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

**Country:** Greece

**Compiling agency: ELSTAT** 

**Domain name: STATISTICS ON THE STRUCTURE** 

AND ALLOCATION OF EARNINGS

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1. Contact	<u>Top</u>
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2. Introduction	<u>Top</u>
2.1 Introduction	The survey on the Structure and Allocation of Earnings in enterprises is a yearly sampling survey with a four-year periodicity. In the past, the survey has been conducted with the following reference years: 2002, 2006 and 2010, with reference month October of the corresponding reference year. The purpose of the survey is to produce statistics on the structure of employees' earnings in enterprises and services. The latest survey was conducted with reference year the year 2010 and it provides statistical data on gross earnings by economic activity for sectors B-S on Nace, paid hours, sex, citizenship, family status, age, occupation, education level and length of service in the enterprise.

3. Metadata update	<u>Top</u>
3.1 Metadata last certified	February 2015
3.2 Metadata last posted	February 2015
3.3 Metadata last update	February 2015

## 4. Statistical presentation

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## 4.1 Data description

The main purpose of the survey on the Structure and Allocation of Earnings in Enterprises and services at national level is to produce statistics on the structure of earnings of employees. More specifically, the collected variables refer to:

- the enterprise (branch of economic activity, geographical region, number of local units, number of employed persons, type of employment contract, form of economic and financial control) and
- the employed persons (sex, age, occupation, citizenship, marital status, status in employment, length of service in the enterprises, educational level earnings during the year of the survey, hourly earnings, contributions, paid hours, etc.)

From a microeconomic perspective, these statistics are a tool for drawing conclusions on the allocation of earnings in the branches of economic activity. Moreover, the allocation of earnings may be assessed and interpreted on the basis of the characteristics of the persons employed in the different branches of economic activity.

At European level, the survey aims at compiling harmonized statistics that can provide comparable quantitative and qualitative information for all the EU Member States with reference to the structure and allocation of earnings of employees.

#### 4.2 Classification system

## Economic activity

All sections B-S of economic activities of Nace Rev.2 are covered.

More specifically:

- For the years 2002 and 2006 the data were compiled in accordance with Nace Rev.1.1.
- In 2010, the survey was conducted in line with Nace Rev.2, yet the data were also codified in accordance with Nace Rev.1.1, in order to ensure comparability with the previous surveys (2002 and 2006).

## 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 2002 and 2006 the data were compiled in accordance with ISCO 88
- In 2010, the survey was conducted in line with ISCO 08, yet the data were also codified in accordance with ISCO 88, in order to ensure comparability with the previous surveys (2002 and 2006).

#### Level of education

All education levels are covered and the data were compiled in accordance with the statistical classification ISCED 97.

#### Geographical coverage

Greece, total.

### 4.3 Sector coverage

The 2002 survey covered sections C-K of Nace Rev.1.1

The 2006 survey covered sections C-K and in addition from the year 2002 sections M, N and O of Nace Rev.1.1

The 2010 survey covered all the sections B-S of Nace Rev.2, yet the data were also codified in accordance with Nace Rev.1.1, in order to ensure comparability with the previous surveys (2002 and 2006).

#### 4.4 Statistical concepts and definitions

The concepts and definitions of the basic variables used for the compilation of data of the Survey on the Structure and Allocation of Earnings are laid down in Regulation (EC) 1738/2005 amending Regulation (EC) No 1916/2000 and Regulation (EC) 530/1999 of the European Parliament and of the Council.

**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 . More information about the structure of the Regional Units in Greece are available on the website of ELSTAT at the following link:

http://www.statistics.gr/portal/page/portal/ESYE/PAGE-namingcodes

**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. An enterprise may belong to more than one branches of economic activity. For the Survey on the Structure and Allocation of Earnings, the branch of economic activity of the enterprise shall be the branch which employs the majority of the employees of the enterprise.

**Economic activity of the local unit** is the branch of economic activity in which the majority of its workers is employed, which may be different from the branch of economic activity of the enterprise.

#### **Group of enterprises**

An enterprise group is an association of at least two enterprises bound together by legal and/or financial bonds. A group of enterprises consists of the parent enterprise and the affiliated companies.

**Collective pay agreement** is any type of agreement signed between the enterprise and the employees or their collective body and may be:

- A national level agreement
- An industry agreement
- An agreement for individual industries in the regions where the enterprise or the local unit are located
- An enterprise agreement or an agreement applying only to the workers of a local unit

**Employed persons**, for the purposes of the survey on the structure and allocation of earnings, are all the employees of the enterprise, i.e., the wage and salaries earners.

**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 members,
- partners that are remunerated on the basis of the product or service they deliver.
- sales representatives who are not included in the payroll, i.e. they are self-employed
- occasional workers (i.e. employed without pre-defined working hours),
- temporary workers employed by / through agencies,
- persons wholly remunerated by way of fees, or commission,
- members of the board of directors of the enterprise,
- unpaid owners, directors or managers on the grounds that are paid by way of profit share or by fee, because they are not considered employees,
- workers of the survey unit permanently (i.e. for more than one year) working in an affiliated company located abroad,
- voluntary workers.

**Full-time employees** are the members of the personnel 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 employees** are the members of the personnel whose regular working hours are less than the collectively agreed or customary hours worked in the enterprise on a daily, weekly or monthly basis.

**Seasonal employees** are the members of the personnel that are hired under a special work contract designed to cover seasonal needs of the enterprise or the local unit, which are identified in the same time period every year.

**Apprentices** are those remunerated employed persons who do not fully participate in the production process and work either under an apprentice contract or in the context of a project for which vocational training is most important than productivity.

**Occupation,** according to the statistical classification of occupation ISCO 08 is the "real" profession mainly performed by the employee. A basic criterion for the classification to an occupation group is whether an employee has some form of managing or supervising responsibilities.

**Paid hours** cover normal and overtime remunerated hours, hours remunerated with a lower rate even if the difference is covered by social security contributions, as well as hours not worked during the reference periods but nevertheless paid (annual leave, sick leave, official holidays and other hours paid, special type of leaves).

**Special earnings** are the payment for shift work, night work and work during weekends, given the fact that they are not counted as overtime pay.

**Payments in kind** comprise of all goods and services provided to the employees by the enterprise or the local unit, such as products of the enterprises provided for free or at a reduced price, (e.g.,food, beverages, footwear, clothware) shelter for the personnel, leased cars, as well as share of the company and other benefits.

Total annual bonuses refer to any irregular payments which did not occur during each pay period, such as

holiday bonuses, Christmas and Easter bonuses (13th and 14th salary), productivity bonuses, occasional commissions, profit-shares, etc. Bonuses paid regularly on a monthly basis are excluded.

#### 4.5 Statistical unit

The primary statistical unit is the local unit of the enterprise with average annual employment amounting to, at least, 10 persons and the final statistical unit is the employee. As a register of local units is not available, the primary unit is considered the enterprise with average annual employment amounting to, at least, 10 persons and belongs to sections B-S of Nace Rev.2.

## 4.6 Statistical population

The statistical population is the total of the enterprises employing at least 10 employees and belong to sections B-S of Nace Rev.2.

#### 4.7 Reference area

Greece, total.

## 4.8 Time coverage

The Survey on the Structure and Allocation of Earnings is a yearly survey with a four-year periodicity. In the past, the survey was conducted for the following reference years: 2002, 2006 and 2010 for which data have been compiled. It is planned that the survey will be conducted again in 2015 with reference year the year 2014.

## 4.9 Base period

Not applicable.

## 5. Unit of measure

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Number of employees, hours, percentages (%), euro.

## 6. Reference period

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The year 2010.

## 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 the Structure and Allocation of Earnings is carried out simultaneously in all EU Member States using harmonized methods and definitions, pursuant to Council Regulation (EC) No 530/1999 on structural statistics on Earnings and Labour Cost, as well as pursuant to the implementing Regulation (EC) No 1916/2000, as amended by Regulation 1738/2005.

The first survey for the compilation of community statistics on Earnings following harmonized methods and definitions was conducted simultaneously in all EU Members States in 1995, pursuant to Regulation 2744/95. The definitions for earnings followed by Members States are based on the European System of National and Regional Accounts in the European Union, in accordance with Regulation (EC) No 2223/96, as amended by Regulation (EC) 448/98.

#### 7.2 Data sharing

There is a bilateral agreement between Eurostat and the National Statistical Institutes concerning the provision of anonymised microdata of the Survey on the Structure and Allocation of Earnings.

In addition, there is a bilateral agreement between OECD and ELSTAT pertaining to the provision of data in

8. Confidentiality <u>Top</u>

## 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 the structure and allocation of earnings, the rules for ensuring non-authorized notification are implemented at the following levels:

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

## 9. Release policy

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#### 9.1 Release calendar

Within September of the current year, ELSTAT publishes a Press Releases Calendar which lists the exact dates for the release of all the statistics planned for next year.

http://www.statistics.gr/portal/page/portal/ESYE/BUCKET/General/calendar en 2015.pdf

#### 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 (www.statistics.gr) at the link: "Announcements Calendar".

http://www.statistics.gr/portal/page/portal/ESYE/BUCKET/General/calendar\_en\_2015.pdf

#### 9.3 User access

The results of the survey on the Structure and Allocation of Earnings are not announced through a Press Release.

## 10. Frequency of dissemination

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The survey results are released 18 months after the end of the year of reference when the survey is conducted, every four years.

## 11. Dissemination format

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## 11.1 News release

There is no relevant press release.

## 11.2 Publications

There are no publications.

## 11.3 On-line database

There is no on-line database concerning the survey on the structure and allocation of earnings.

## 11.4 Micro-data access

Microdata, if not confidential, are 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

Tabulated data of the survey on the Structure and Allocation of Earnings for the years 2002, 2006 and 2010 are available through the digital library of ELSTAT, at the following link:

http://www.statistics.gr/portal/page/portal/ESYE/PAGE-

themes?p param=A0103&r param=SJO46&y param=2006 00&mytabs=0

## 12. Accessibility of documentation

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## 12.1 Documentation on methodology

The methodology concerning the compilation of data of the survey on the structure a and allocation of earning is laid down in Regulation (EC) No 530/1999 of the European Parliament and of the Council.

In 2010 the survey was conducted on an enriched sample of enterprises and services covering all sections B-S of Nace Rev.2.

The survey is a sample survey using the two-stage stratified sampling method. The primary statistical unit is the local unit of the enterprise with average annual employment amounting to at least 10 persons and the final statistical unit is the employee. As a register of local units is not available, the primary unit is considered the enterprise with average annual employment amounting to at least 10 persons and belongs to sections B-S of Nace Rev.2

A short methodological note is available at the following link:

http://www.statistics.gr/portal/page/portal/ESYE/PAGE-

themes?p param=A0103&r param=SJO46&y param=MT&mytabs=0

## 12.2 Quality documentation

Quality is ensured by ELSTAT by means of logical checks and specialized checks by Eurostat.

This user-oriented quality report of the survey on the structure and allocation of earnings is available on the portal of ELSTAT at the link:

http://www.statistics.gr/portal/page/portal/ESYE/PAGE-themes?p param=A0103

## 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 involved in 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 time series 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 if there is an error or is just an unusual value. At the same time, data are checked for completeness, accuracy and consistency of the relevant variables.

The Hellenic Statistical Authority (ELSTAT) aims at ensuring and further improving 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/portal/page/portal/ESYE/BUCKET/General/ELSTAT\_Quality\_Policy.pdf http://www.statistics.gr/portal/page/portal/ESYE/BUCKET/General/ELSTAT\_quality\_quidelines.pdf

## 13.2 Quality assessment

The results of the survey on the Structure and Allocation of Earnings are reliable and are transmitted to Eurostat where they are assessed and validated.

14. Relevance Top

#### 14.1 User needs

The main users of the Survey on the Structure and Allocation of Earnings are international organizations (Eurostat, OECD, European Central Bank (ECB), International Monetary Fund (IMF)), as well as many National Authorities, Services and Institutions (Ministries, 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 (bilingual) which is issued by the Library and the Section of Statistical Dissemination of ELSTAT, evaluating 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 regarding 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 the results of the User Satisfaction Survey (a), and on the Users' Conferences (b) are available on the portal of ELSTAT, at the following link:

http://www.statistics.gr/portal/page/portal/ESYE/PAGE-conferences

## 14.3 Completeness

The Survey on the Structure and Allocation of Earnings covers all the variables as defined 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).

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 as regards the groups of sections of economic activities at the level of Greece total.

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.

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 the Structure and Allocation of Earnings is generally considered to be high.

## 15.2 Sampling error

The Survey on the Structure and Allocation of Earnings 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.

## 15.3 Non-sampling error

#### 15.3.1 Coverage error

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

### 15.3.1.1. A2. Over-coverage - rate

Some enterprises, that had been included in the Register, had been selected in the sample and yet did not exist during the survey conduct (closed enterprises, enterprises out of scope, e.g., enterprises employing less than 10 employees).

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 period between the drawing 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, and as a result inflated 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

The data of the Survey on the Structure and Allocation of Earnings derive exclusively from a sample survey and not from administrative sources.

## 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 or they fill in themselves the data on employees (questionnaire Form 2) 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 fully understand the definitions and the variables of the survey, correctly fill in the survey questionnaire and check the questionnaires for any errors through logical checks.

The structure and the size of the questionnaire are designed as to be friendly to statistical interviewers and respondents. The questions are clearly posed 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 minimizing 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 tackled by sending reminder letters via fax or e-mail, by calling the enterprises or by planning 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 size classes, on account of non-response of some enterprises. Consequently, some census strata became sampling strata, resulting in increasing sampling error for the survey characteristics.

## 15.3.4 Processing error

Once collected, the data are processed in order to compile the data of the survey on the structure and allocation of earnings.

More specifically, once the data are gathered in the Central Offices of ELSTAT, the following statistical actions follow; 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, quality checks are carried out on the collected data in order to identify any outliers. If outliers and errors are identified, then are duly corrected.

## 15.3.5 Model assumption error

Not applicable.

## 16. Timeliness and punctuality

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#### 16.1 Timeliness

The data of the survey on the Structure and Allocation of Earnings are available 18 months after the end of the reference year, in accordance with Regulation (EC) No 530/1999.

### **16.2 Punctuality**

The results of the 2010 survey on the structure and allocation of earnings were announced one year after the expiration of the deadline, mainly in cause of the delayed response on behalf of the surveyed enterprises.

## 17. Comparability

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## 17.1 Geographical comparability

The collected variables of the survey are fully in line with the relevant definitions laid down in Regulation (EC) 530/1999 of the European Parliament and of the Council, thus ensuring comparability of statistics among Member States.

## 17.2 Comparability over time

There are no significant differences in the definitions used in the surveys conducted in 2002, 2006 and 2010, apart from those provided by the relevant Regulations, such as the change in the statistical classifications of economic activities and occupations. The 2002 and 2006 surveys were conducted in accordance with Nace Rev.1.1 and ISCO 88. The 2010 survey was conducted with Nace Rev.2. and ISCO 08, yet, in order to ensure comparability with the surveys of 2002 and 2006, the 2010 survey was conducted in accordance with Nace Rev.1.1 and ISCO 88 as well.

All the above surveys are in line with European principles.

# 18. Coherence <u>Top</u>

## 18.1 Coherence cross-domain

The data of the survey were compared with the data of the Labour Force Survey (LFS) in terms of employment and hours worked data and proved to be coherent.

#### 18.1.1 Coherence - sub annual and annual statistics

No comparisons, the survey is conducted only every 4 years.

#### 18.1.2 Coherence - National Accounts

The Survey on the Structure and Allocation of Earnings covers only the enterprises employing at least 10 persons, while National Accounts cover all the enterprises.

In order to achieve a level of comparability between National Accounts (NA) data and the results of the Survey on the Structure and Allocation of Earnings, and in order to check their coherence, the earnings per person must be calculated for each one of these two data sources. When compared, the data prove to be coherent in the majority of the branches of economic activity.

#### 18.2 Coherence – internal

All data are checked for internal coherence by ELSTAT and Eurostat.

## 19. Cost and burden Top

The questionnaires used for the survey are 100% harmonized with Eurostat's questionnaire. Two forms of questionnaires are used, namely:

- Questionnaire Form 1, and
- Questionnaire Form 2

The questionnaire Form 1 is the questionnaire used for the enterprise and it helps collecting information on the enterprise, such as economic activity, number of persons employed, form of economic and financial control, number of local units of the enterprise, the main type of employment contract and whether the company belongs to a Group of enterprises.

The required time needed to fill in the questionnaire Form 1 ranges from 10 to 70 minutes, depending on the size of the enterprise/service.

The questionnaire Form 2 is used to collect information on the employees. More specifically, it helps collecting information on:

- Individual characteristics of the employee (e.g., sex, age, educational level)
- Characteristics pertaining to employment (occupation, position, employment status, total length of service in the enterprise, full or part-time employment)
- Monthly data (the reference month is October of the year when the survey is conducted) on hours paid broken down to overtime pay, on gross earnings broken down to payments related to overtime and to payments related to shift work
- Annual data on gross earnings broken down into payments in kind and payment related to annual bonuses.

It should be noted that the survey is conducted by using the two-stage stratified sampling method, with primary statistical unit the local unit of the enterprise with average annual employment amounting to 10 persons, at least, and final statistical unit the employee. Therefore, at the first stage, ELSTAT draws a sample of the enterprises and sets out the number of employees that should be surveyed per enterprise (range: 8 – 250 employees).

At the second stage, during the first visit to the enterprise, a sample of employees is drawn from the payroll list, something that is time consuming and increases the level of difficulty of the survey.

The survey on the Structure and Allocation of Earnings is considered by some surveyed enterprises a difficult and time-consuming survey. Complaints have been expressed mostly in terms of size of the questionnaire Form 2 and the detailed analysis of required information, in addition to the fact that the necessary data must be collected from the local unit and not from the enterprise and finally complaints have been expressed on the size of the sample of employees.

The required time for filling in the questionnaire Form 2 ranges from 40 to 60 minutes per employee. The total time needed for filling in the questionnaires Form 2 for all the employees of the sample per enterprise depends on the size of the enterprises and the information systems of the enterprise.

The cost of the survey for 2010 amounted to 342,000 euros.

# 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.

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

http://www.statistics.gr/portal/page/portal/ESYE/BUCKET/General/ELSTAT Revisions Policy 22 5 2013 EN.pdf

## 20.2 Revision practice

In case the data of the survey on the structure and allocation of earnings are revised, this is announced

## 21. Statistical processing

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#### 21.1 Source data

The Survey on the Structure and Allocation of Earnings in enterprises is conducted on a sample drawn from the Business Register of ELSTAT.

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.	10-19	
2.	20-49	
3.	50-99	
4.	100-249	
5.	250-499	
6.	500-999	
7.	1.000+	

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

The enterprises with average annual employment more than 250 persons are surveyed exhaustively and for 2010 amounted to 773 units.

The selection of the sample of employees in each enterprise of the sample is based on the unified payroll list (Total of all the local branches and the central offices of the enterprise) of the enterprise which is the sampling frame. It is preferable that this list is provided from the enterprise to the interviewer, broken down according to the individual local units.

The size of the sample of employees in each enterprise is based on the total number of persons employed, figuring in the payroll list as follows:

Employment Class Sizes	Employment (in persons)	Sample of employees
1.	10-19	8
2.	20-49	8
3.	50-99	12
4.	100-249	12
5.	250-499	23
6.	500-999	40
7.	1.000-1.999	70
8.	2.000-3.999	100
9.	4.000-5.999	120
10.	6.000-9.999	160
11.	10,000+	250

In 2010 the sample was redesigned in order to implement Nace Rev.2 and the survey was conducted on a sample of 4,421 enterprises and services.

## 21.2 Frequency of data collection

The Survey on the Structure and Allocation of Earnings has a four year periodicity.

#### 21.3 Data collection

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

The questionnaire Form 1 is the questionnaire used for the enterprise and helps collecting information on the enterprise, such as economic activity, number of persons employed, form of economic and financial control, number of local units of the enterprise, main type of employment contract and whether the company belongs to a Group of enterprises or not.

The questionnaire Form 2 is used to collect information on the employees. More specifically, the collected data refer to sex, age, educational level, occupation, position, employment status, total length of service in the enterprise, full or part-time employment. In addition, financial data are collected for October of the year when the survey is conducted, such as data on hours paid, overtime pay, on gross earnings, payments related to overtime and payments related to shift work. Furthermore, annual financial data are collected, such as gross earnings, payments in kind and payments related to annual bonuses.

The questionnaires are delivered to external survey workers (statistical interviewers) who, 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. Before filling in the questionnaire form 2, they have to be supplied with the payroll list for October (of the specific reference year), that will be used as sampling frame in order to draw the sample of the employees to be surveyed. Afterwards, in cooperation with the staff of the enterprise, they have to fill in the questionnaire Form 2.

In cases where the enterprise refuses to cooperate with the statistical interviewers, or refuses to respond, delays or there are particularities, an employee form the Wages and Salaries Statistics Section of ELSTAT plans 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 or
- by e-mail

The same procedure is followed by 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 tackled 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, mostly as regards employment data, with the data of the Labour force Survey and as regards average monthly salaries with National Accounts. Then the data are checked by employment stratum and by two digit branch of economic activity. In case big differences are observed, all the enterprises belonging into the same stratum are investigated. Once identified, the errors are further investigated in cooperation with the enterprise in order to confirm if there is an error or it is just an unusual value. It is not possible to find all of the errors, but emphasis is put on the errors that may have a major impact on the results.

## 21.5 Data compilation

The data of the survey on the Structure and Allocation of Earnings are produced at two digit level of Branches of Economic Activities, by earnings and paid hours, by number of employees, sex, age, educational level and average annual earnings.

## 21.5.1 Imputation - rate

Not applicable.

## 21.6 Adjustment

Not applicable.

## 21.6.1 Seasonal adjustment

Not applicable.

22. Comment <u>Top</u>