description of and references for metadata provided	References for core methodological documents relating to the statistics provided	Description of main actions carried out by the national statistical services to inform users about the data	Remarks
Methodological information on Job Vacancies can be found at the following link: https://www.cystat.gov.cy/en/MethodologicalDetails?m=2260	No references for core methodological documents were provided.	CYSTAT issues a quarterly press release with the results of JVS.	None

9.7.1. Metadata completeness - rate

-

9.7.2. Metadata - consultations

-

10. Cost and Burden

[Top](#)

Cost and burden of the survey are not available.

CAWI is incorporated in order to reduce the cost and minimize respondent's burden.

11. Confidentiality

[Top](#)

11.1. Confidentiality - policy

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

- National Official Statistics Law No. 25(l) 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).
- Guidelines for the Protection of Confidential Data.

Annexes:

[Official Statistics Law No. 25\(l\) of 2021](#)

[Regulation \(EC\) No 223/2009 on European statistics \(consolidated text\)](#)

[European Statistics Code of Practice](#)

[Guidelines for the Protection of Confidential Data](#)

11.2. Confidentiality - data treatment**Disclosure rules: Brief description of when data have to be deleted for reasons of confidentiality**

The treatment of confidential data is regulated by Guidelines for the Protection of Confidential Data.

Annexes:

[Guidelines for the Protection of Confidential Data](#)

12. Comment

[Top](#)

Special remarks

None

Related metadata

[Top](#)

Annexes

[Top](#)