# **Single Integrated Metadata Structure (SIMS)**

**Country:** Greece

**Compiling agency: ELSTAT** 

**Domain name: STATISTICS ON JOB VANACIES 2016** 

# **ELSTAT** metadata

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| 1. Contact                    | <u>Top</u>   |
|-------------------------------|--|
| 1.1 Contact organisation      | Hellenic Statistical Authority (ELSTAT)  |
| 1.2 Contact organisation unit | Population and Labour Market Statistics Division / Wages and Salaries Statistics Section |
| 1.3 Contact name              | Sofia Bakalidou  |
| 1.4 Contact person function   | Head of the Section  |
| 1.5 Contact mail address      | 46, Peiraios & Eponiton Str. 18510 - Piraeus   |
| 1.6 Contact email address     | s.bakalidou@statistics.gr,   |
| 1.7 Contact phone number      | (+30) 213 135 2175   |
| 1.8 Contact fax number        | (+30) 213 135 2876   |

| 2. Introduction  | <u>Top</u>   |
|------------------|--|
| 2.1 Introduction | The survey on Job Vacancies is a sample survey which is conducted on a quarterly basis and records the number of Job Vacancies by branch of economic activity (Nace Rev.2) and occupation (ISCO_08). It covers sections B-S of Nace Rev.2. |

| 3. Metadata update          | <u>Top</u>    |
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| 3.1 Metadata last certified | November 2017 |
| 3.2 Metadata last posted    | November 2017 |
| 3.3 Metadata last update    | November 2017 |

# 4. Statistical presentation

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# 4.1 Data description

The survey on Job Vacancies is part of the European Labour Market Statistics. The survey records the number of Job Vacancies on the 1<sup>st</sup> day of the third month of each quarter.

The statistics on Job Vacancies are compiled at one-digit code of the branches of economic activity (Nace Rev.2), at one-digit level of occupation groups of the statistical classification of occupations (ISCO 08) and by full / part-time employement.

# 4.2 Classification system

## **Economic activity**

All sections B-S of economic activities of Nace Rev.2 are covered, excluding the Activities of Households and Extraterritorial Organisations and Agencies.

## More specifically:

- For the years 2005 2010 the data were compiled in accordance with Nace Rev.1.1
- From 2009 onwards the survey is conducted in line with Nace Rev.2.

# Occupation

All occupations are covered, excluding employees in primary sector described as "Skilled agricultural, forestry and fishery workers" in group 6 of ISCO 08.

#### More specifically,

- For the years 2005 2011 the data were compiled in accordance with ISCO 88
- From 2012 onwards, the survey is conducted in line with ISCO 08.

# Geographical coverage

Greece, total.

#### 4.3 Sector coverage

Statistics on Job Vacancies for the years 2005 - 2010 were compiled in line with Nace Rev.1.1, covering sections C-K. The data were produced at one-digit level of economic activity.

From 2009 onwards the data are compiled in line with Nace Rev.2, covering sections B-S. The data are produced at one-digit level of economic activity.

Therefore, there are two different data timeseries:

- Timeseries for 2005-2010, with data in line with Nace Rev.1.1 and
- Timeseries from 2009 onwards, with data in line with Nace Rev.2

Furthermore, the statistics on Job Vacancies for the years 2005 - 2011 were compiled in accordance with ISCO 88 and from 2012 onwards, in line with ISCO 08. The data are procuded at one-digit level of occupation groups.

#### 4.4 Statistical concepts and definitions

The concepts and definitions of the basic variables used for the compilation of Job Vacancies are laid down in Regulations (EC) No 453/2008, (EC) No 1062/2008 and (EC) No 19/2009 of the European Parliament and of the Council.

**Job vacancy** means a paid post that is newly created, unoccupied, or about to become vacant, 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 which the employer intends to fill either immediately or within a specific period of time. It should noted that job vacancies refer only to employees.

A vacant post which is going to be filled by the following categories is not considered as Job Vacancy:

- An apprentice without remuneration coming either by the employer or through the Social Securities Funds
- Contractors which are not on the payroll list,
- Personnel who is re-hired or returns to the enterprise after a holiday paid, or not, leave
- Internal movement of a member of personnel inside the enterprise

**Job Vacancies to be filled in immediately** are job vacancies for full or part-time employment which are to be filled in within a period **not** longer than three months (starting day of the quarter is considered the first day of the third month of every calendar quarter).

**Job Vacancies in the near future** are job vacancies for full or part-time employment which are to be filled in within a period <u>longer than three months</u> (starting day of the quarter is considered the first day of the third month of every calendar quarter).

**Full-time Job Vacancies** are posts which are to be filled by employees whose regular working hours are the same as the collectively agreed or customary hours worked in the enterprise, even if their contract is for less than one year.

**Part-time Job Vacancies** are posts which are to be filled by employees whose regular working hours are less than the collectively agreed (set out in the collective or industry employment agreement) or customary hours worked in the enterprise.

**Employees** are the persons who work and receive remuneration in the form of wages or salaries and have a direct employment contract with the enterprise and are remunerated on the basis of the number of hours worked (full-time or part-time) and the duration of the contract (fixed or indefinite). The following categories are excluded: management personnel whose remuneration wholly takes the form of a share in profits, unpaid family workers and sales representatives who are not included in the payroll, i.e. they are self-employed.

**Local unit** of the enterprise is every local branch of the enterprise which is operating in a different physical place and may belong to a different branch of economic activity and it is located in another Regional Unit.

**Total of local units located in the same Regional Unit and belonging to the same branch of economic activity** is the number of all local units of the enterprise located in the same Regional Unit and belonging to the same branch of economic activity. The local units of the enterprise located in the same Regional Unit but belong to different branches of economic activity are separate totals of local units.

Additionally, the local units belonging to the same branch of economic activity but located in different Regional Units are separate totals of local units.

**Regional Unit** is a geographical area and it is defined in accordance with the Municipalities under Kallikratis Plan. In most cases, it refers to a geographical area which is defined by the boundaries of the Department.

## 4.5 Statistical unit

The statistical unit is the enterprise employing at least one (1) employee and belongs to sections B-S of Nace Rev.2. It should be noted that Job Vacancies are also recorded for the total of local units of the enterprise which are located in the same Regional Unit and have the same 2-digit code of economic activity.

# 4.6 Statistical population

The statistical population is the total of the enterprises employing at least one (1) employee and belongs to sections B-S of Nace Rev.2.

#### 4.7 Reference area

Greece, total.

## 4.8 Time coverage

There are available data from the 1<sup>st</sup> quarter 2005 until the 4<sup>th</sup> quarter 2010 in line with Nace Rev.1.1 and from the 1<sup>st</sup> quarter 2009 onwards in line with Nace Rev.2.

#### 4.9 Base period

Not applicable.

# 5. Unit of measure <u>Top</u>

Number of Job Vacancies on a quarterly basis.

# 6. Reference period

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The reference period of the data on Job Vacancies is one calendar quarter.

# 7. Institutional mandate

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# 7.1 Legal acts and other agreements

The Hellenic Statistical Authority (ELSTAT) is an independent authority which is responsible for the production and dissemination of the official statistics of Greece.

The legal framework concerning the organization and operation of ELSTAT is as follows:

> Law 3832/2010 (Government Gazette No 38, Issue A): "Hellenic Statistical System Establishment of the Hellenic Statistical Authority (ELSTAT) as an Independent Authority", as amended by article 90 paragraphs 8 and 9 of the Law 3842/2010 (Government Gazette No 58, Issue A): "Restoration of fiscal justice, confrontation of tax evasion and other provisions", by article 10 of the Law 3899/2010 (Government Gazette No 212, Issue A): "Urgent measures for the implementation of the assistance program of the Greek Economy", by article 45 of the Law 3943/2011 (Government Gazette No 66, Issue A): "Combating tax evasion, staffing of auditing services and other provisions falling within the competence of the Ministry of Finance", by article 22 paragraph 1 of the Law 3965/2011 (Government Gazette No 113, Issue A): "Operations Reform of the Consignment and Loan Fund, Public Debt Management Agency, Public Enterprises and Government bodies, the establishment of the General Secretary of Public Property and other provisions", by article first of the Law 4047/2012 (Government Gazette No 31, Issue A): "Ratification of the Act of Legislative Content "Very urgent measures for the implementation of the Medium-term Fiscal Strategy 2012-2015 and of the State Budget for 2011" and of the Act of Legislative Content "Regulation of very urgent issues for the implementation of law 4024/2011 "Pension provisions, uniform pay scale - grading system, labour reserve and other provisions for the implementation of the Medium-term Fiscal Strategy Framework 2012-1015" and of issues falling within the competence of the Ministries of Administrative Reform and E-Governance, Interior, Finance, Environment, Energy and Climate Change, and of Education, Lifelong Learning and Religious Affairs and related to the implementation of the Medium-term Fiscal Strategy Framework 2012-2015" and other provisions", by article 323 of the Law 4072/2012 (Government Gazette No 86, Issue A): "Improvement of the business environment New corporate form - Trade Marks - Realtors - Regulating maritime, port and fishing matters and other provisions" and by article 7 paragraph 1 of the Act of Legislative Content dated 18/11/2012 (Government Gazette No 228, Issue A): "Financial rules and other provisions", by Article 93 of the Law 4182/2013 (Government Gazette No 185, Issue A): "Code of charitable estate,

inheritances in abeyance and other provisions", by Article 6 paragraph 8 of the Law 4244/2014 (Government Gazette 60, Issue A): "Integration in Greek law of the Council Directive 2013/1/EU of 20 December 2012 amending Directive 93/109/EC as regards certain detailed arrangements for the exercise of the right to vote and stand as a candidate in elections to the European Parliament for citizens of the Union residing in a Member State of which they are not nationals and amendment of law 2196/1994 (A' 41) and other provisions", by Article first subparagraph C.3 of the Law 4254/2014 (Government Gazette No 85, Issue A): "Measures for the support and development of the Greek economy, in the context of the implementation of Law 4046/2012, and other provisions of law" and by Article 33, paragraphs 5a and 5b of the Law 4258/2014 (Government Gazette No 94, Issue A): "Demarcation process and arrangements of matters for streams - arrangements of Urban Planning legislation and other provisions".

- Regulation on the Operation and Administration of the Hellenic Statistical Authority (ELSTAT), 2012, (Government Gazette No 2390, Issue B, 28-8-2012)
- Regulation (EC) No 223/2009 of the European Parliament and of the Council, on the European statistics (Official Journal of the European Union L 87/164).
- Article 14 of the Law 3470/2006 (Government Gazette No 132, Issue A): "National Export Council, tax regulations and other provisions".
- Article 3, paragraph 1c, of the Law 3448/2006 (Government Gazette No 57, Issue A): "For the further use of information coming from the public sector and the settlement of matters falling within the responsibility of the Ministry of Interior, Public Administration and Decentralization".
- European Statistics Code of Practice adopted by the Statistical Programme Committee on 24 February 2005 and promulgated in the Commission Recommendation of 25 May 2005 on the independence, integrity and accountability of the national and Community statistical Authorities, after its revision, which was adopted on 28 September 2011 by the European Statistical System Committee.
- ➤ Presidential Decree 226/2000 (Government Gazette No 195, Issue A): "Organization of the General Secretariat of the National Statistical Service of Greece".
- Articles 4, 12, 13, 14, 15 and 16 of the Law 2392/1996 (Government Gazette No 60, Issue A): "Access of the General Secretariat of the National Statistical Service of Greece to administrative sources and administrative files, Statistical Confidentiality Committee, settlement of matters concerning the conduct of censuses and statistical works, as well as of matters of the General Secretariat of the National Statistical Service of Greece".

The Survey on Job Vacancies is fully in line with European legislation. The main legislative act governing the survey is Regulation (EC) No 453/2008 of the European Parliament and of the Council, which sets out the design, the characteristics of the survey and decision making, as well as Implementing Regulations (EC) 1062/2008 and 19/2009.

# 7.2 Data sharing

Apart from the obligation to transmit the survey data to Eurostat, there is no other data sharing agreement.

# 8. Confidentiality

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## 8.1 Confidentiality policy

The issues concerning the observance of statistical confidentiality by the Hellenic Statistical Authority (ELSTAT) are arranged by articles 7, 8 and 9 of the Law 3832/2010 as in force, by Articles 8, 10 and 11(2) of the Regulation on Statistical Obligations of the agencies of the Hellenic Statistical System and by Articles 10 and 15 of the Regulation on the Operation and Administration of ELSTAT.

More precisely, ELSTAT disseminates the statistics in compliance with the statistical principles of the European Statistics Code of Practice and in particular with the principle of statistical confidentiality.

# 8.2 Confidentiality – data treatment

ELSTAT protects and does not disseminate data it has obtained or it has access to, which enable the direct or indirect identification of the statistical units that have provided them by the disclosure of individual information directly received for statistical purposes or indirectly supplied from administrative or other sources. ELSTAT takes all appropriate preventive measures so as to render impossible the identification of individual statistical units by technical or other means that might reasonably be used by a third party. Statistical data that could potentially enable

the identification of the statistical unit are disseminated by ELSTAT if and only if:

- a) these data have been treated, as it is specifically set out in the Regulation on Statistical Obligations of the agencies of the Hellenic Statistical System (ELSS), in such a way that their dissemination does not prejudice statistical confidentiality or
- b) the statistical unit has given its consent, without any reservations, for the disclosure of data.

The confidential data that are transmitted by ELSS agencies to ELSTAT are used exclusively for statistical purposes and the only persons who have the right to have access to these data are the personnel engaged in this task and appointed by an act of the President of ELSTAT.

ELSTAT may grant researchers conducting statistical analyses for scientific purposes access to data that enable the indirect identification of the statistical units concerned. The access is granted provided the following conditions are satisfied:

- a) an appropriate request together with a detailed research proposal in conformity with current scientific standards have been submitted;
- b) the research proposal indicates in sufficient detail the set of data to be accessed, the methods of analyzing them, and the time needed for the research;
- c) a contract specifying the conditions for access, the obligations of the researchers, the measures for respecting the confidentiality of statistical data and the sanctions in case of breach of these obligations has been signed by the individual researcher, by his/her institution, or by the organization commissioning the research, as the case may be, and by ELSTAT.

Issues referring to the observance of statistical confidentiality are examined by the Statistical Confidentiality Committee (SCC) operating in ELSTAT. The responsibilities of this Committee are to make recommendations to the President of ELSTAT on:

- the level of detail at which statistical data can be disseminated, so as the identification, either directly or indirectly, of the surveyed statistical unit is not possible;
- > the anonymization criteria for the microdata provided to users;
- the granting to researchers access to confidential data for scientific purposes.

The staff of ELSTAT, under any employment status, as well as the temporary survey workers who are employed for the collection of statistical data in statistical surveys conducted by ELSTAT, who acquire access by any means to confidential data, are bound by the principle of confidentiality and must use these data exclusively for the statistical purposes of ELSTAT. After the termination of their term of office, they are not allowed to use these data for any purpose.

Violation of data confidentiality and/or statistical confidentiality by any civil servant or employee of ELSTAT constitutes the disciplinary offence of violation of duty and may be punished with the penalty of final dismissal.

ELSTAT, by its decision, may impose a penalty amounting from ten thousand (10,000) up to two hundred thousand (200,000) euros to anyone who violates the confidentiality of data and/or statistical confidentiality. The penalty is always imposed after the hearing of the defense of the person liable for the breach, depending on the gravity and the repercussions of the violation. Any relapse constitutes an aggravating factor for the assessment of the administrative sanction.

More specifically, as regards the dissemination of data of the survey on Job Vacancies, the rules for ensuring non-authorized notification are implemented at the following levels:

- ➤ Greece, total
- One-digit code of Nace Rev.2
- > One-digit code of ISCO 08.

# 9. Release policy

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#### 9.1 Release calendar

In December of each year, ELSTAT publishes a Press Releases Calendar which lists the exact dates for the release of all the statistics planned for next year.

## 9.2 Release calendar access

The press releases calendar is disseminated to the press and it is available for free to every interested party. The release calendar is also posted on the website of ELSTAT: "Announcements Calendar" (<a href="http://www.statistics.gr">http://www.statistics.gr</a>)

#### 9.3 User access

The data are released simultaneously to all users through the publication of the Press Release entitled "Job Vacancies", which is posted on the portal of ELSTAT at 12:00 on the predefined data. The Press Release is concomitantly transmitted electronically to the subscribers and posted on the portal of ELSTAT.

Neither users nor any government bodies have access to data before their official release.

# 10. Frequency of dissemination

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The survey results are released on a quarterly basis.

## 11. Dissemination format

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#### 11.1 News release

Quarterly results of the Job Vacancies

#### 11.2 Publications

No publications.

## 11.3 On-line database

There is no on-line database concerning the survey on Job Vacancies.

#### 11.4 Micro-data access

Microdata, if not confidential, are made available to users after their submitting a request to the:

Division of Statistical Information and Publications

46, Peiraios and Eponiton Str.,

18510 Piraeus

Tel: +30 213 135 2022 Fax: +30 213 135 2312

e-mail: data.dissem@statistics.gr,

# 11.5 Other

# 12. Accessibility of documentation

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#### 12.1 Documentation on methodology

The methodology concerning the compilation of data on Job Vacancies is laid down in Regulation (EC) No 453/2008 of the European Parliament and of the Council.

From the 2<sup>nd</sup> quarter 2013 until the 4<sup>th</sup> quarter 2015 the Survey was conducted with an enriched sample of enterprises and services (amounting to 6,774), covering all sections B-S of Nace Rev.2. In 2016 the sample was redesigned and the survey was conducted on a sample of 7,451 enterprises.

# 12.2 Quality documentation

This is the 2<sup>nd</sup> user-oriented quality report on the Job Vacancies and it is available on the portal of ELSTAT at: http://www.statistics.gr/en/statistics/-/publication/SJO41/-

# 13. Quality management

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# 13.1 Quality assurance

Correctness and completeness checks, as well as quality checks are carried out during the whole process of the compilation of the data of the survey: from the data collection stage to the final compilation of the results.

First of all, well-trained and experienced staff is utilized for all the stages of the compilation of the data, namely for data collection- including communication with the enterprise- initial checks, data entry, checks for outliers and final checks concerning the timeseries characteristics of every enterprise.

Data are validated either before or after data entry by means of logical checks. During data processing the data are checked in order to identify and correct any errors. When an error is identified, the data are further investigated, in cooperation with the enterprises, in order to confirm that it is an error or it is just an unusual value. At the same time, data are checked for completeness, accuracy and consistency of the correlating variables.

In the near future the data collection method is to be changed and the printed questionnaires are to be replaced by electronic ones which will be collected through a web application. This method is expected to significantly accelerate the production of data but also to improve their quality, since the logical checks will be carried out during the filling in of questionnaires by the respondents.

ELSTAT is also exploring the possibility to collect data from administrative sources (National Insurance Foundation – IKA, "ERGANI" project), in order to enhance the quality of data and reduce the administrative burden of enterprises.

The Hellenic Statistical Authority (ELSTAT) aims to ensure and further improve the quality of statistics produced and maintain the confidence of users in them. This is achieved through the Quality Policy and Quality Guidelines of ELSTAT, which are posted on the website of ELSTAT and are available at the following links:

http://www.statistics.gr/documents/20181/2571f853-1e37-46da-9387-595bbe2a162b

http://www.statistics.gr/documents/20181/1609796/ELSTAT\_Quality\_Instructions\_EN.pdf/4095e67c-2fe4-450b-8a95-18bc992a83c6

#### 13.2 Quality assessment

The results of the survey on Job Vacancies are reliable, they are transmitted every quarter to Eurostat where are assessed and validated.

## 14. Relevance

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# 14.1 User needs

The main users of the survey on Job Vacancies are international organizations (Eurostat, OECD, European Central Bank (ECB), International Monetary Fund, (IMF)), as well as many national authorities, services and institutions (Government, Banks, Universities, Research Institutes, etc.). Furthermore, among the users are the press, researchers and the general public. Moreover, the enterprises that have the obligation to fill in the questionnaire are at the same time users of these data. They request relevant data in order to draw their remuneration policy, estimate the costs of contractual agreements and study competitiveness in the branch of economic activity they belong to.

## 14.2 User satisfaction

#### a. User Satisfaction Survey

ELSTAT conducts a user satisfaction survey every semester. The results of this survey are published in the Library's Newsletter (published in Greek and English) which is issued by the Library and the Section of Statistical Dissemination of ELSTAT, drawing information from the user's questionnaire. This publication presents data on the number of users in relation with other variables, such as response rate to users' requests, the kind of requested data, as well as the dissemination mode of statistical information. These characteristics are tabulated and are presented in absolute values and percentages.

#### b. Users' Conference

Pursuant to its annual statistical work programme, ELSTAT has been conducting since 2010, on a yearly basis, the Users Conference with the participation of representatives of the public and private sector, academics and research institutes.

The Users Conferences offer ELSTAT the opportunity to gather comments and proposals made by users of statistics pertaining to the dissemination of statistical information, access to statistical data and any shortcomings in the produced statistics.

The Users Conferences help ELSTAT to draw useful conclusions on the areas of statistical production that need to be improved in order to better fulfill the changing needs of users. Such conclusions are integrated in the annual and short-term statistical work programmes of ELSTAT.

More information on a) the results of the User Satisfaction Survey and b) on the Users Conferences are available on the portal of ELSTAT, at the following link:

http://www.statistics.gr/en/user-conference

#### 14.3 Completeness

The survey on Job Vacancies covers all the variables set out in the relevant EU Regulations.

# 15. Accuracy and reliability

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#### 15.1 Overall accuracy

The errors that have an impact on the accuracy of the results are sampling errors, (a) non-sampling errors (b) and non-response errors(c).

- (a) Sampling errors are due to the fact that the survey is not conducted on all the enterprises of the target population but on a sample of these enterprises. The sample size ensures high accuracy estimations at the level of Greece total.
- (b) Non-sampling errors mostly refer to measurement errors and non-response errors, on account of non-response of the sample enterprises. Any measurement errors during data collection are identified by means of quality checks and are duly corrected.
- (c) As regards non-response errors, all efforts are made for contacting the enterprises that have not responded by phone or by other means of communication, in order to persuade them to cooperate and give the required information.

As a consequence, the overall accuracy of the results of the survey on Job Vacancies is generally considered to be satisfactory.

#### 15.2 Sampling error

The survey on Job Vacancies is a sample survey and therefore sampling errors are observed in the total of estimations and in the estimations at the level of sections of economic activities and occupations.

The CV of quarterly Job Vacancies for Nace\_Rev2: B-S for the years 2015 and 2016 are:

|         | cv    |       |
|---------|-------|-------|
| Quarter | 2015  | 2016  |
| Q1      | 7,1%  | 19,1% |
| Q2      | 28,7% | 19,5% |
| Q3      | 42,0% | 37,5% |
| Q4      | 9,4%  | 33,0% |

# 15.3 Non-sampling error

#### 15.3.1 Coverage error

No coverage errors are observed in the Business Register of ELSTAT on the basis of which the survey was designed.

# 15.3.1.1. A2. Over-coverage - rate

Some enterprises, that had been included in the sample, had been selected in the sample and yet they did not exist during the survey conduct (closed enterprises, enterprises out of scope, e.g., enterprises employing no employees any more).

Furthermore, some enterprises may have not been included in the sample because they started operating in a later stage. This resulted in under coverage and underestimation of the produced statistics (under coverage rate).

During the time between the design of the sample and the conduct of the survey, some sampling units (enterprises)

changed the designing of the strata after data collection. These units were allocated to new strata (employment size classes, branch of economic activity) maintaining their initial probability of selection. This fact changed the initial variation of data, the initial allocation of the sample enterprises, thus inflating the variation of estimations. Therefore, the coefficient of variation of the produced statistics was higher than the coefficient of variation which had been calculated on the basis of the sample design.

## 15.3.1.2 A3.Common units - proportion

Until the 2<sup>nd</sup> quarter 2013, the data on Job Vacancies used to derive exclusively from a sample survey for sections B-S, except from section O for which data were collected from administrative sources. From the 3<sup>rd</sup> quarter 2013 onwards the data are exclusively collected through a sample survey (including for section O) and not from administrative sources. The data for section O continue to be collected from administrative sources only for consistency and cross-checking purposes.

#### 15.3.2 Measurement error

The questionnaires are filled in through personal interview in the enterprise. The method which is used ensures high quality data, since the statistical interviewers assist the respondents to filling in the questionnaire and they check very carefully the filled in questionnaires before leaving the enterprise.

The statistical interviewers are normally external survey workers and, if necessary, experienced permanent employees of ELSTAT. The interviewers are duly trained during training seminars before the conduct of the survey. The purpose of the training seminars is to enable the interviewers to a) fully understand the definitions and the variables of the survey, b) correctly fill in the survey questionnaire and c) check the questionnaires for any errors through logical checks.

The structure and the size of the questionnaire make it friendly to statistical interviewers and respondents. The questions are clearly stated using the appropriate language and terminology, Furthermore, the compiled guidelines cover analytically all the survey variables. All the above ensure the fact that the collected questionnaires are complete and correctly filled in, thus eliminating any measurement errors.

Any measurement errors which make take place during data collection, are identified by means of quality checks and are duly corrected.

#### 15.3.3 Non response error

Non-response of the enterprises is addressed by sending reminder letters via fax or e-mail, by calling the enterprises or by paying a visit to the enterprise, in order to collect the requested data.

Response rate as regards employment size classes and the total population was quite satisfactory. In the census strata, where all the population units had been included in the sample, unit response was sometimes quite high, but not 100% for all the combinations of sections and class sizes, on account of non-response of some enterprises. Consequently, some census strata became sampling strata, thus increasing sampling error for the survey characteristics.

## 15.3.4 Processing error

Once collected, the data are processed in order to compile the data on Job Vacancies.

More specifically, once the data are gathered in the Central Offices of ELSTAT, the following statistical actions take place: codification, logical checks, data entry and comparison with other sources of statistical information.

After the completion of all the final checks in order to identify any non-sampling errors, the following steps are taken:

- o comparisons of data with the data of the corresponding quarter of the previous year and with the data of the previous quarter,
- o quality checks are carried out on the collected data in order to identify any outliers. Any outliers and errors are identified and are duly corrected.

## 15.3.5 Model assumption error

No model is used for the compilation of the data on Job Vacancies Survey.

# 16. Timeliness and punctuality

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#### 16.1 Timeliness

The data of the survey on Job Vacancies are available 70 days after the end of the reference period. For the period

from 2013 until the 2<sup>nd</sup> quarter 2014 the results were not published on time, mainly on account of the delayed response of the surveyed enterprises.

#### 16.2 Punctuality

The results of the survey are release on time. For the period from 2013 until the 2<sup>nd</sup> quarter 2014 the results were not published on time, mainly on account of the delayed response of the surveyed enterprises.

# 17. Comparability

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## 17.1 Comparability – geographical

The collected survey variables are fully in line with the relevant definitions laid down in Regulation (EC) 453/2008 of the European Parliament and of the Council, thus ensuring comparability of statistics among Member States.

# 17.2 Comparability over time

The data on Job Vacancies are comparable over time. The data are available from the 1<sup>st</sup> quarter 2005 until the 4<sup>th</sup> quarter 2010 in accordance with Nace Rev.1.1 and from the 1<sup>st</sup> quarter 2009 onwards in accordance with Nace Rev.2. In addition, the data are available from the 1<sup>st</sup> quarter 2005 until the 4<sup>th</sup> quarter 2011 in accordance and ISCO 88 and from the 1<sup>st</sup> quarter 2012 onwards in line with ISCO 08.

## 18. Coherence

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#### 18.1 Coherence cross-domain

The data of the survey are compared with the data of the Labour Force Survey in terms of employment and unemployment. There is coherence between the employment and unemployment rates of change and the number of job vacancies. It should be noted that the data on Job Vacancies are compiled on the basis of a sample of enterprises, while the Labour Force Survey data from a sample of households.

Moreover, the survey data are checked with the data on Job Vacancies deriving from administrative sources for section O, and data prove to be coherent.

#### <u>18.1.1 Coherence – sub annual and annual statistics</u>

The data of the survey are compared with the data of the Labour Force Survey in terms of employment and unemployment on a quarterly basis. There is coherence between the employment and unemployment rates of change and the number of job vacancies. It should be noted that the data on Job Vacancies are compiled on the basis of a sample of enterprises, while the Labour Force Survey data from a sample of households.

### 18.1.2 Coherence - National Accounts

Not applicable.

## 18.2 Coherence – internal

All data are checked for internal coherence by Eurostat.

#### 19. Cost and burden

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Two forms of questionnaires are used for the survey on Job Vacancies, namely:

- Questionnaire Form 1 and
- Questionnaire Form 2

The questionnaire Form 1 is a joint questionnaire used for the Survey on Labour Cost Indices and on Short-term Indices (STS). Consequently, the administrative burden of the respondent enterprises is reduced, since many of the questions are common.

The required time needed to fill in the questionnaire Form 1 ranges from 20 to 60 minutes, depending on the size of the enterprise/service.

The questionnaire Form 2 is used to collect information only for the survey on Job Vacancies and does not include any economic data.

The required time needed to fill in the questionnaire Form 2 ranges from 5 to 20 minutes, depending on the size of the enterprise / service.

Efforts are made in order to collect the necessary data from administrative sources (IKA, ERGANI project), aiming at reducing the administrative burden on the enterprises.

The cost of the survey on Job Vacancies can not be estimated, since one of the questionnaires is common with the questionnaire of the LCI survey and the STS survey. The total cost of the three surveys is approximately 55,000 euros per quarter.

20. Data revision Top

#### 20.1 Revision policy

The data are not subject to revisions after their publication, since they are final and are not based on estimates. Revisions may take place only if there are changes in methodology or the statistical classifications of the branches of economic activity or occupations and only after Eurostat's decision.

More information on the revision policy implemented by ELSTAT is available at the following link:

http://www.statistics.gr/documents/20181/a49dca9a-dacf-4b52-b5df-b156216cb354

## 20.2 Revision practice

In case in which the data are revised of the survey on Job Vacancies, this is announced with a relevant Press Release.

# 21. Statistical processing

Top

#### 21.1 Source data

The survey on Job Vacancies is conducted on a sample designed from the business register of ELSTAT. More specifically for every two-digit code of economic activity a number of enterprises is selected for every one of the following size classes:

| Class Sizes | Annual average employment |
|-------------|---------------------------|
| 1           | 1-4 persons               |
| 2           | 5-9 persons               |
| 3           | 10-19 persons             |
| 4           | 20-49 persons             |
| 5           | 50-99 persons             |
| 6           | 100-249 persons           |
| 7           | 250+ persons              |

Therefore, all the strata covered are those deriving from the combinations of the two digit code of economic activity with the class sizes.

From 2005 -when the survey was conducted for the first time- until 2008, the survey was conducted on a sample of 3,495 enterprises for the 1<sup>st</sup>, 2<sup>nd</sup> and 4<sup>th</sup> quarters. For the sample of the 3<sup>rd</sup> quarter 1,422 more enterprises were added and therefore the final sample of the 3<sup>rd</sup> quarter amounted to 4,917 enterprises. The sample was designed in line with Nace Rev.1.1.

In 2009, the sample was redesigned in order to implement the new Nace Rev.2 and the survey was conducted on a sample of 4,440 enterprises and services for the 1<sup>st</sup>, 2<sup>nd</sup> and 4<sup>th</sup> quarters. For the sample of the 3<sup>rd</sup> quarter, 978 more enterprises were added and therefore the final sample of the 3<sup>rd</sup> quarter amounted to 5,418 enterprises. This sample was used until the 2<sup>nd</sup> quarter 2013. From the 2<sup>nd</sup> quarter 2013 until the 4<sup>th</sup> quarter 2015 the Survey was conducted with an enriched sample of enterprises and services (amounting to 6,774), covering all sections B-S of Nace Rev.2, the same for all the quarters. In 2016 the sample was redesigned and the survey was conducted on a sample of 7,451 enterprises.

#### 21.2 Frequency of data collection

The data of the survey on Job Vacancies are collected on a quarterly basis.

#### 21.3 Data collection

The data are collected through a specially designed questionnaire (questionnaire Form 1 and Form 2).

The questionnaire Form 1 is a joint questionnaire used for the Survey on Labour Cost Index (LCI) and on Short-term Indices (STS). The questionnaire Form 2 is used to collect information only for the survey on Job Vacancies and does not include any economic data.

The questionnaires are delivered to external survey workers (statistical interviewers) which, once trained, visit the enterprises in order to fill in the questionnaire form 1 with the assistance of the enterprise's staff or they hand the questionnaire to be filled in by the accountant of the enterprise. Afterwards, they collect the filled in questionnaires and they deliver them back to ELSTAT.

In cases where the enterprise refuses to cooperate with the statistical interviewers, refuses to respond, delays, or in case there are particularities, an employee form the Wages and Salaries Statistics Section of ELSTAT pays a visit to the enterprise and collects the necessary information himself.

In some cases (due to lack of time) the questionnaire may be delivered and collected:

- by fax
- by e-mail

The same procedure is followed in the Regional Statistical Offices (RSO) of ELSTAT. The questionnaires are sent by post to the RSO and then the completed questionnaires are sent by the RSO back to ELSTAT by post. In some cases (due to lack of time) the questionnaire may be sent and returned by:

- fax. or
- e-mail

Non-response is addressed through telephone contact with the enterprise, reminders sent by fax or e-mail or personal visits to the enterprise.

#### 21.4 Data validation

The data are validated by means of a series of logical checks. During data processing, the data are checked in order to identify and duly correct any errors. Comparisons are made for every enterprise mostly with the data of the previous quarter but also with the data of the corresponding quarter of the previous year. Then, the number of Job Vacancies is checked per employment stratum and per one-digit code of economic activity. In case big differences are observed, all the enterprises belonging to the same stratum are investigated. Once identified, the errors are further investigated in cooperation with the enterprise in order to confirm that it is an error or it is just about an unusual value. It is not possible to find all of the errors, but emphasis is put on the errors that have a major impact on the results.

# 21.5 Data compilation

The data on Job Vacancies are produced at one-digit level of Branches of Economic Activities, one-digit level of occupation groups and by part/full-time employment.

# 21.5.1 Imputation - rate

Not applicable.

#### 21.6 Adjustment

Not applicable.

# 21.6.1 Seasonal adjustment

Not applicable.

| 22. Comment | <u>Top</u> |
|-------------|------------|
|             |            |