



HELLENIC REPUBLIC
HELLENIC STATISTICAL AUTHORITY

ELSTAT

Annual Report

2018

PIRAEUS 2019

A. INTRODUCTION

In this Annual Report, ELSTAT accounts for its activities in 2018. Besides the activities concerning the statistical surveys and tasks outlined in the 2018 Statistical Work Programme, the Chapters of this Annual Report also contain information about the major issues in the area of statistics in 2018.

In 2018, ELSTAT continued its actions to improve the completeness, quality and timeliness of its statistics through the continuous implementation of the Greek and European statistical legal framework in force and by adopting the higher European and international statistical standards. Furthermore, it continued its cooperation with the agencies of the Hellenic Statistical System (ELSS) to improve the quality of their statistics by coordinating their statistical activities and assessing their statistics for their certification as "official". In this context, in 2018, ELSTAT drafted the "Guide to the Agencies of the Hellenic Statistical System for Implementing the European Statistics Code of Practice (CoP)", which aims to assist the ELSS agencies in understanding and applying the principles of the CoP.

ELSTAT maintained its active role within the European Statistical System (ESS) in 2018, through its close cooperation with the other members of the ESS, in the framework of Task Forces/Working Groups and Sector/Directors' Groups organised by Eurostat on various statistical issues, as well as through its participation in European decision-making centers on statistical issues.

Among the important events in 2018 for ELSTAT, the completion of the draft of the new Organisation of ELSTAT is included.

B. IMPROVING THE QUALITY AND RELIABILITY OF STATISTICS

1. Implementation of improvement actions in line with the recommendations of the Peer Review Report

In line with the recommendations of the Peer Review Report for Greece, ELSTAT undertook, in June 2015, to implement 47 improvement actions with a specific timetable for completion. These improvement actions have been incorporated by Eurostat, with ELSTAT's consent, to the actions of pillar A of the Joint Overall Statistical Greek Action Plan (JOSGAP), which aim at enhancing the institutional framework of the ELSS.

Out of the above actions, 33 were completed by 31 December 2017. In 2018, 3 of the remaining improvement actions were completed. Therefore, a total of 36 out of the 47 improvement actions were completed by 31 December 2018. The actions completed in 2018 concern:

- The drafting of a new Organisation of ELSTAT (see Section 2, below).
- The inclusion in the regular tasks of ELSTAT of the compilation and publication of a Press Release for each one of its statistical surveys.
- The inclusion in the regular tasks of ELSTAT of the compilation, in line with SIMS standard, and publication of a quality report for each statistical survey it carries out.

Out of the 11 outstanding improvement actions, ELSTAT has the responsibility for the implementation of 4 of them –actually it is about 3 actions, since 1 of them is included in the list of improvement actions for 2 separate recommendations of the Peer Review Report and, therefore, it has been counted twice– while the implementation of the remaining 7 improvement actions depends on agencies other than ELSTAT.

2. The new Organisation of ELSTAT

The Task Force set up by ELSTAT officials in November 2016 with the mandate to prepare a draft

of the new Organisation of ELSTAT completed its work and submitted to the President of ELSTAT a final draft of the new Organisation in December 2018.

The new Organisation of ELSTAT has been compiled with the aim of responding to the obligations and requirements of a modern Statistical Office, so that ELSTAT fulfils its tasks in the ELSS and is an active member of the ESS. It also aims to address existing deficiencies in the production of ELSTAT statistics and to adapt the production and dissemination of those statistics to new technological developments, with sharing of resources. In addition, it aims to adjust the ELSS to the main orientations of the future European Union statistical production system, as promoted by the relevant legislation (single Regulatory Framework for Business Statistics – FRIBS, Social Statistics – IESS and Agricultural Statistics – IFS).

The generalised model underpinning the development of the new Organisation of ELSTAT was the Generic Statistical Business Process Model – GSBPM, which has as a key principle the "shared use of resources". It is the most widely-used model worldwide, as it contributes to resource savings through the standardisation of statistical processes. The new Organisation of ELSTAT also foresees, for the first time, the establishment of a category of statistical interviewers/researchers of secondary education, with the aim to recruit staff for the collection of primary data for statistical surveys. The recruitment of the above staff aims to reduce the number of private, external statistical interviewers currently used for this purpose. In addition, saving of resources is also achieved, while at the same time reducing the administrative burden on ELSTAT, as well as improving the quality of the data collected, through the specialisation of the staff concerned.

According to the new Organisation, ELSTAT is composed of:

- 3 Independent Offices and 1 Office of the Legal Advisor, affiliated to the President of ELSTAT
- 2 Directorates General
- 13 Divisions
- 104 Sections, including 49 Regional Statistical Offices (RSO), which operate at the level of the Section.

3. Coordination of statistical activities within and between the ELSS agencies

In accordance with Article 5a of Regulation (EC) 223/2009 on European statistics, as amended by Regulation (EC) 2015/759, and on the basis of the experience gained from the certification process, ELSTAT has compiled, in 2018, the "Guide to the Agencies of the Hellenic Statistical System for the Implementation of the European Statistics Code of Practice". This Guide includes guidance for the ELSS agencies, with a view to facilitating the practical and efficient application of the CoP by them.

More specifically, the Guide lays down the obligations of: a) the agencies, b) the Statistical Heads of the agencies, c) the employees of the agencies involved in the production and dissemination of statistics and d) ELSTAT vis-à-vis the agencies, in the context of compliance with the principles of the CoP. It concerns, in particular, those principles and indicators of the CoP that ELSTAT considers as likely to present challenges in their implementation, as the ELSS agencies have different structures from those of a National Statistical Institute (NSI).

The Guide has 4 Annexes, which include Templates for the Quality Policy, Statistical Confidentiality Policy, Quality Report and Documentation of Statistical Processes, with the aim of assisting the ELSS agencies in implementing the basic steps for the certification of their statistics.

The Guide is a tool for quality assurance at the different stages of the statistical production process by the ELSS agencies, in order to provide users with high quality statistical products and services that meet their needs. The guidelines apply uniformly to all statistics of the ELSS, as, according to

the Greek Statistical Law, the CoP is applied uniformly for all official statistics produced by the ELSS agencies and not only for European statistics.

The implementation of the Guide by the ELSS agencies, as well as the recognition by them of the role of the Statistical Head and the provision of substantial support to his/her work, are crucial factors in improving coordination within and among the ELSS agencies.

In addition, during the period 27 February – 2 March 2018, a training programme on "Quality Management and Quality Reporting" was held at the central premises of ELSTAT with the assistance of 2 experts from the European Statistical System in matters relating to the quality management of statistics. The programme was attended by officials from ELSTAT and the ELSS agencies involved in the production and dissemination of statistics.

With regard to the statistical monitoring of the Sustainable Development Goals (SDGs)⁽¹⁾ of the UN 2030 Agenda on Sustainable Development, the role of ELSTAT, which is responsible for the statistical coordination of the project, was decisive. Following close cooperation with the General Secretariat of the Government, which was the competent body, at national level, for the monitoring and coordination of the work, ELSTAT was actively involved in the drafting of the Voluntary National Review presented at the UN High Level Political Forum on Sustainable Development in New York, in July 2018.

(https://sustainabledevelopment.un.org/content/documents/19378Greece_VNR_Greece_2018_pdf_FINAL_140618.pdf)

Furthermore, cooperation was also established with the above body for the selection of indicators at national level, on the basis of which the progress in the implementation of the National Implementation Plan for the Sustainable Development Goals will be monitored. In the same context, ELSTAT will assess the indicators under the competencies of the ELSS agencies in the process of certification of their statistics, with a view to ensuring their quality, so that they can be used.

4. Certification as "official" of the statistics produced by the ELSS agencies

The certification by ELSTAT of the statistics produced by the other ELSS agencies is an important factor and a tool to improve the quality and reliability of the statistics of the ELSS.

ELSTAT has completed the basic certification stage of the statistics of, almost, all the ELSS agencies. The ELSS agencies, for which the basic certification stage has been completed, have been informed by ELSTAT about the main steps to take, in order to proceed with the certification of their statistics. These steps relate to horizontal actions to be taken by each agency as a whole and, more or less, are common to all agencies. In order to implement the above actions, ELSTAT continued, during 2018, to provide guidance to the agencies. However, despite the significant progress achieved by the end of 2018, none of the agencies completed the basic steps to continue the process of certification of statistics by ELSTAT.

To address the above delays, ELSTAT took the following initiatives in 2018:

- It asked all the ELSS agencies to record, with a detailed timetable, their planned actions within the two-year period 2018 – 2019, to implement the basic steps needed to continue the process of certification of their statistics, and ELSTAT monitors the implementation of the timetable by each agency.
- It compiled the "Guide to the Agencies of the Hellenic Statistical System for the Implementation of the European Statistics Code of Practice" (see previous Section).

It should be noted that, as early as 2017, ELSTAT, in cooperation with the competent ELSS agen-

(1) Adoption of 17 Sustainable Development Goals, broken down into 169 targets and 232 indicators.

cies, as appropriate, compiled the "List of Statistics of ELSS Agencies"⁽²⁾. This list includes the statistics of the ELSS agencies, except ELSTAT, which are candidates for certification and will be updated on an annual basis. The list was first published on the website of ELSTAT in March 2018 and concerns the statistics produced in 2017.

5. Compliance with the requirements of the Union Statistical Legislation

In order to fully comply with European Regulations, ELSTAT undertook, in 2018, the following actions by Regulation:

- *Regulation (EU) 2016/792 on Harmonised Indices of Consumer Prices*

Non-compliance with the Regulation concerns the compilation of the Housing Price Index, for the period 1st quarter of 2008 – 1st quarter of 2018, and of the Owner-occupied Price Index, for the period 1st quarter of 2010 – 1st quarter of 2018.

ELSTAT, in 2018, continued to cooperate with the Ministry of Finance (MoF) to obtain access to its database recording real estate transactions. This database, which was established in March 2017 in the context of Real Estate Values Databank, records data on real estate transactions.

At present, ELSTAT has public access to this database, as it applies to all users. During 2018, it continued its actions to gain full access through the signing of a Memorandum of Cooperation with the MoF.

As the Memorandum of Cooperation was not completed in 2018, ELSTAT started to process the (publicly) available, aggregated data of the database, which had been transmitted by the MoF in December 2018, for transactions made up to November 2018, in order to compile the housing prices indices. As regards the compilation of the time series up to 2008, the real estate price indices compiled by the Bank of Greece are going to be used, together with additional information from the reports and surveys of real estate agencies.

- *Regulation (EC) 1287/2003 on the harmonisation of Gross National Income at market prices*

As regards compliance with Council Regulation (EC) 1287/2003 of 15 July 2003 on the harmonisation of the Gross National Income (GNI) at market prices (GNI Regulation), as of 2012, the GNI reservation number 6 is maintained on the use of the balance of payments for maritime transport and ships in the compilation of National Accounts. In addition, the reservation on the Financial Intermediation Services Indirectly Measured (FISIM) is maintained, which, in 2016, has been converted into a specific reservation, from a transversal reservation initially in 2012, to be monitored in the Gross National Income verification cycle under Regulation (EU) 549/2013. In addition, since 2016, another reservation is maintained, namely the reservation on holding gains/losses, which refers to the exclusion of gains/losses from changes in the value of stocks.

With a view to lifting the above reservations, ELSTAT has transmitted the relevant methodological notes to Eurostat. For all 3 reservations there was a positive feedback from Eurostat on the inclusion of the relevant data in the transmission of tables, in September 2019.

- *Regulation (EU) 549/2013 on the European System of National and Regional Accounts (ESA 2010)*

Compliance concerns the use of specific flags pertaining to the availability or non-availability of data in Tables 6 and 7 of the Transmission Programme for variable F11 "Liabilities". The use of right flags for this variable will apply to the transmission of Tables 6 and 7 by the Bank of Greece, in September 2019.

(2) The "List of Statistics of ELSS Agencies" is available at:<http://www.statistics.gr/el/elss-agencies-list>.

- *Regulation (EU) 691/2011 on the European Economic Accounts for the Environment*
- *Regulation (EC) 2150/2002 on Waste Statistics*

For the above Regulations, statistical results have been compiled and final checks are ongoing.

C. ENHANCED RESPONSIVENESS TO USER NEEDS AND CLOSER COOPERATION WITH PRODUCERS OF STATISTICAL DATA

ELSTAT's main concern is to produce statistics tailored to the needs and requirements of users, at national, European and international level. In this context, ELSTAT collects the feedback and interventions of participants in the Annual User Conferences that it has established. It also takes into account the results of the User Satisfaction Survey, as well as the positions and opinions of the members of the Advisory Committee of the Hellenic Statistical System (SYEPELSS), with the aim of improving its statistical product and services, as well as identifying new needs and requirements for the production of statistics.

- **Advisory Committee of the Hellenic Statistical System**

SYEPELSS convened its meeting on 10 May 2018. During the meeting, the draft Annual Statistical Work Programme of ELSTAT for 2019 was presented to the members and, in line with Article 3(8) of the Law 3832/2010, as in force, the members of the Committee were asked to give their opinion on the above draft, with any comments being sent within a period agreed, so that they could be taken into account for the finalisation of the Programme. Furthermore, in the context of the Committee's previous request to set up a dedicated webpage for SYEPELSS on the website of ELSTAT, by analogy with the webpage of the European Statistical Advisory Committee (ESAC) on the Eurostat web portal, a pilot application was presented and a discussion took place between the members of the Committee, concerning the format and content of the website.

- **Actions taken in 2018, on the basis of the conclusions of the Annual User Conferences held from 2010 to 2017**

On the basis of the comments and suggestions made by the users during the 8 User Conferences held during the period 2010 – 2017, ELSTAT included in its 2018 Annual Work Programme the following:

- Production of seasonally adjusted short-term indices for: a) Industrial Production, b) Turnover in Industry, c) Production in Construction, d) Turnover and Volume in Retail Trade, e) Persons Employed in Retail Trade, f) Hours Worked and Wages in Retail Trade, g) Turnover in Wholesale Trade, h) Turnover in Motor Trade, i) Turnover in the Services Sector, j) Turnover in Accommodation and Food Service Activities, k) Turnover in Transport, l) Turnover in the Information and Communication Sector, m) Turnover in Water Transport. Publication of time series of revised indices, with a new base year 2015 = 100.0, and updating the sample of statistical units and weighting factors and compilation of back time series, in terms of seasonality, using the software JDemetra +, in line with the recommendations of the ESS for the seasonal adjustment of these indices and compilation of retroactive time series (Regulations 1165/98, 1158/2005 and 329/2009).
- Breakdown of the Turnover Index in the Accommodation and Food Services Sector and compilation of separate indices for Division 55 (Accommodation) and Division 56 (Food Services).
- Compilation of the Turnover Index in Wholesale Trade at the three-digit code of economic activity, with back data from 2015.
- Continuation of re-designing the samples of sample surveys conducted on households, so

that they can provide high reliability results, at a more detailed level of administrative division.

- Availability of more up-to-date business statistics.
- Accelerating the procedures for granting access to anonymised micro-data of statistical surveys.
- Development of partnerships, in the context of the design of the next Population – Housing Census.
- Further exploitation of administrative sources data, as well as use of new technologies, in order to improve the quality and reduce the production time of statistical results in different statistical domains, such as business, education and health statistics.
- Addressing the occurrence of discrepancies between statistical results produced by different agencies and refer to the same variable, in the context of the certification by ELSTAT of the statistics of ELSS agencies.
- Providing methodological guidance to the ELSS agencies for compiling, within the remit of their responsibilities, the Sustainable Development Indicators and the inclusion of these indicators in the certification process of the statistical bodies of the ELSS, with a view to ensuring their quality, so that they can be used to evaluate the relevant policies.
- Continuous update of the central list of open data with new ELSTAT statistics.
- Overview of migration statistics, taking into account the latest developments in refugee flows and the granting of asylum.

As regards the above actions, the following progress was made in 2018:

- *Production of seasonally adjusted short-term indices*

The production of seasonally adjusted short-term indices has been completed for: a) Industrial Production, b) Production in Construction, c) Turnover and Volume in Retail Trade, d) Persons Employed in Retail Trade, e) Hours Work and Wages in Retail Trade, f) Turnover in Wholesale Trade and g) Turnover in Motor Trade. The publication of time series of the revised indices, with a new base year 2015 = 100.0, was completed for the following indices: a) Turnover and Volume in Retail Trade, b) Person Employed in Retail Trade, c) Hours Worked and Wages in Retail Trade, d) Turnover in Wholesale Trade, e) Turnover in Motor Trade, f) Turnover in the Services Sector, g) Turnover in Accommodation and Food Service Activities, h) Turnover in the Transport Sector, i) Turnover in Information and Communication Services, j) Turnover in Water Transport.

- *Breakdown of the Turnover Index in the Accommodation and Food Services Sector and compilation of separate indices for Division 55 (Accommodation) and Division 56 (Food Services)*

In December 2018, revised data for the Turnover Index in the Accommodation and Food Services Sector were published, with a new base year 2015=100.0, for the period from 2010 to the 3rd quarter of 2018. This Press Release included, for the first time, Turnover Indices in the sub-sectors of the tourism sector, namely "Provision of Accommodation Services" and "Provision of Food Services".

- *Continuation of re-designing the samples of sample surveys conducted on households, so that they can provide high reliability results at a more detailed level of administrative division*

The increase of the sample of the Survey on Income and Living Conditions of Households (EU-SILC) was completed in 2018, with a view to producing reliable results at the level of the

Region (NUTS 2). In addition, ELSTAT, in the context of a contract agreement with Eurostat, has worked with an expert specialised in the surveys with rotating panels, with a view to improving the current sampling design of the above survey, re-identifying the size of the sample and improving the methods for calculating the weighting factors and estimating the key aggregates and indices of the survey, in order to produce reliable results at the level of the Region (NUTS 2). The methodological changes resulting from this cooperation were implemented in the survey conducted in 2019.

– *Availability of more up-to-date business statistics*

The use, from 2016 onwards, of data of the Independent Authority for Public Revenue (IAPR) for the annual update of the Statistical Business Register and the production of Business Statistics has contributed to a significant reduction in the time taken to complete the above works, thus, leading to the improvement of the timeliness of business statistics. In April 2018, tables of data from the Statistical Business Register for the reference years 2014 and 2015 were published on the website of ELSTAT and corresponding tables were published in December 2018 with data from the Statistical Business Register for the reference year 2016.

– *Accelerating the procedures for granting access to anonymised micro-data of statistical surveys*

In the context of improving users' accessibility to anonymised micro-data of ELSTAT's statistical surveys, a significant part of the preparatory work was completed in 2018, pertaining to the posting on the website of ELSTAT of anonymised micro-data files of 8 statistical surveys, with anonymisation criteria pre-defined by ELSTAT, so as to render impossible direct or indirect identification of the surveyed units (public use files). These are micro-data files of the following surveys: Household Budget Survey, Survey on Income and Living Conditions of Households, Labour Force Survey, Time Use Survey, National Health Interview Survey, Survey on Information and Communication Technologies by Households, Survey on Energy Consumption in Households and Survey on Road Accidents. The posting of the above files on the website will allow users to access them by simply making a registration, without being obliged to submit a request through the relevant e-platform and, therefore, both the time needed for accessing the files and the administrative burden on ELSTAT will be reduced.

At the same time, statistical surveys have been identified for which standardised scientific use files could be produced, i.e., anonymised micro-data files through which indirect identification of the surveyed units could be theoretically possible. The criteria for the anonymisation of these files are published on the website of ELSTAT, so that researchers, if such criteria satisfy their needs, can submit a request for access to the standard files of ELSTAT, accompanied by their research proposal. In this way, researchers will be able to access files more quickly and at no cost, as ELSTAT staff will not be required to work for their production.

– *Development of partnerships, in the context of the design of the next Population – Housing Census*

During the last meeting of SYEPELSS, an information note was circulated to the members, pertaining the forthcoming 2021 General Population Census; this note included the compulsory variables provided for in the European Regulation governing the Census. The members of the Committee were invited to submit proposals for including additional variables in the Census questionnaire, with an appropriate justification.

– *Improving the quality and production of statistical results in a number of statistical domains*

The use of the tax data transmitted to ELSTAT, since May 2016, has helped to improve the quality and significantly reduce the cost and time for the production of the Structural Business Statistics, as well as to alleviate the burden on respondents.

Furthermore, to the above purposes has contributed the transmission to ELSTAT, in December 2018, of a file with aggregated data on real estate transactions, for the period 1 March 2017 – 1 December 2018, from the Register of Immovable Property Transfer Values, in the context of the compilation of the Housing Price Index and the Owner-occupied Price Index (see Chapter B, Section 5).

At the same time, the planned use of administrative data in the education sector under the Memorandum of Cooperation with the Ministry of Education, Research and Religious Affairs, in March 2018, is expected to contribute to the improvement of the quality and completeness of the relevant statistics.

- *Addressing the occurrence of discrepancies between statistical results produced by different agencies and refer to the same variable*

Addressing discrepancies between similar statistical results produced by different bodies is a constant concern of ELSTAT. A significant development in this respect is expected in the context of the certification by ELSTAT of ELSS statistics and the cooperation between ELSTAT and the various producers of statistics, which continued in 2018.

- *Providing methodological guidance to the ELSS agencies for compiling, within the remit of their responsibilities, the Sustainable Development Indicators and the inclusion of those indicators in the certification process of the ELSS agencies (See Chapter B, Section 3)*
- *Continuous update of the central list of open data with new ELSTAT statistics*

During 2018, ELSTAT updated the central list of open data kept by the Ministry of Administrative Reconstruction, with new ELSTAT statistics. The relevant data are available at the following link: <http://www.data.gov.gr/organization/elstat>.

- **Compilation of the 2019 Statistical Work Programme and the 2017 Annual Report of ELSTAT**

In response to its regular obligations under the Greek Statistical Law, ELSTAT compiled its 2019 Statistical Work Programme and the 2017 Annual Report.

- **Digitisation of new settlements for the 2021 Population – Housing Census**

75% of the historical cartographic archive of the census – administrative boundaries of Local Government, of scale 1: 50,000 of the General Population – Housing Census of the years 1961, 1971 and 1981 has been digitised. The checks on the geographical representation of the independent settlements of the Country have been completed, as well as the update of the digital cartographic file of the 200 settlements (out of a total of 1,142) of the 2011 Population – Housing Census, at the level of blocks and road axis. In addition, the enrichment of the above digital cartographic archive with geo-positioning points has also been completed.

- **9th Annual User Conference**

In accordance with its 2018 Annual Statistical Work Programme, ELSTAT convened, on 5 December 2018, the 9th Annual User Conference, on its premises in Piraeus, which was a thematic conference on "2021 Population – Housing Census: Relevance and Challenges".

The topic of the conference was chosen with a view to highlighting the importance of the Population – Housing Census, both for ELSTAT and for the users of statistics.

46 representatives from the public and private sector, as well as educational and research institutions, participated to the conference and the following 4 presentations were made:

1. Brief overview of the conduct of the 2011 Population – Housing Census

2. Censuses beyond 2021
3. Data collected during the Population – Housing Censuses
4. Finding of the 2017 User Satisfaction Survey.

In addition, during the Conference an update was made on the ongoing Graphic Design Competition for the Logo of the 2021 Population – Housing Census. This competition was launched by ELSTAT on 1 October 2018 and was targeted to students of relevant Schools. The objective of this initiative was to inform citizens, in the best possible way, on the Population – Housing Census, so as to ensure maximum participation to it.

Subsequently, users commented on the statistical output and the services provided by ELSTAT in relation to the satisfaction of their needs. The users pointed out, inter alia, the need for:

- i. Ensuring the availability of basic statistical information of the 2021 Population – Housing Census.
- ii. Keeping in the Dwelling – Household Enumeration Form of the Population – Housing Census Questionnaire the questions concerning the type and the amenities of the dwelling and to add a question concerning the floor of the dwelling.
- iii. Making provisions in the 2021 Population – Housing Census for: a) identifying migrants, refugees and migrants of 2nd generation, as well as for locating the dwellings on short-term renting, b) extracting data on the maintenance of the dwellings on short-term renting.
- iv. Enriching the application "Panorama of Census Data for 1991 – 2011" with the data of the 2021 Population – Housing Census.
- v. Adding in the Building Enumeration Form of the Population – Housing Census Questionnaire questions concerning the change of use of the building and the time of the change of use, the total surface of the building, the existence of an elevator and of a top-floor apartment in the building, as well as a question on the floor of the dwelling.
- vi. Producing statistics on natural disasters.
- vii. Collecting, during the 2021 Population – Housing Census, data concerning: a) the personal care of persons with disabilities and the provision of relevant allowances; b) the coordinates of the buildings; c) the public use buildings not belonging to the Greek State; d) the origin of the refugees and adding the variable on the "reasons for relocation" for Greek nationals; and e) specific population groups, such as asylum seekers, spatially and also on the basis of their characteristics, for the migration flows in 2015.
- viii. Compiling, via the Population Censuses, micro-data for the variable of income.
- ix. Developing web-based courses on Statistics, in cooperation with Greek universities.
- x. Creating a Working Group, involving academics, for studying the existing literature on the anonymisation of microdata.
- xi. Providing users with the files in URL format and statistics, based on the SDMX (Structural Data and Metadata eXchange) standard.
- xii. Ensuring availability of data, on a yearly basis, on the ratio of fixed to mobile telephony in households in Greece.
- xiii. Adding in the Person Enumeration Form of the Population – Housing Census Questionnaire questions concerning the place of work of the enumerated person (at LAU 2 level), the working days of the enumerated person with and without remuneration, his/her income from paid

work, from other sources related to employment (unemployment benefits, pensions, etc.) and from sources other than work (rent, interest, etc.).

- xiv. Producing additional statistics on social inequalities better reflecting demographic events.
- xv. Collecting data on the energy footprint of buildings.
- xvi. Developing cooperation between ELSTAT and National Statistical Offices of neighbouring countries, in the context of the availability of data on the place of work of nationals of these countries in Greece and of Greek nationals in the above countries.
- xvii. Implementing the concept of the "representative on behalf of ELSTAT".
- xviii. Presenting the work of ELSTAT at a conference of the Greek Statistical Institute.

The importance of fostering statistical literacy in Greece has also been recognised and the willingness to provide relevant support to ELSTAT.

Material on the 9th User Conference is available on the website of ELSTAT at the following link: <http://www.statistics.gr/el/user-conference-2018>.

ELSTAT has prioritised the aforementioned needs on the basis of their importance to users and their criticality for the statistical product and has begun to explore the possibility of satisfying these needs, taking into account its available resources and its national and international obligations.

- **ELSTAT portal and web presence**

ELSTAT aims at continuously improving the various aspects of the layout and content of its portal and of the other dissemination modes of its statistics, with a view to adapting them to users' needs, both at national and international level.

The main webpage receives a large number of visitors on a daily basis. In 2018, the main webpage of ELSTAT had 616,990 unique users' visits⁽³⁾. In comparison with 2017, the number of unique users' visits recorded an increase of 11.7%. ELSTAT has published 552 tweets on its twitter account (@ StatisticsGR), in 2018, and a total of 3,654 tweets, since its creation in 2010. The number of tweets from other twitter users of ELSTAT amounted to 782,700.

Furthermore, in 2018, ELSTAT's LinkedIn account (<https://www.linkedin.com/company/hellenic-statistical-authority-elstat->) had 171 publications and the number other users' posts amounted to 232,387. Since December 2018, ELSTAT has also made an account on Instagram (@ statistics.gr).

It should be noted that, in 2018, the Statistical Data Dissemination Section, the Library and the Cartographic Works Section of the Division of Statistical Information and Publications received 2,867 users' requests. Furthermore, an additional 540 users were directly addressed to the External Trade Statistics Section for the provision of statistics. Out of the above users' requests:

- 88 Contracts were signed for access to confidential data for research purposes,
- 115 requests were met pertaining to the provision of anonymised data of statistical surveys data.

In the context of the User Satisfaction Survey, conducted by ELSTAT on a continuous basis, in 2018, 266 user satisfaction questionnaires have been completed.

(3) It refers to the number of unique computers that visited the webpage.

On the basis of the survey results, the categories of statistics with the highest demand, in 2018, were Population – Housing Census (15.0 %), Demography (10.9%), Employment – Labour Cost (10.2%) and Agriculture (6.8%). 98.9 % of users' requests were fully satisfied, 0.4 % were partly satisfied, while 0.7 % of the requests were not met. 98.0% of users reported being satisfied or very satisfied in terms of the response time to their request and 96.3 % reported being satisfied or very satisfied in terms of the services provided.

In addition, in January 2018, the new online User Satisfaction Questionnaire (Greek and English) was launched, that had been drafted in 2017, with the aim of collecting more information on user confidence in statistics.

With a view to enriching the website of ELSTAT (both the Greek and English version), in 2018, the following steps were taken:

- Continuing the illustration of selected statistical surveys and production processes by means of infographics. The full collection of infographics produced by ELSTAT is available at the following link: <http://www.statistics.gr/el/elstat-infographics>.
- Continuation of the work to covering the gaps in the time series on the website of ELSTAT, including the enrichment of the website with the metadata and the quality reports of all statistical surveys, in line with the latest version (2.0) of SIMS (Single Integrated Metadata Structure), the most established structure in the ESS.
- Posting of the "Guide to Agencies of the Hellenic Statistical System for the Implementation of the European Statistics Code of Practice", in September 2018 (see Chapter B, Section 2).

• **Fostering Statistical Literacy**

In the context of the programme for Fostering Statistical Literacy in Greece, in 2018, ELSTAT undertook the following actions:

1. Signing of the Memorandum of Cooperation with the Ministry of Education, Research and Religious Affairs.
2. Undertaking of initiatives to encourage postgraduate programmes of Greek universities to be certified by the EMOS (European Master in Official Statistics) label.
3. Building partnerships with academia.
4. Information visits/speeches by the President of ELSTAT on the work of the Authority.
5. Creation of a dedicated webpage for pupils, students and teachers.
6. Organisation of the 2nd Panhellenic Statistics Competition.
7. Organisation of a Graphic Design Competition for the logo of 2021 Population – Housing Census.
8. Participation of ELSTAT in the 83rd Thessaloniki International Fair (TIF).
9. Traineeship Programme for students at the premises of ELSTAT.
10. Participation in the "Summer Vocational Guidance" programme.
11. Organisation of educational visits and presentations for pupils/students.
12. Participation in Eurostat's "Statistics Explained" programme.

More specifically, the above actions pertain to the following:

1. Memorandum of Cooperation between ELSTAT and the Ministry of Education, Research and Religious Affairs

In March 2018, a Memorandum of Cooperation was signed between ELSTAT and the Ministry of Education, Research and Religious Affairs. The Memorandum includes actions for cooperation between the 2 agencies aiming at, inter alia, introducing statistical literacy in education,

namely to familiarise pupils with the basic concepts and usefulness of Statistics, and how statistical data should be read and used. Furthermore, it includes actions to improve the quality of the statistics produced by ELSTAT on school units, pupils/students and teaching staff.

2. Undertaking initiatives to encourage postgraduate programmes of Greek universities to be certified by the EMOS (European Master in Official Statistics) label

Intensive efforts have been made by ELSTAT for the inclusion of postgraduate programmes of Greek universities in the elite team of master programmes, at European level, certified by the prestigious Eurostat EMOS label for the next certification period (2019 – 2023).

3. Building partnerships with academia

ELSTAT worked with the School of Electrical Engineering and Engineers of the Aristotle University of Thessaloniki (AUTH), in 2018, to develop a Memorandum of Cooperation, with the aim of jointly developing sampling methodologies for "smart statistics", using the data generated by sensors and individual smart devices.

4. Information visits/speeches by the President of ELSTAT on the work of the Authority

In the context of promoting and informing on the work of ELSTAT, the President of ELSTAT carried out visits and gave speeches/presentations to schools and universities (in Heraklion and Kalamata) and participated to the event organised by the branch of the Greek Mathematics Society of Crete, in the Chamber of Iraklion.

5. Creation of a dedicated webpage for pupils, students and teachers

A dedicated user-friendly web page was created (<http://www.statistics.gr/el/edu>) for pupils, students and teachers, which contains detailed information on all the actions, the latest developments as regards statistical literacy actions, educational videos and games.

6. Organisation of the 2nd Panhellenic Statistics Competition

During the 2nd semester of 2018, ELSTAT initiated the procedures for the conduct of the 2nd Panhellenic Statistics Competition. The general rules and relevant information material have been updated, actions for the promotion of the Competition have been undertaken and the teams of pupils of secondary education of public and private school units in Greece have made their registration to the Competition.

A total of 356 teams were registered (215 teams of lower secondary school pupils and 141 teams of upper secondary school pupils) from 98 school units from all over Greece. The total number of participants of lower secondary and upper secondary schools amounted to 593 and 370, respectively.

Information concerning the Competition can be found on the website of ELSTAT (<http://www.statistics.gr/el/edu>) and more specifically at : <http://www.statistics.gr/el/edu-statistics-competition>.

In May 2018, the award ceremony of the 1st Panhellenic Statistics Competition was held at ELSTAT premises in Attiki, during which prizes were awarded to the first 5 winning teams of pupils of lower secondary and upper secondary schools, respectively.

7. Organisation of a Graphic Design Competition for the Logo of the 2021 Population – Housing Census

For the first time, ELSTAT launched a call for tenders for the creation of the logo of the 2021 Population – Housing Census, in which students from graphic design or similar schools were

entitled to participate. The rules and conditions for admission were drawn up by ELSTAT. In order to promote the competition, an information letter was sent to the secretariats of graphic design or similar schools, a relevant web page was created, and a Press Release was published. The interested parties were given the opportunity to obtain all relevant documents in electronic form on the website of ELSTAT (<http://www.statistics.gr/el/logo-competition>).

8. Participation of ELSTAT in the 83rd Thessaloniki International Fair

"Fostering Statistical Literacy" in Greece was the main topic of ELSTAT stand in the 83rd TIF in Thessaloniki. In the stand of ELSTAT detailed information has been provided (per educational level) to pupils, students, teachers and parents too, concerning the relevant actions of ELSTAT.

Despite the fact that these events were organised before the official beginning of the school year (2018/2019), hundreds of pupils from schools in the Region of Thessaloniki, as well as students of different specialities, visited the stand of ELSTAT and attended the specially designed presentations on the mission and actions of ELSTAT. The presentations were made by the staff of ELSTAT and referred to its work, as well as to the way in which official statistics are developed, produced and disseminated. This was followed by examples of how selected statistics of wider interest were produced, and subsequently the survey results were presented to participants in an easily understandable manner with the help of infographics.

The visitors of the stand of ELSTAT were given information material, such as the special information publications of ELSTAT, exercise books, programmes and bookmarks with fancy illustrations of the results of ELSTAT's surveys, the statistical workbooks "Numbers and our life", volume I and II. Furthermore, the following material was distributed: a collection with the most important Infographics for 2018, the paper publication "Young people in Greece 2018", which was presented for the first time in the 83rd TIF, as well as a special leaflet entitled "GREECE – USA in figures", which includes statistics outlining the relations between the 2 countries –the United States of America being the honoured country during the 83rd TIF.

The material is available on the website of ELSTAT, at the link:
<http://www.statistics.gr/el/elstat-83-tif>.

9. Traineeships of students at the premises of ELSTAT

ELSTAT, during 2018, gave students the opportunity to have a traineeship at its premises. In this context, 20 students from all over Greece carried out their traineeship relating to the field of their studies.

The students come from the Athens University of Economics and Business, the National Technical University of Athens, the Harokopio University, the Universities of Piraeus and Ioannina and the Vocational Training Institute of Piraeus. It should be noted that the traineeship was carried out at the premises of the Office in Piraeus, Thessaloniki, Ioannina, Arta and Rethymno.

This action aims, inter alia, to promote the work of ELSTAT and the possibility of ELSTAT being a career destination for the trainees.

10. Participation in the "Summer Vocational Guidance" programme

ELSTAT took part, in 2018, for the first time, in the programme of "Summer Vocational Guidance", which concerns pupils of upper secondary schools, with the aim of providing them with a useful experience for their academic and professional careers. Pupils attended, on a daily basis for a whole week, the process of producing statistics and had the opportunity to discuss with ELSTAT officials and to exchange views on their professional career.

11. Organisation of educational visits and presentations for pupils/students

In the framework of the programme "Fostering Statistical Literacy", ELSTAT continued, within the 2018/2019 academic year, to organise educational visits of educational establishments to ELSTAT premises in Attica, which recorded a significant increase compared with the previous academic year. More specifically, 51 visits of educational establishments took place, of which 6 concerned primary education establishments, 39 secondary, 3 post-secondary (Vocational Institutes/Colleges) and 3 tertiary education institutions.

2,833 pupils and students, accompanied by 183 teachers visited the premises and the Library of ELSTAT, they were informed about the work and the mission of ELSTAT, the statistical material they can draw from its website, as well as the services provided to users by the specialised ELSTAT Library (e-Library catalogue, the Digital Library, the Centre for European Statistics Data Support in Greece – ESDS).

The purpose of the visits is to introduce pupils and students in the world of the statistical science and to inform them of the processes for the development, production and dissemination of official statistics, in line with European and international standards. In addition, the important role and usefulness of official statistics in politics, economy and everyday life is highlighted. Furthermore, the participants receive information on how to retrieve the data they are looking for, while enabling them to navigate on the website of ELSTAT and Eurostat.

Due to the increased demand for educational visits from all over Greece, ELSTAT has begun to plan the implementation of the action at the premises of the Regional Statistical Office of Northern Greece, as well.

In addition, printed educational material and infographics are made available by ELSTAT to school libraries both of schools visiting ELSTAT and of schools who request the dispatch of the relevant material, for posting it in the classrooms.

More information on the educational visits can be found at the following link:
<http://www.statistics.gr/el/edu>.

12. Participation in Eurostat's "Statistics Explained" programme

As one of the key priorities of ELSTAT is the transmission of statistical information to Greek society, ELSTAT participates actively in the "Statistics Explained" programme of Eurostat. It is an innovative, rich in information material e-platform (available at http://ec.europa.eu/eurostat/statistics-explained/index.php/Main_Page), which presents all statistical concepts in a user-friendly and understandable way. It is an encyclopaedia of European statistics, a web portal for further information to users (regular and occasional) and a glossary of statistical terms. The material of the platform is enriched progressively and updated with the most recent data and metadata.

In 2017, a specific environment was developed in this platform under the title "**Statistics 4 beginners**", which explains in a simple way a number of statistical indicators and key statistical concepts, so that the world of statistics is easier to understand not only for students, but also for all those interested in statistics.

In 2018, the sections "Population" and "Statistical concepts" of the above platform were translated into Greek. The relevant link is:
https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Beginners: Statistics_4_beginners/el.

- **Digital publication "The European economy from the beginning of the millennium – a statistical portrait"**

In the context of the DIGICOM project, namely sub-project WP 2.3, in which ELSTAT participates, the new Eurostat interactive digital publication "The European economy from the beginning of the millennium – a statistical portrait" was translated into the Greek.
(http://www.statistics.gr/infograph/european_economy/index.html?lang=el)

The purpose of the digital publication is to show how the main features of the economy of the European Union and its Member States have evolved since 2000, through a wide range of statistical data, providing a microeconomic but also macroeconomic insight.

- **Joint organisation with Eurostat of the International Congress "Smart Statistics4SmartCities"**

On 5 and 6 October 2018, the International Conference "SmartStatistics4SmartCities" was held in Kalamata, jointly organised by ELSTAT, Eurostat, the National Documentation Centre (EKT), the Municipality of Kalamata and the 2nd Upper Secondary Education School of Kalamata.

The aim of the conference was to highlight opportunities to improve lives in cities, by making use of the data generated by modern electronic devices (mobile phones, tablets, Internet of Things) and their processing in real time.

During the conference, specific examples of the use of "Smart Statistics" were presented in European cities, including Rome, Helsinki, The Hague, Athens, Heraklion, Kalamata and Trikala. There were also discussions on the applications of the use of such data in the areas of health, tourism, traffic management (urban mobility), maritime transport and sustainable development. The participants highlighted the need for cooperation between National Statistical Authorities, Local Authorities, Academic Institutions, citizens and businesses, in order to maximise the benefits and make decisions based on reliable data.

The conference was opened by the President of the ELSTAT, Mr Athanasios C. Thanopoulos, and the speakers included academics, Eurostat officials, National Statistical Authorities, Local Government, entrepreneurs, etc.

More information and the programme of the Conference can be found at:
<http://www.statistics.gr/event/smart-statistics/index.html>.

- **Study visit of officials from the Statistical Office of Russia to ELSTAT**

During the period 29 October – 2 November 2018, a study visit of officials from the Russian Statistical Service (ROOSTAT) took place at the premises of ELSTAT, with a view to informing them on issues related to the production and dissemination of tourism statistics.

The visit took place in the framework of an agreement enshrined in a Joint Declaration signed by the 2 countries in October 2013 and established the year 2016 as the "Year of Greece in Russia", as well as the "Year of Russia in Greece", respectively. The agreement aimed at the development of mutual benefit partnerships with substantial economic results, the creation of new scientific, academic and business synergies between the 2 countries and the expansion of the markets for Greek products and services, including the tourism market.

In order to commemorate the "Year of Russia in Greece", ELSTAT published an information leaflet concerning the 2 areas in which the 2 countries work very closely together, namely tourism and trade. It is noted that Greece is among the world's top 5 holiday destinations for the Russians. In terms of Greek exports for 2015, Russia ranks 25th in the list of countries to which Greek products are exported, whereas for the same year it was the 3rd main supplier of Greece, mainly due to the imports of fossil fuels, mineral oils and products of their distillation.

D. INTENSIFYING COOPERATION AND UNDERTAKING OF ACTION IN THE EUROPEAN AND INTERNATIONAL STATISTICAL COMMUNITY

ELSTAT, as an active member of the ESS, continued, in 2018, to put special emphasis on the cooperation with Eurostat and the other agencies of the European Commission, as well as with the NSIs of the other EU Member States. In this context, in 2018, the staff of ELSTAT continued to participate in Eurostat Working Groups and in the Council Working Party on Statistics (CWPS). In addition, in the context of pursuing the cooperation of ELSTAT in the international statistical fora, ELSTAT continued to participate in the meetings and workings of international statistical agencies.

ELSTAT participated in the sub-projects: i) WP1: Web scraping job-vacancies and ii) WP4: AIS-data of the ESSnet BIG DATA I project, which was completed in May 2018. The main purpose of the project was to integrate big data into the production of official statistics, through pilot sub-projects that explore selected sources of big and/or administrative data for the development of relevant applications. The results of the work of the project ESSnet BIG DATA are disseminated at the following link:

https://webgate.ec.europa.eu/fpfis/mwikis/essnetbigdata/index.php/ESSnet_Big_Data.

The results of the project were presented at the European Conference on Big Data, which took place on 14 and 15 May 2018 in Sofia, Bulgaria. The presentations are available at the following link: https://webgate.ec.europa.eu/fpfis/mwikis/essnetbigdata/index.php/BDES_2018.

Moreover, ELSTAT participated in the presentation of the results of sub-project WP4 to the European Conference on the Quality of Official Statistics 2018 (Q2018), which took place on 27 – 29 June 2018 in Krakow, Poland. The presentations are available at the following link: <https://www.q2018.pl/papers-presentations/>.

Since November 2018, ELSTAT participates in the 2nd phase of the project ESSnet BIG DATA II, in the following sub-projects:

- *Sub-project E: Ship Tracking Ships' (WPE Tracking Ships)*, which aims to develop a methodological reference framework, as well as procedures and technical specifications for the integration of data collected by the ship's transmission signal through the Automatic Identification System (AIS) in the production of official statistics.
- *Sub-project J: Innovative Tourism Statistics (WPJ Innovative Tourism Statistics)*, which aims to develop a conceptual framework and set up a smart pilot information system to support statistical production in the tourism sector, by integrating big and administrative data and by using innovative methods.

Moreover, ELSTAT participated, in 2018, in the DIGICOM project, which is part of the project portfolio of ESS Vision 2020. This project aims to modernise the communication and dissemination of European statistics, notably by upgrading statistical products and services through continuous and systematic dialogue with users and an analysis of their needs. Specific actions of the project concern:

- categorisation and analysis of user needs, in order to create products and services that meet their specific needs;
- developing communication tools (visualisation, animation, interactive tools and applications), in the context of an upgrade of the dissemination of European statistics, taking advantage of the opportunities provided by the digital transformation and the new data sources;
- further development of the infrastructure for user access to open data and micro-data research data in machine-readable format, as well as the availability of tailor-made data, subject to the safeguarding of the statistical confidentiality of the data;

- creating a strategy for communication and marketing, with the ultimate aim to optimise dissemination and communication to promote the value of national and European statistics;
- development of the statistical culture of citizens through joint actions and products.

The results of the DIGICOM project are made available at the following link:
<http://ec.europa.eu/eurostat/web/ess/digicom>.

E. HUMAN RESOURCES OF ELSTAT

1. ELSTAT personnel

On 31 December 2018, the total number of ELSTAT officials amounted to 719 employees: the permanent staff numbered 678 employees (247 men and 431 women), the staff working under Private Contract of Unlimited Duration numbered 39 employees (12 men and 27 women) and there were 2 employees (1 man and 1 woman) under Private Contract of Limited Duration.

On 31 December 2017, the total number of ELSTAT staff amounted to 729 employees: the permanent staff numbered 688 employees (252 men and 436 women), the staff working under Private Contract of Unlimited Duration numbered 40 employees (13 men and 27 women) and there was 1 employee under a Private Contract of Limited Duration. In 2018, 16 employees left, while 2 new recruitments and 3 secondments from other entities to ELSTAT took place.

Moreover, 1 temporary staff member was appointed to the Independent Office of the President of ELSTAT in the position of Special Adviser, under Private Contract of Limited Duration.

On 31 December 2018, out of the 719 persons employed in ELSTAT, 515 were employed in the Central Office and 204 in the Regional Statistical Offices.

The following table depicts the allocation of ELSTAT staff, by gender and education level, in 2017 and 2018 (31 December):

Table 1. ELSTAT staff, by gender and education level, 2017 and 2018

Education level	Men			Women			Total		
	2017	2018	Change (%)	2017	2018	Change (%)	2017	2018	Change (%)
University	170	167	-1.8	217	213	-1.8	387	380	-1.8
Technical	26	26	0.0	56	56	0.0	82	82	0.0
Secondary	67	63	-6.0	187	186	-0.5	254	249	-2.0
Obligatory	2	4	100.0	4	4	0.0	6	8	33.3
Total	265	260	-1.9	464	459	-1.1	729	719	-1.4

F. ELSTAT BUDGET EXECUTION

ELSTAT's expenses, for 2018, are classified in the following categories:

- a) Labour cost (salaries of ELSTAT staff, including basic salary, allowances (family allowance, position allowance, etc.), social security contributions, overtime pay, etc.).

b) Expenditure related to the staff's travelling within Greece and abroad, i.e., travel, accommodation and subsistence expenses for the employees of ELSTAT travelling:

- in Greece, away of the headquarters or out of the office, for the purpose of conducting statistical surveys in the field,
- abroad, for participating in meetings, seminars, etc. organised by Eurostat or other international organisations.

This category includes also expenses related to the transfer or detachment of ELSTAT employees to other agencies, in Greece or Eurostat.

c) Other operating expenses, including expenses related to ELSTAT's buildings (Central and Regional Offices), such as rents, electricity, communication, water supply, security and building maintenance costs, expenses related to advertising and public relations, subscriptions, expenses for the provision of consumables (paper, stationery, medical and pharmaceutical supplies, materials for the maintenance and repair of premises and equipment), fuel, etc. In the same category are also included expenses for the provision of capital formation (furniture, PCs, printers, photocopiers and other office equipment), as well as the expenses for the remuneration of external survey workers, who are used by ELSTAT for the collection of data of conducted statistical surveys.

d) Expenses for projects financed by Eurostat (for the conduct of surveys, studies and other statistical works).

The following table presents the allocation of ELSTAT's expenditure in 2018, by type of expenditure, as well as the comparison with the corresponding debriefing expenditure in 2017:

Table 2. ELSTAT expenses paid in 2018 in comparison with 2017

Category of expenditure	Amount paid (in euro)	
	2018	2017
Labour cost	21,553,255.31	21,014,307.63
Expenditure related to staff travelling within Greece and abroad	499,572.72	504,945.11
Other operating expenses and cost for capital formation	6,908,033.08	6,789,862.01
Projects financed by Eurostat	348,737.54	1,606,733.04
Investment through the Public Investment Programme	—	—
Total	29,309,598.65	29,915,847.79

The increase observed in the expenses paid in 2018, in comparison with 2017, as regards the item "labour cost", is due to the increase in the employer's social contributions.

As regards expenditure relating to "projects financed by Eurostat", in 2017, ELSTAT completed the procedures for the payment of the external statistical interviewers who had worked for the "Farm Structure Survey of the year 2016". Therefore, in 2018, expenditure in this category relates to the other grant agreements signed with Eurostat.

