

**Republic of Macedonia
State Statistical Office**

ANNUAL REPORT 2016

Skopje, May 2017

Summary

This is the latest Annual Report on the work of the State Statistical Office, which summarises the most significant activities of the Office in 2016.

In 2016, by undertaking activities for improving statistics, the SSO was committed to achieving its strategic goals and accomplishing the objectives and obligations set out in the Work Programme.

Statistical surveys

In 2016, in addition to the regular surveys, the State Statistical Office made progress with the implementation of all postponed surveys from previous years, as well as by conducting new surveys and other statistical activities, such as:

- Census of school premises of primary, lower secondary and upper secondary schools in the Republic of Macedonia
- Census of retail trade capacities
- Census of catering and accommodation capacities
- Farm structure survey
- Survey on foreign visitors at border crossings
- Survey on foreign tourists in accommodation establishments
- Survey on the travels of the domestic population
- Adult education survey
- A particularly important activity was the introduction of keeping records of primary and secondary sampling units in selected statistical districts in order to update the sampling frame for the social statistics surveys.
- In the area of national accounts, activities were undertaken in order to continue the implementation of the ESA 2010 methodology.
- Experimental EDP (excessive deficit procedure) tables were prepared and delivered to Eurostat.
- Several national classification and nomenclatures were adopted.
- The Energy Balances for the period 2005-2014 were revised using the statistical data obtained by the survey on energy consumption in households, 2014.
- A total of 190 quality reports were prepared and published in accordance with the Quality Policy of the SSO.

Meeting user needs

The Office shortened the deadlines for processing and publishing data from several surveys, thus responding to user requests for the provision of timely and relevant statistics.

In order to improve the availability of statistical products, activities began for developing a mobile app - MakStat.

The MakStat database was enriched with new data, which contributed to even greater use of the database as a source of information.

According to the 2016 report of the non-governmental organisation Open Data Watch (ODW), which deals with research and analysis of the relationship between open data and official statistics, the Macedonian statistical system is ranked 30th worldwide (out of 173 countries) and ranked 6th among the countries of Southern Europe. Among the candidate countries and potential candidates for EU membership, the Macedonian statistical system is in the first place.

Reducing respondent burden

The strategic commitment of the SSO for greater use of administrative data for statistical purposes was accomplished through analysis of the available administrative data and undertaking activities for using these data in statistical surveys and discontinuation of the traditional method of data collection with paper forms in certain surveys.

New surveys were included in the electronic data collection system (eStat), bringing the total number to 29 statistical surveys from different areas and with different frequencies.

Cooperation with providers and users of statistical data

The State Statistical Office continued and intensified the activities for extending and deepening the cooperation with the providers and users of statistical data. Memoranda of Cooperation were signed with the Association of the Units of Local Self-Government (ZELS) and the University of Information Science and Technology "St. Paul the Apostle" from Ohrid, and activities were initiated for signing a Memorandum of Cooperation with the Agency for Real Estate Cadastre.

In line with its Communication Strategy, the Office organised a series of lectures at several faculties in the Republic of Macedonia, and hosted a large number of students and professors who were introduced to the statistical activity in the Republic of Macedonia.

In cooperation with the economic chambers, SSO experts gave lectures and presentations to members of the chambers.

On the occasion of Macedonian Statistics Day, 1 June, the Office announced an art contest for students from all primary schools in the Republic of Macedonia on the topic "World in Figures", which attracted great attention. More than 500 drawings were submitted for the contest and displayed at the exhibition organised for this occasion.

The State Statistical Office joined the celebration of European Statistics Day by organising an Educational Caravan and visiting 20 secondary schools over a period of three months, during which lectures were held on the significance of statistics and the benefits of using statistical data.

European integration, international cooperation and projects

The process of European integration of the Republic of Macedonia in the field of statistics was carried out in close cooperation with the Statistical Office of the European Union - Eurostat.

The twinning project "Support to the State Statistical Office for capacity building and improving compliance of statistics with EU standards" was launched in October and will last until 2018. As part of the IPA 2013 Multi-Beneficiary Programme, the SSO started preparing tender documentation for a supply contract for procurement of personal computers, for renewing the computer equipment in 2017.

With the implementation of the IPA 2014 Multi-Beneficiary Programme, the planned results within the pilot projects have been achieved and reports have been submitted to Eurostat.

Preparatory activities for the Peer Review by Eurostat were intensified by adopting over 40 internal acts and reports for alignment with the European Statistics Code of Practice.

Coordination of the national statistical system

As coordinator of the statistical system, the State Statistical Office intensified the cooperation with the authorised bodies. The Office supported the authorised bodies in the national statistical system in the process of their alignment with the European Statistics Code of Practice and the preparations for the Peer Review. The National Bank of the Republic of Macedonia and the Ministry of Finance played a particular role in this process by responding to special questionnaires on their compliance with the Code of Practice, within the national statistical system of the Republic of Macedonia.

Human resources

The Office managed to provide professional training to employees through training events, internships, participation in meetings and conferences organised by Eurostat and other international institutions, and the acquired knowledge was shared with colleagues and translated into daily work.

All of these achievements of the State Statistical Office are the result of the management policies and dedicated work of employees who, despite all the challenges, managed to accomplish their tasks and goals with the utmost professionalism.

CONTENTS

Summary.....	2
Statistical surveys.....	2
Meeting user needs.....	2
Reducing respondent burden	3
Cooperation with providers and users of statistical data.....	3
European integration, international cooperation and projects.....	3
Coordination of the national statistical system.....	4
Human resources	4
INTRODUCTION.....	6
1. STATISTICAL INFRASTRUCTURE.....	7
1.1. Administrative capacities	7
1.2. Support of statistical outputs, technical infrastructure	12
1.3. Dissemination	15
2. STATISTICS BY SECTOR	22
2.1. Social statistics	22
2.2. National accounts.....	25
2.3. Business statistics, agricultural statistics and environmental statistics	27
2.4. Sector for Regional Departments	31
3. CLASSIFICATIONS AND REGISTERS	33
3.1. Classifications	33
3.2. Statistical registers.....	33
4. EUROPEAN INTEGRATION AND INTERNATIONAL ACTIVITY	35
4.1. European integration.....	35
4.2. International projects where the SSO was included.....	36
4.3. Communication and cooperation with other institutions	38
5. CHALLENGES THAT THE SSO WAS FACING.....	39
6. COORDINATION OF THE STATISTICAL SYSTEM AND AUTHORISED BODIES.....	40
6.1. National Bank of the Republic of Macedonia	40
6.2. Ministry of Finance	43
6.3. Pension and Disability Insurance Fund.....	43
6.4. Ministry of Interior	43
6.5. Hydrometeorological Service.....	44
6.6. Institute of Public Health.....	45
6.7. Employment Agency of the Republic of Macedonia.....	45
6.8. Observations of the State Statistical Office.....	45
Abbreviations:.....	47

INTRODUCTION

Pursuant to Article 21, paragraph 1 of the Law on State Statistics (Official Gazette of the Republic of Macedonia No. 54/97, 21/07, 51/11, 104/13,42/14, 192/15 and 27/16), the State Statistical Office (hereinafter: SSO) prepared an Annual Report on the work done and the implementation of the Programme of Statistical Surveys 2013-2017, in terms of the statistical surveys carried out by the Office in 2016, as well as by other institutions that are authorised to conduct statistical surveys under the Programme. The Annual Report is for the most part dedicated to the activities carried out by the SSO in 2016 as the SSO, according to the Law on State Statistics, is coordinator of the statistical system of the Republic of Macedonia, with the highest authority, and in accordance with this role has the greatest responsibility for the effective functioning and quality of the statistical system of the Republic of Macedonia.

The report consists of six sections, five of which are related to the activities of the SSO, and one section covering the activities of the authorised bodies (total 6) in terms of the implementation of the statistical surveys in the Programme for which they are responsible.

The first section of the report covers the statistical infrastructure of the SSO, and it contains information about the human and financial resources, professional development of staff, the institutional environment of the SSO, the support of statistical outputs and information technology. The statistical infrastructure covers the comprehensive and complex activity of data dissemination of the SSO in 2016.

The second section of the report contains information about the activities carried out by the SSO with regard to sector statistics, in the Sector of Business Statistics, the Sector of Social Statistics and the Sector of National Accounts.

The third section provides information about the activities of the SSO with respect to the statistical registers under its jurisdiction and the statistical standards, nomenclatures and classifications adopted by the Government of the Republic of Macedonia in 2016. Of particular importance for the SSO were the observance of European standards and the international activity of the SSO. The international activity of the SSO in 2016 was implemented through direct involvement in the process of European integration of the country, as well as by participation in several international projects as part of the foreign aid that was provided to the SSO. The fourth section of the report describes the international activities carried out in 2016.

The fifth section contains information about the challenges the SSO was faced with in 2016.

The sixth section of the report contains a brief overview of the coordination of the statistical system of the country and the implementation of the Programme of Statistical Surveys by the authorised bodies in the statistical system: National Bank of the Republic of Macedonia, Ministry of Finance, Ministry of Justice, Ministry of Interior, Pension and Disability Insurance Fund, Employment Agency, Hydrometeorological Service and Institute of Public Health.

1. STATISTICAL INFRASTRUCTURE

The statistical infrastructure is an essential precondition for achieving the objectives of official statistics as defined in the Law on State Statistics and other laws, and further operationalised in the Strategic Plan of the SSO and other documents adopted by the SSO.

1.1. Administrative capacities

The Law on State Statistics is a comprehensive law governing the role, position and authority of the State Statistical Office. This Law also regulates the position and powers of the authorised bodies with regard to their statistical activity. The Law was adopted in 1997 (Official Gazette of the Republic of Macedonia No. 54/97). Over the years, the Law was amended six times. In January 2016, as part of the alignment with the new Law on Public Sector Employees, the Assembly of the Republic of Macedonia passed the Law Amending the Law on State Statistics (Official Gazette of the Republic of Macedonia No.27/16).

In addition to the Law on State Statistics, the second most important document adopted by the Government of the Republic of Macedonia on proposal of the SSO is the Programme of Statistical Surveys. The Programme specifies the statistical surveys conducted by the SSO and the authorised bodies during a five-year period. The current Programme of Statistical Surveys covers the period 2013-2017 (Official Gazette of the Republic of Macedonia No. 20/2013, 24/2014, 13/2015 and 7/2016).

In January 2016, the Government of the Republic of Macedonia passed amendments to the Programme of Statistical Surveys 2013-2017 (Official Gazette No. 7/16), which is the third modification of the Programme since 2013.

The adopted amendments made significant changes to the Programme of Statistical Surveys. The SSO introduced two new surveys, changes was made in the content of some statistical surveys, the electronic method of collecting data from reporting units was expanded, and the deadline for publication of some of the data was changed.

Regarding the authorised bodies (National Bank of the Republic of Macedonia), amendments were made to 14 statistical surveys in the names of the surveys, the brief description and the applied international standards, as well as a change in the name and content of one statistical survey of the Ministry of Finance.

In February 2016, pursuant to the legal obligation laid down in the Law on Public Sector Employees and the Law on Administrative Officers, the Director of the SSO, in accordance with the adopted Rulebook on Internal Organisation and the Rulebook on Systematisation of Work Posts in the State Statistical Office, conducted a procedure for SSO staff redeployment.

In 2016, the SSO adopted the Strategic Plan 2017-2019, which defines the values, priorities and the strategic goals of the Office. This is a basic document containing the main activities to be performed in the upcoming period in order to achieve harmonisation of national statistics with EU legislation.

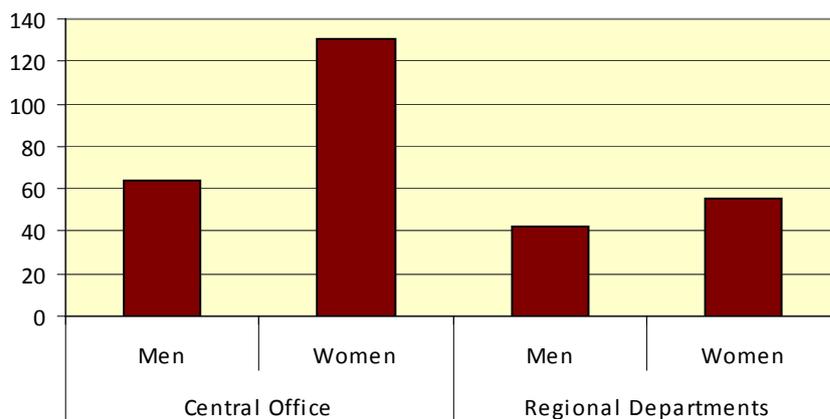
1.1.1. Human resources

The organisational structure and powers of the SSO are laid down in the Rulebook on Internal Organisation of the SSO. According to the Rulebook, adopted by the Director of the State

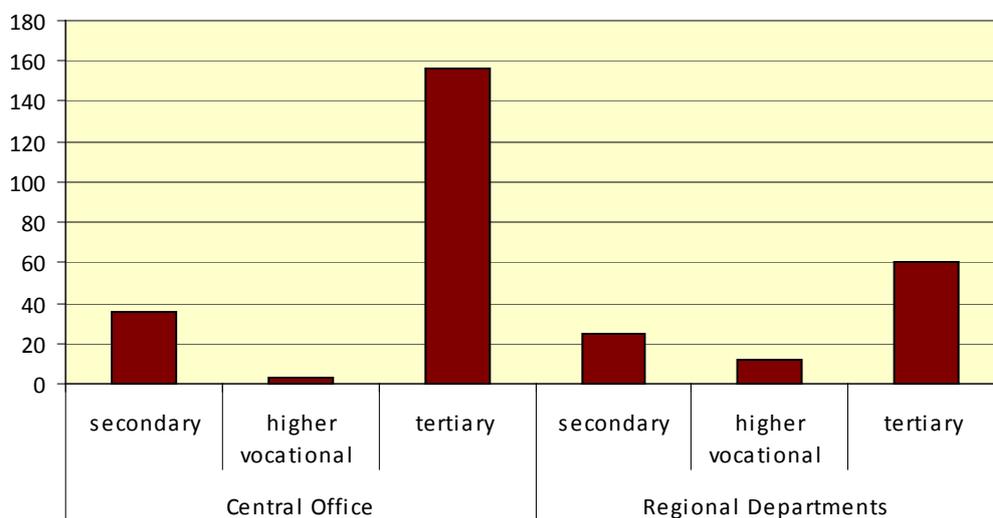
Statistical Office in December 2015, the SSO is organised in seven sectors and 36 departments. Of these departments, three are independent and not part of any sector, while eight are regional statistical departments throughout the Republic of Macedonia (Stip, Veles, Strumica, Kumanovo, Tetovo, Ohrid, Bitola and Skopje).

The number of employees at the State Statistical Office, as at 31 December 2016, was 292 persons. The central Office employs 186 people, while the regional departments (8) have 106 employees.

Graph 1. Number of employees at the SSO, by location and gender



Graph 2. SSO employees, by location and education

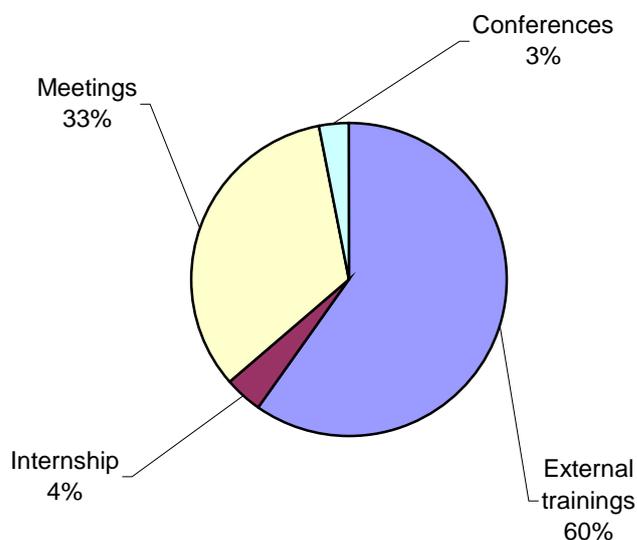


1.1.2. Professional training of employees

The professional development of SSO employees is a precondition for creating professional, competent and highly motivated employees who are ready to meet the needs not only of the SSO in terms of producing high-quality and reliable statistical data, comparable statistics with the developed EU countries, but also the needs of a wider range of users in the country. Professional development and training of SSO staff is a continuous activity to which the senior management of the SSO pays great attention. There are two types of training: generic training, mostly organised by the Administration Agency, and specialised statistical training carried out by foreign experts as part of the numerous projects.

In 2016, 13 persons from the SSO participated in 8 international conferences, and 63 SSO representatives took part in 55 Eurostat meetings. Also, a total of 364 persons from the SSO attended 97 external training events (expert missions, study visits, workshops, seminars, courses, summer schools, etc.) organised by external experts. The SSO also took part in 6 webinars. Furthermore, the State Statistical Office hosted a study visit of representatives from the Statistical Office of the Republic of Serbia. In July 2016, the European Free Trade Association (EFTA), the Statistical Office of the EU – Eurostat and the SSO jointly organised a Workshop on Generic Law on Official Statistics.

Graph 3. SSO staff participation in events, by type of event



In 2016, the SSO had 19 presentations and 2 papers at international events, on invitation from the organisers, where it presented the achievements of the Office in various areas.

In accordance with the training plan, the SSO continued with the practice of organising lectures given by the employees themselves. A total of 19 in-house training courses were held, which were attended by a total of 87 persons. Of these, 17 were generic and 2 were specialised lectures.

- The topics of the lectures were: Peer Review training, preparations for the next cycle of LPR, five lectures from internships in Luxembourg, two lectures from internships in Portugal, lecture from an internship in Slovenia, an eStat workshop, training on preparing news releases and preparing tables in the MakStat database (two training courses).

1.1.3. Budget of the State Statistical Office

The total budget of the SSO in 2016 was 191 018 000 denars, which was reduced by 1 000 000 denars with the budget amendments. The budget of the SSO for performing regular activities in 2016, in comparison with the previous year, was higher by 6.95%.

The largest portion of the budget was allocated to Programme 20 – Statistical Surveys, 95.00%, followed by Census Programme with 2.67%, Programme 10 – Administration with 1.22% and Programme MA – EU Integration with 1.09%.

In the funds approved for Programme 20 – Statistical Surveys, salaries and contributions for SSO employees had the highest share with 70.62%, utility services 8.57%, funds for conducting statistical surveys accounted for 9.27%, while capital expenditures participated with 8.86%. The remainder of funds for this programme (2.66%) was composed of travelling expenses and daily allowances 0.36%, materials and office supplies 0.40%, repairs and maintenance 1.45%, other current expenditures 0.12% and subsidies and transfers 0.31%. The above budget parameters show its unfavourable structure, primarily in terms of the predominance of employee salaries in relation to the funds for implementation of statistical surveys of the Five-Year Programme of Statistical Surveys.

In 2016, budget funds in the amount of 5 088 000 denars were approved for conducting the Census of Retail Trade Capacities, which was postponed several times due to unapproved budget for its implementation.

1.1.4. Internal audit

In the SSO, internal audit is conducted as an independent activity of objective assurance and consulting in order to determine whether adequate policies and procedures are applied, whether the regulations and the established standards are implemented, whether the resources are used in an efficient and economic manner, and whether the planned objectives are achieved effectively.

The internal audit provides the Director with additional assurance that the implementation of the management and control instruments is adequate, economical and consistent with the generally accepted standards and the national legislation. It also provides the Director with analyses, recommendations, advice and information concerning the reviewed activities, in order to contribute to the improvement of SSO's work.

Internal audit at the State Statistical Office is carried out in accordance with the principles of legality, independence, objectivity, competency, professionalism, integrity and confidentiality.

During 2016, the SSO started the process of establishment of the Financial Management and Control (FMC) system. The task of internal audit is to give recommendations to strengthen the FMC for transparent, regular, economical, efficient and effective use of available funds.

In the course of 2016, internal auditors performed 5 audits and one follow-up audit, for which they prepared auditor's reports, based on the strategic plan, the internal audit annual plan and the plans for individual audits, in accordance with the International Standards for the Professional Practice of Internal Auditing. A total of 21 recommendations were given for the specified period.

In 2016, an Annual Report was prepared about the performed audits and activities of the internal audit for 2015.

1.1.5. Statistical Council of the Republic of Macedonia

The Statistical Council of the Republic of Macedonia is an expert advisory body for state statistics, whose position and responsibilities are defined in Articles 10, 11 and 11 of the Law on State Statistics.

The current Statistical Council was established by Decision No. 07-2155/1 of the Assembly of the Republic of Macedonia of 30 April 2012 (fourth Council). During 2016, the Council held 10 sessions in total. In accordance with its responsibilities defined in the Law on State Statistics, the Council reviewed several materials in the field of state statistics, as follows:

- ◆ Report on the work of the Statistical Council for the period January-December 2015;
- ◆ Status of implementation of ESA 2010,
- ◆ Information about the course of preparations for the Peer Review (PR),
- ◆ Information about the preparations for conducting the Farm Structure Survey,
- ◆ Information about the holders of administrative data sets necessary for defining the method of conducting the Census of Population, Households and Dwellings in the Republic of Macedonia,
- ◆ Annual report on the work of the State Statistical Office for 2015,
- ◆ Information about the implementation of IPA projects in the State Statistical Office,
- ◆ Information about the preparations for conducting the Census of Retail Trade Capacities and Census of Catering Capacities in the Republic of Macedonia,
- ◆ Information about the introduction of electronic data collection, in accordance with the Work Programme of the SSO for 2016,
- ◆ Consideration of the draft strategic plan of the SSO for the period 2017-2019,
- ◆ Information about the update of ISCED 2011 with new fields of education and training ISCED-F 2013,
- ◆ Consideration of the Report of the European Commission on the progress of the Republic of Macedonia – Chapter 18 Statistics,
- ◆ Information about the revision of national accounts data, in accordance with the Action Plan for Implementation of ESA 2010,
- ◆ Work Programme of the State Statistical Office for 2017 – brief overview,

- ◆ Draft Work Programme of the Statistical Council of the Republic of Macedonia for 2017, with draft budget.

1.2. Support of statistical outputs, technical infrastructure

1.2.1. Quality management

The quality management framework in the SSO is based on the quality standards established in the European Statistical System (ESS) and expressed in the Quality Declaration of the ESS and the European Statistics Code of Practice (hereinafter: the Code). The Office continuously works on implementation of the principles of the Code, while periodically checking the level of compliance via a self-assessment process.

In order to achieve high-quality production of statistical data, improve statistical processes and analyse methodological issues, in 2016, the Director of the SSO established the Expert Methodological Council. The Expert Methodological Council reviewed and gave a positive opinion to the Management Board on several guidelines, manuals, policies, and initiatives for introducing new statistical products, complementing the existing ones, using administrative resources for reducing the burden on reporting units, etc.

In 2016, the Working Group (WG), established in 2015 by the Director of the SSO, worked very intensively on the preparations for the Peer Review of the implementation of the European Statistics Code of Practice that was carried out in February 2017. Several relevant documents were prepared for alignment with the Code of Practice. Among other activities, this WG also provided support to the other authorised bodies in the national statistical system (the National Bank of the Republic of Macedonia and the Ministry of Finance) in the process of completing the questionnaire on the implementation of the Code of Practice.

With the adoption of the new internal organisation and systematisation of the SSO, a new Department for Methodologies, Quality of Statistical Surveys and Statistical Classifications was established at the beginning of 2016. One of the tasks of the department is to work on activities related to quality management.

In 2016, a total of 190 quality reports were created or updated, using the standard metadata structure (ESMS). The quality reports were prepared in Macedonian and English language and published on the SSO website at the beginning of 2017. These quality reports are for the reference year 2015, and will be continuously prepared in order to further inform users about the surveys carried out by the SSO.

1.2.2. Use of administrative data sources

By decision of the Director of the SSO, an Intersectoral Working Group was established in December 2015 and an action plan was made to explore the possibilities of using administrative data sets for statistical purposes. In accordance with the action plan, in the first half of 2016, a number of meetings and discussions were held with several ministries and institutions, as well as with the Association of the Units of Local Self-Government (ZELS), about the content, form and method of updating the data sets. The activities were concluded in May 2016 with the preparation of a report on the findings, which was reviewed by the Expert Methodological

Council of the SSO. Also, there have been other analyses regarding the content, quality, comprehensiveness, comparability and other characteristics of data from various administrative data sets, and comparison of the definitions and standards applied in these data sets with those of the statistical surveys. This is a continuous activity carried out in the SSO aiming at greater use of data from administrative sources for statistical purposes, partial or total replacement of data collection in the field, and quality control of the collected data.

As a result of the strategic determination of the SSO for greater use of administrative data for statistical purposes, the activities for publishing statistical data directly from administrative sources (the database of the Public Revenue Office) are in the final phase.

1.2.3. New methods and tools for data processing:

The SSO applies the data processing tools developed by Eurostat:

- Data from the Job Vacancy Survey were transmitted in SDMX format using the Eurostat SDMX converter;
- EDIT data validation tool was used for processing data from the Continuing Vocational Training Survey;
- The Macedonian calendar of working days for 2017 was added to JDemetra+ for seasonal adjustment of short-term business statistics (Industry and Construction).

New methods applied for the first time:

- Sample selection for the Labour Cost Survey from a newly defined sampling frame using administrative data from the Public Revenue Office.
- Sample selection for a Fruit Pilot Survey by defining a sampling frame from three sources (Census of Agriculture, Farm Structure Survey 2013 and Farm Structure Survey 2016).
- LFS weights have been calibrated to ensure coherence between quarterly and monthly data.
- Transcoding and editing data from the Adult Education Survey.

1.2.4. Metainformation system and electronic data collection

The State Statistical Office is always committed to modernisation of its work methods that lead to reduction of respondent burden and operating costs and simple access to statistics, allowing for proper interpretation of data by users.

In accordance with its obligations, the SSO applies the recommendations of Eurostat for the production and publication of reference metadata on its website, applying the established ESMS structure, oriented to external users.

Standardisation and harmonisation of statistical variables and code lists are carried out in order to increase the quality of statistical data and the efficiency of the production process.

The eStat system incorporates an infrastructure for automatic metadata-based creation of questionnaires and, at the same time, it represents a centralised repository of structural metadata. The system is used for management of metadata and statistical microdata, and it

also serves as a framework for organising and coordinating the communication with reporting units and for mass mailing of electronic notifications.

In 2016, new functionalities and improvements were introduced to the eStat system in order to simplify the creation of e-questionnaires and improve the efficiency of data delivery by reporting units.

The system is actively functioning and, as at the end of 2016, it included 29 statistical surveys from different areas and with different frequency. Its application abides by the criteria and principles of the Quality Policy:

- Improving timeliness
- Improving data accuracy
- Rational use of available resources

1.2.5. Reducing the burden on reporting units

Reducing respondent burden is a very important activity of the SSO, and as such it has been identified as a major objective in the priority "Strengthening the cooperation with providers of data and holders of data sets" in the Strategic Plan of the SSO.

In 2016, a Memorandum of Cooperation was signed with the Association of the Units of Local Self-Government (ZELS).

This activity has continued for several years, with special emphasis in 2016 on meeting the obligations set out in the memoranda and annexes signed in 2015 with:

- Civil Registry Office
- Ministry of Agriculture, Forestry and Water Economy
- Central Register of the Republic of Macedonia
- Annex to the Agreement with the National Bank of the Republic of Macedonia (NBRM)
- Annex to the Agreement with the Public Revenue Office (PRO)

Significant reduction of the burden on respondents-business entities in 2016 was achieved with the use of the electronic data collection system - eStat, where reporting units can submit data via web questionnaires. In addition to moderate burden, eStat significantly decreases questionnaire printing and mailing costs, both for the SSO and for data providers.

1.2.6. Data security and statistical confidentiality

During 2016, the SSO continued the implementation of statistical disclosure protection methods by developing custom software applications; there has also been an increase in the range of users from the scientific research community interested in using individual data available at the SSO for scientific research purposes.

Concerning external trade data, tabular data protection was implemented for all years back to 2012, using the following methods: p-percent rule and threshold rule or minimum frequency of 3. Protection is done with the Tau-Argus software, and secondary protection is done using the HyperCube method.

For structural business statistics sent to Eurostat, 10 secured files are prepared. They have a different structure, and the following protection methods are applied: dominance rule (1.75) and (2.75) and minimum frequency of 4. Secondary protection is done using the HyperCube method, implemented in Tau-Argus.

For research purposes, special protection is implemented for survey data, such as protection of data from the Survey on Innovation Activities. Various analyses were first made to select the most appropriate data protection methods in order to obtain a file with minimum loss of information.

1.2.7. Use of the collaborative infrastructure of Eurostat – data transmission through the “Single Entry Point”

Data transmission to Eurostat by using eDamis tools through the Single Entry Point was carried out regularly as part of the established practice and within the deadlines set by Eurostat, and the number of transmitted data sets is growing every year.

In 2016, there were a total of 1119 data transmissions with 724 data sets transmitted.

Data sets are delivered along with reference metadata using the National Reference Metadata Editor, as a tool for their transmission.

1.3. Dissemination

1.3.1. Data dissemination

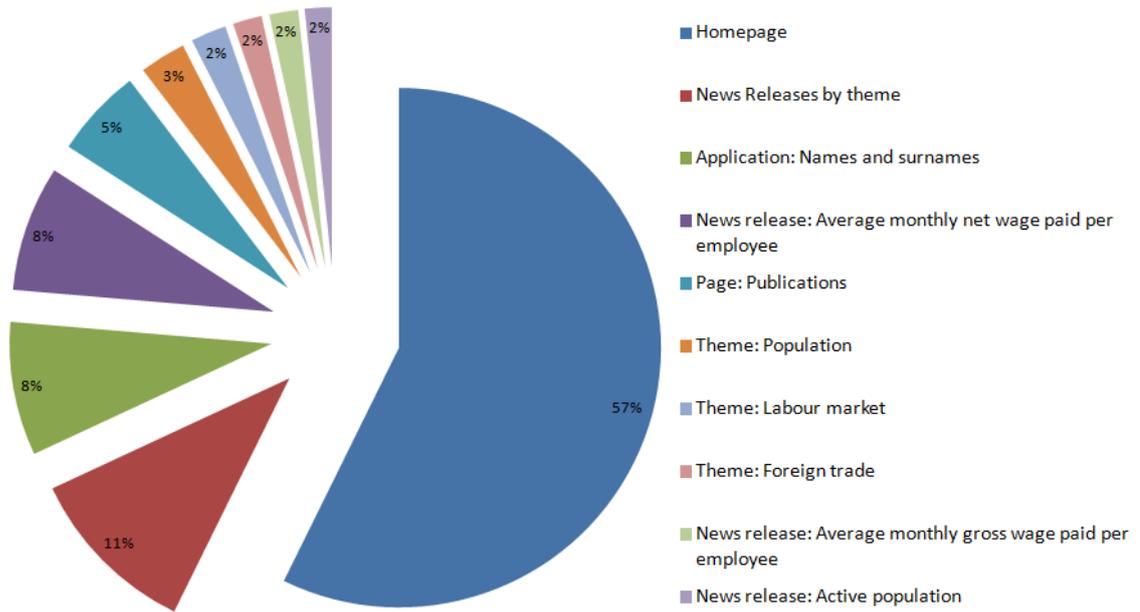
The main goal of dissemination is to provide SSO products and services that meet the modern needs of users of official statistics.

The website is the main channel for dissemination of statistical data and information. In 2016, the SSO started developing the MakStat application for mobile devices, which presents published news releases, publications and indicators, along with graphic display and time series. Furthermore, great efforts were made by SSO employees for preparing new data tables and for updating the existing data tables with longer time series in the MakStat database.

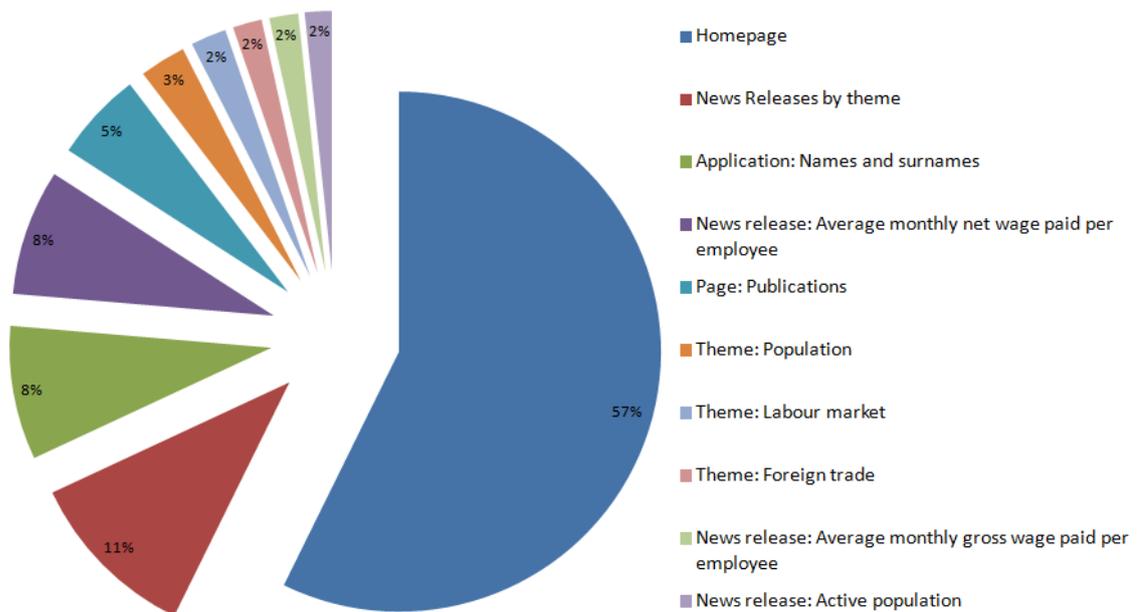
1.3.2. Statistical data available online – more data and more users

The website of the State Statistical Office is the primary source of official statistics. Through the website, users have access to the publications issued by the institution, as well as to the MakStat database, which contains data from several thematic areas and data by regions and municipalities. In 2016, the website of the SSO was visited 1 104 170 times.

Structure of visits, by pages



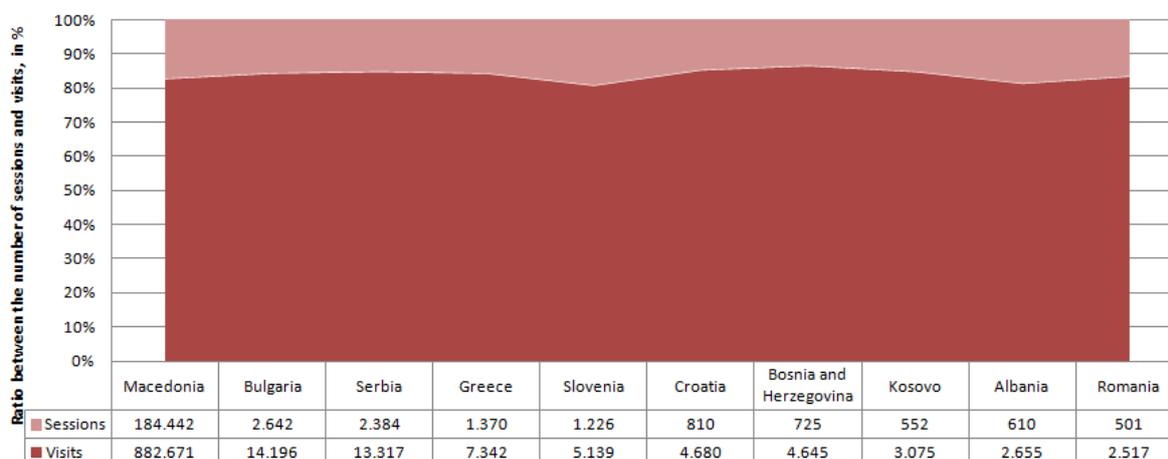
Structure of visits, by pages



The website of the State Statistical Office has been designed according to user needs and in line with European standards. The MakStat database is becoming the main channel for data dissemination and, to that end, the SSO tested a new version of the PX-Web software that provides better accessibility, possibility for selection and outputs in different formats, as well as possibility of automated access to data in the MakStat database. The new version based on .NET technology was posted on the website at the beginning of 2016, and therefore visit statistics are not comparable to previous years. From January to December 2016, the tables in the database were visited 52 667 times in total.

New data tables and time series are constantly added to the MakStat database. The amount of data organised in Excel spreadsheets is steadily growing, and data users can access tables of the statistical reviews and the Statistical Yearbook in Excel format. Information about the statistical products and activities of the SSO is regularly published on Twitter.

Graph 6. Visits and sessions by countries of the region



Statistics on visits by countries of the region show that the website is mostly visited by domestic users, while the ratio of visits to sessions is similar across all countries, indicating a similar number of pages viewed per session for all users of the website.

1.3.3. Publication activity of the institution

The results from the statistical surveys are available to both domestic and international users in the form of statistical publications.

Dissemination statistics show that the following results were achieved in 2016:

- 310 issues were published in the “News Releases” edition
- 37 issues were published in the “Statistical Reviews” edition
- 6 multi-domain publications were issued
- 12 issues of the Monthly Statistical Bulletin were published, separately in Macedonian and English language
- the MakStat database was improved with new data

The following were published by the SSO in 2016: "Statistical Yearbook of the Republic of Macedonia" – a publication containing statistical data on the demographic, social and economic situation in the Republic of Macedonia, as well as data for a longer period of time. A separate chapter contains data comparable with other countries in Europe and the world.

"Macedonia in Figures" – a small statistical yearbook, containing tables and charts with data about the Republic of Macedonia from all the areas covered by the surveys conducted by the State Statistical Office. The concept of presenting comparative data about the Republic of Macedonia and the EU member states and candidate countries has been retained in this edition as well.

"Sustainable Development" – publication by which the SSO succeeded in the efforts to calculate and unite in one place the available indicators of sustainable development in the Republic of Macedonia. The indicators have a multi-domain character and reflect the economic, social, environmental and the institutional dimension of sustainable development.

"Regions of the Republic of Macedonia" – seventh edition (2016) of the State Statistical Office, which contains the latest economic and socio-demographic data about the regions in the country. Statistical data about the regions contribute to the fulfilment of the obligations of the Republic of Macedonia in the context of the regional policy of the European Union. Through clear and simple tables, maps and charts, this publication presents the statistical regions in several statistical areas, while the short comments allow for easy identification of the characteristics, differences and similarities between the regions.

"Women and men in the Republic of Macedonia" – ninth edition (2016) of the publication, containing gender indicators that are used for monitoring the process of providing equal opportunities and equal treatment of women and men in various areas of life: education, employment, judiciary, culture, social protection, etc.

"Environmental Statistics" – fifth edition of the State Statistical Office; it is published every two years. This publication covers a particular set of indicators that show a comprehensive picture of the state of the environment. It is prepared in cooperation with the Ministry of Environment and Physical Planning.

"MakStat Selection" – issued for the first time in 2016. It presents in a different way some of the data available at the Office that should be interesting for data users. The publication is divided into 20 areas with tables, graphs, infographics and short comments that show the trends in some of the phenomena observed by statistics. The pages of this publication are filled with visual data describing the socio-economic developments in the Republic of Macedonia and presenting a snapshot of what the country is today.

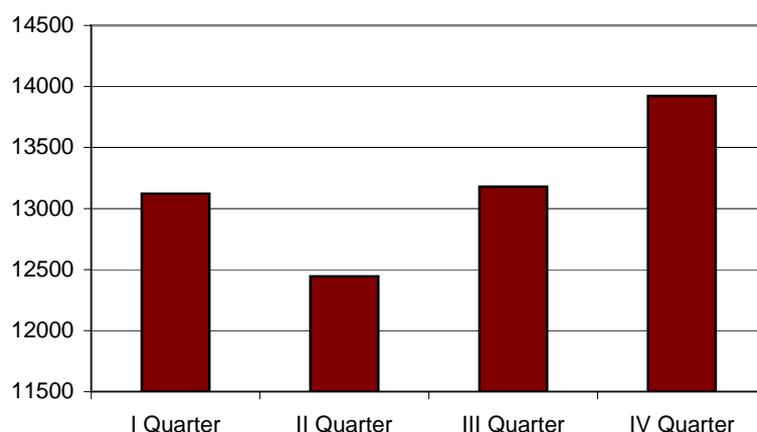
As part of the celebration of the 25th anniversary of independent Republic of Macedonia, the State Statistical Office issued two special publications:

- "25 Years of Independent Macedonia" – a special edition that shows in figures the period of independence of the Republic of Macedonia in all spheres of the socio-political and economic life of the country.

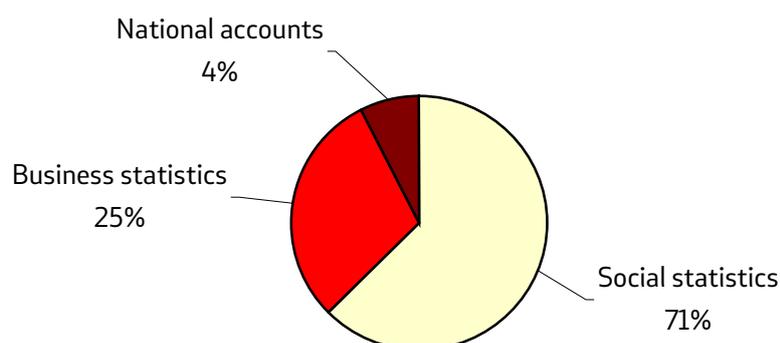
- "Statistical Album", which presents through tables, graphs and infographics the development and achievements of the Republic of Macedonia over the last 25 years.

The State Statistical Office is constantly making efforts to develop and improve its dissemination products in order to reach a larger number of users and raise awareness of the significance of statistical data and their use.

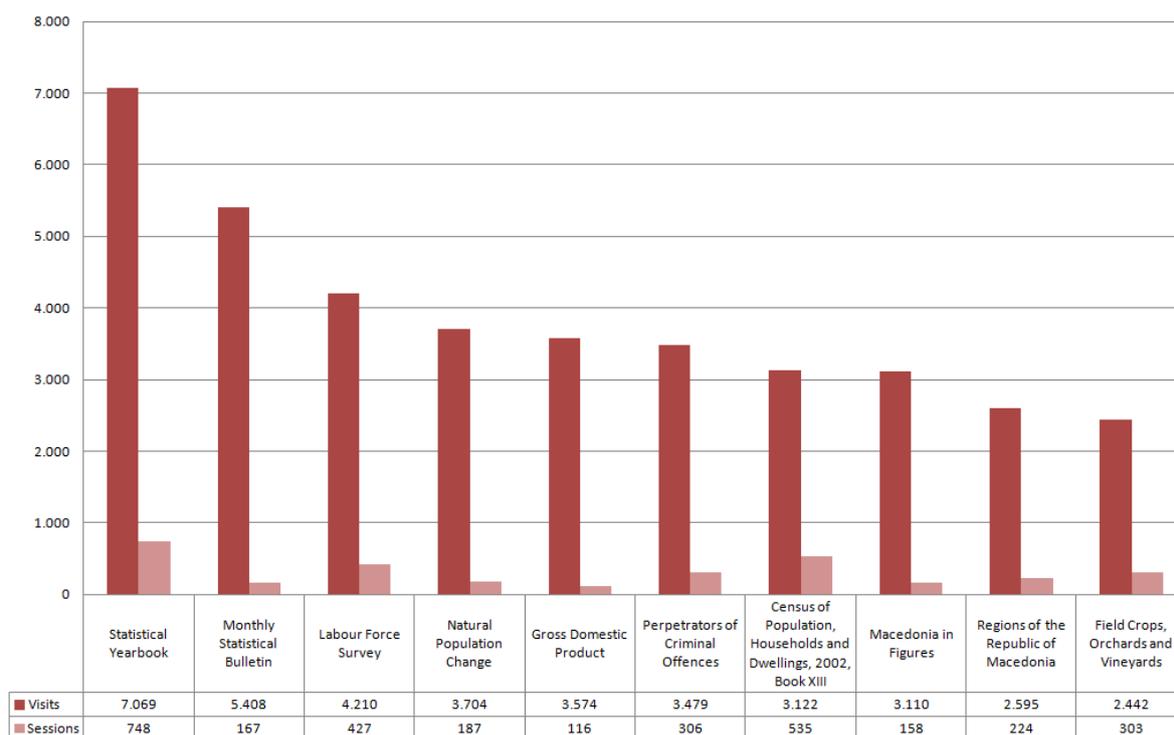
Graph 7. Visits to the MakStat database on the website of the SSO, 2016



Graph 8. Issued publications in 2016

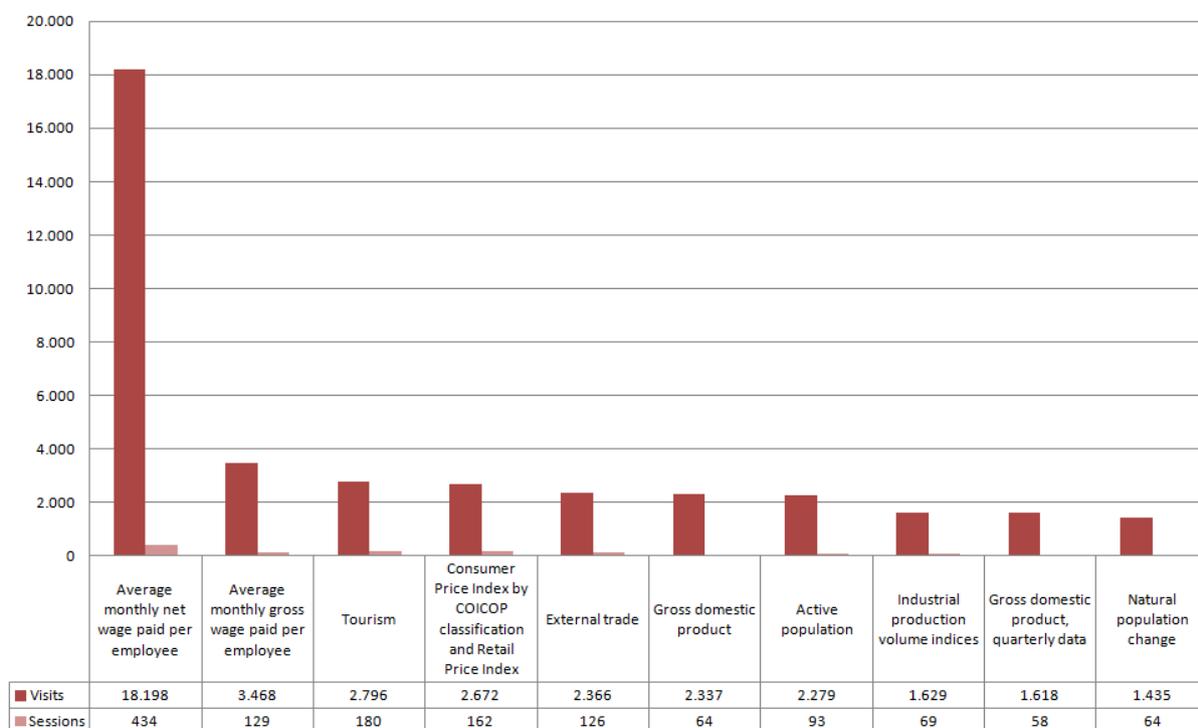


All publications are available on the website of the State Statistical Office:
<http://www.stat.gov.mk/>



Graph 9. Number of visits and sessions, by publications

Of the issued publications, according to website visitor statistics, the Statistical Yearbook was the most visited publication in 2016.



Graph 10. Number of visits and sessions, by news releases

In 2016, the most visited news release was "Average monthly net wage paid per employee", which stands out from other news releases with 18 198 visits. The news releases "Average monthly gross wage paid per employee", "Tourism", "Consumer Price Index by COICOP classification and Retail Price Index" and "External trade" make up the remainder of the list of 5 most visited news releases in 2016.

1.3.4. Simple delivery of data to users

In addition to the data and information available on the website, users may also submit requests for data and information or visit the library of the Office. In 2016, the SSO responded to 912 requests for statistical data, most of which via e-mail, and to around 620 data queries via telephone.

The library of the Office was visited by 30 users, who used SSO's publications and other library materials. Processing of library material continued in 2016, when 49 titles were processed in the COBISS tool.

In order to meet the modern needs of users of official statistical data and to improve the availability of statistical products, the State Statistical Office started working on the development of a mobile app – MakStat.

1.3.5. Greater representation of statistical data in the media

Media constitute a very important segment of users of official statistics, because through the media statistical data are available to the general public. The "News Releases" edition is the most often used medium by the journalists. The State Statistical Office keeps track of its coverage in print media and web portals, and according to the available data, 756 articles were published in print media in 2016, most of which referring to the interpretation of statistical data in the area of industry, population, incomes, expenditures and prices.

Cooperation with the media - one of the main channels for dissemination of statistical data - was carried out through communication of the responsible persons with all the media, which significantly increased the interest in the statistical products.

2. STATISTICS BY SECTOR

2.1. Social statistics

In the Sector of Social Statistics, progress was made in the following areas:

In the field of education and science, the Census of School Premises of Primary, Lower Secondary and Upper Secondary Schools in the Republic of Macedonia (schools and school buildings) was conducted electronically, via eStat. Preliminary results of this Census were published in a news release in December 2016;

The SSO continued the activities, at the quarterly level, for registration and checking of primary and secondary sampling units in selected enumeration areas for the surveys in the field of social statistics. The resulting data are incorporated in the sample design for the surveys;

- For the first time, three sub-indices of the Consumer Price Index were computed and published in the MakStat database:

Overall index excluding energy, liquid fuels and lubricants and food,

Overall index excluding energy, liquid fuels and lubricants and unprocessed food,

Overall index excluding energy, liquid fuels and lubricants, unprocessed food, tobacco and alcoholic beverages.

Survey instruments were prepared for conducting the adult education survey. The instruments for collecting data on persons aged 25 to 64 were tested, and then the main survey was conducted in the field;

In order to further improve the labour market surveys, activities were launched to determine the possibility of using administrative sources that will help in the revision of the instruments for collecting data from business entities;

The Public Revenue Office (PRO) started with daily transmission of data by employees and business entities. A detailed analysis of the PRO database was made for the variables needed for calculation of the average monthly gross and net wages, and a set of data was defined on the basis of which preliminary calculations were made of the average gross and net wages by month for the whole of 2016. The goal is to change the method of data collection in the monthly survey on gross and net wages by using data from the Public Revenue Office as a single and complete administrative source, which will reduce the burden on reporting units (business entities), decrease financial costs of printing forms and making telephone calls, reduce the number of staff engaged to collect data in the field, and at the same time improve the quality of the data;

The Gender Pay Gap and the number of employees from the Structure of Earnings Survey were calculated for the first time in October, and in the same month the data were sent to Eurostat;

With the publication of the final version (2016) of the UN/Eurostat Recommendations for the 2020 Censuses of Population and Housing, a working group was established to study the possibilities for using the recommended core and non-core topics and to select an appropriate methodological approach for conducting the next Census of Population, Households and Dwellings;

In the area of vital statistics, from January, in accordance with EU Regulation No. 1260/2013, the SSO started collecting data by country of birth of parents of newborns, of deceased persons, of mothers of deceased infants, and of spouses;

In the area of social protection, the survey on homes for pupils and students studying outside the place of residence of the parent/guardian began to be implemented electronically via the eStat system;

In the field of child protection, changes were made to the questionnaires for institutions for child care and education - kindergartens/centres for early childhood development, in accordance with the Ministry of Labour and Social Policy;

In addition, the surveys on radio, television, museums and museum collections were also carried out electronically via eStat;

The publications "Publishing Activity" and "Culture and Public Information" were discontinued in print form and, starting from 2016, they are available in the MakStat database;

In the sphere of judicial statistics, activities have started for improving the communication with public prosecutor's offices and courts of first instance for exchanging the necessary information, which will require a revision of the instruments for collecting data in the field of the judiciary;

In order to obtain data on the acquisition of new knowledge and/or development of existing knowledge and skills of employees in enterprises, a Continuing Vocational Training Survey was conducted among business entities. This survey was also carried out via eStat;

In the field of science, three separate questionnaires for each sector (business entities, higher education, government and non-profit sector) were prepared for the Survey on Research and Development Activity, in accordance with the Frascati manual;

As part of the Labour Force Survey, households in 66 enumeration areas were resurveyed. Household members that had already been interviewed once were interviewed again. The purpose of this activity was to check the quality of received materials, as well as to check the work of the interviewers;

In addition to data in the regular news releases and publications concerning the labour market, new data by region were published for the first time in the MakStat database. The data are from the Labour Force Survey and refer to the economically active and inactive population;

There were also 3 training events for interviewers in order to improve the quality of the survey materials from the surveys conducted in the Social Statistics Sector;

Laeken indicators of poverty for 2015 were published in a news release. Revised data for the cross-sectional and longitudinal databases for SILC 2015 were delivered to Eurostat. Publications on income and living conditions for 2014 and 2015 were also published in this area. The 2016 Survey on Income and Living Conditions (SILC) included the compulsory variables from the recommended modules;

The SSO continued with the calculations of experimental Harmonised Index of Consumer Prices (HICP) and Harmonised Index of Consumer Prices at constant tax rates (HICP-CT), which were submitted to Eurostat on a monthly basis, as well as experimental lists of administered prices (HICP-AP);

Microdata databases from the Household Budget Survey (HBS) 2015 were submitted to Eurostat.

Methodological improvements in statistical surveys

For the purpose of systematic development of science surveys and compliance with the OECD methodology - the Frascati Manual 2002, as well as for the provision of data with greater international comparability, changes were made in 2016 in the Research and Development questionnaires. As a result of the changes, new indicators were calculated and the set of data that was submitted to Eurostat and OECD was complemented with data on expenditures.

Within the IPA projects, recommendations were given for methodological improvements in the surveys covered by the projects.

Planned and conducted statistical surveys:

1. Sector of Social Statistics

Periodicity - area	Number of surveys in 2016	Number of surveys in 2015
Department of Living Standard		
monthly	1	1
annual	2	2
analytical	1	1
five-yearly	-	-
Total	4	4
Department of Social Protection, Judicial and Public statistics		
annual	27	27
biennial		1
three-yearly	1	1
five-yearly		
Total	28	29
Department of Education and Science		
annual	20	20
biennial	-	-
three-yearly	-	-
five-yearly	1	-
ten-yearly	1	-
Total	22	20
Department of Population Statistics		
annual	7	7
Total	7	7
Department of Labour Market		
monthly	1	1

annual	1	1
quarterly	2	2
four-yearly	-	1
five-yearly	1	-
Total	5	5
Total Sector of Social Statistics	66	64

2.2. National accounts

In the area of national accounts, appropriate activities were undertaken in 2016 in order to continue the implementation of the ESA 2010 methodology.

Data on gross domestic product are published regularly, on a quarterly and annual basis at national and regional level, as well as supply and use tables, and submitted in accordance with the ESA 2010 Transmission Programme.

Also, national accounts data are regularly sent to other international institutions. Activities are underway for preparing final data on sector accounts for 2015, as well as for harmonisation of data according to ESA 2010 for the period 2008-2011 and improvement of calculations for the period 2012-2014. Work continued on the preparation of non-financial sector accounts. All planned activities for 2016 related to the Purchasing Power Parity were performed as scheduled.

In accordance with the established plan and schedule, activities took place regarding the sectorisation of units in institutional sectors, within the Working Group created by the SSO for sectorisation of institutional units. Last year, this Working Group expanded and regularly works on sectorisation of borderline cases;

Cooperation continued with the Ministry of Finance and the National Bank of the Republic of Macedonia for providing data for preparation of excessive deficit tables.

In 2016, EDP notification tables (Tables 1 and 2) for 2012 and 2013 were prepared and sent to Eurostat, in accordance with the Excessive Deficit Procedure, using Eurostat's deficit and debt methodology. The tables were sent in two reporting periods, in April 2016, in accordance with ESA 95, and in October 2016, in accordance with ESA 2010.

Annex 4 to the Memorandum of Cooperation between the SSO, the National Bank of the Republic of Macedonia and the Ministry of Finance was prepared and signed;

A working group was established by the Director of the SSO for EDP tables, for their preparation and methodological improvement of the tables;

Amendments were made to the Classification of Institutional Sectors and adopted by the Government, and the amended classification was published;

As part of external trade statistics, in addition to the regular data, the SSO also published the results of the survey on External Trade by Enterprise Characteristics. Detailed data for each table are displayed in the MakStat database, which is updated on a regular basis;

A series of data on regional GDP for 2000-2008 was prepared according to NKD Rev.2;

Supply and use tables for 2014 (final data) were compiled and sent to Eurostat in accordance with ESA 2010, using the SDMX tool;

Data and tables on final consumption expenditure of households were prepared according to the ESA 2010 Transmission Programme;

The deadline for publishing quarterly GDP was shortened;

Experimental supply and use tables at constant prices were prepared for 2012, 2013 and 2014;

The SSO is working on improving the calculations of taxes and margins as part of the improvement of the supply and use tables and the input-output tables at basic prices;

Experimental calculation was made of the value of own-account software for 2014, which is treated as a fixed asset, i.e. it is capitalised in accordance with ESA 2010; Work is done on the preparation of a series of data for the period 2000-2015.

Methodological improvements in statistical surveys

Activities were carried out to improve the calculations and indicators of GDP on annual and quarterly basis, the calculation of fixed assets and inventories, excessive deficit procedure - EDP, supply and use tables.

Novelties

The deadline for publishing quarterly GDP was shortened in order to meet the deadline specified in the ESA 2010 Transmission Programme.

The changes in the Classification of Institutional Sectors were published, in accordance with the ESA 2010 recommendations.

EDP tables were prepared and delivered to Eurostat for the first time.

Planned and conducted statistical surveys:

2. Sector of National Accounts

Periodicity - area	Number of surveys in 2016	Number of surveys in 2015
Sector of National Accounts		
annual	2	2
quarterly	1	1
according to Eurostat's survey programme	7 ¹⁾	6 ¹⁾
analytical	27	27
Total Sector of National Accounts	37	36

¹⁾ Purchasing Power Parity survey

2.3. Business statistics, agricultural statistics and environmental statistics

In 2016, the SSO resumed the activities for improving business statistics, agricultural and environmental statistics and for harmonisation with European regulations. Special emphasis was given to the preparatory activities for a number of significant multi-annual surveys, all of which were conducted in 2016:

- Census of retail trade capacities
- Census of catering and accommodation capacities
- Farm structure survey
- Survey on foreign visitors at border crossings
- Survey on foreign tourists in accommodation establishments
- Survey on the travels of the domestic population

2.3.1. Business statistics

As regards the statistical surveys in the field of business statistics (collection, processing and dissemination) the following activities were carried out in 2016:

- Preliminary data on Structural Business Statistics (SBS) for the reference year 2015 were prepared, published on the website of the SSO and transmitted to Eurostat. For improving the level of compliance with the Regulation on structural business statistics (Annex 8), a regular survey on services in the business sector was prepared and conducted in 2016;
- Regarding business demography, data on enterprise deaths were prepared for the period 2013-2014;
- The questionnaires on Information and Communication Technologies in households and enterprises were adjusted in accordance with Commission Regulation (EU) 2015/2003;
- For short-term statistics, data and metadata are regularly submitted to Eurostat through the National Reference Metadata Editor;
- In order to obtain new tourism indicators, two statistical surveys were conducted in the period from June to September 2016: foreign visitors at border crossings and foreign tourists in accommodation establishments;
- The census of retail trade capacities and the census of catering and accommodation capacities were conducted in November 2016;
- Quarterly data collection for the survey on business tendencies in the construction industry began through eStat;
- Quarterly data collection for the survey on business tendencies in retail trade began through eStat;

2.3.2. Agricultural statistics

As regards the statistical surveys in the field of agricultural statistics (collection, processing and dissemination), the following activities were carried out in 2016:

- Improvements were made in animal production statistics by implementing an annual survey on milk and dairy products;
- The third Farm Structure Survey was carried out in 2016;
- Data on orchards and vineyards were obtained from administrative sources (Ministry of Agriculture, Forestry and Water Economy) and are being analysed;
- Monthly data on slaughtered livestock were delivered to Eurostat;
- Annual data collection for the survey on damages to state-owned forests began through eStat;
- Annual data collection for the survey on damages to privately owned forests began through eStat;
- Data collection for the annual livestock report began through eStat;
- Monthly data collection for the survey on slaughtered livestock in slaughterhouses began through eStat;

2.3.3. Statistics on environment, energy and transport

As regards the statistical surveys on the environment, energy and transport (collection, processing and dissemination), changes in EU regulations were followed on a regular basis and the following activities were carried out in 2016:

- The Energy Balances from 2005 to 2014 were revised using the statistical data obtained by the survey on energy consumption in households, 2014. At the same time, all energy indicators were recalculated, including the indicator for the share of renewable energy in final energy consumption;
- All new energy capacities were included in the process of collecting energy data;
- The set of data on environmental taxes was revised and a series of data on environmental taxes (2010-2014) was prepared;
- Annual data collection for the survey on local roads and bridges began through eStat;
- Semi-annual data collection for the survey on housing prices began through eStat;
- Monthly data collection for the survey on energy consumption and types of energy in business entities began through eStat;

Methodological improvements in statistical surveys

New questionnaires were designed and prepared for all surveys relating to information and communication technology, in accordance with the methodology and recommendations of Eurostat for 2016.

Alignment with European standards was achieved for the following questionnaires: Census of retail trade capacities, Census of catering and accommodation capacities, Survey on foreign visitors at border crossings, Survey on foreign tourists in accommodation establishments and Survey on the travels of the domestic population.

Novelties

The Energy Balances for the period from 2005 to 2014 were revised for the first time using the statistical data obtained by the survey on energy consumption in households, 2014.

Planned and conducted statistical surveys:

3. Sector of Business Statistics, Agricultural Statistics and Environmental Statistics

Periodicity - area	Number of surveys in 2016	Number of surveys in 2015
Department of Construction Statistics, Energy and Transport		
Energy		
annual	12	12
monthly	12	12
semi-annual	2	2
Transport	-	-
annual	11	11
five-yearly	-	3
monthly	2	2
quarterly	2	2
Construction		
annual	5	5
semi-annual	1	1
quarterly	1	1
monthly	3	3
Total	51	53
Department of Agricultural Statistics and Environmental Statistics		
Agriculture – general		
three-yearly	1	-
annual	2	2
monthly	2	2
Crop production		
annual	7	7
Livestock production		
annual	3	2

monthly	1	1
Forestry		
annual	7	7
quarterly	1	1
Hunting and fishing		
annual	2	2
Agricultural prices		
monthly	2	2
quarterly	1	1
Economic accounts for agriculture		
annual	3	3
Water Economy		
three-yearly	2	-
annual	6	6
Environment		
biennial	-	1
annual	2	2
Total	42	39

Department of Industry and Business Tendencies		
Industry		
monthly	2	2
annual	1	1
Business tendencies and prices		
monthly	1	1
quarterly	3	3
semi-annual	1	1
annual	1	1
monthly	4	4
quarterly	1	1
Total	14	14

Department of Internal Trade, ICT, Tourism and Hospitality		
ICT		
annual	5	5
quarterly	2	2
monthly	1	1
Internal trade		
annual	1	1
quarterly	-	-
monthly	2	2
five-yearly	1	-
biennial	3	-
Hospitality and tourism		
annual	2	2
quarterly	1	1
monthly	2	2
three-yearly	1	-
five-yearly	4	-
Total	25	16
Department of Statistical Business Register and Structural Business Statistics		
annual	2	2
Total Sector of Business Statistics, Agricultural Statistics and Environmental Statistics	137	131

2.4. Sector for Regional Departments

In accordance with the Rulebook on Internal Organisation from 2015, the State Statistical Office comprises the Central Office in Skopje and eight regional departments throughout the country (Skopje, Tetovo, Kumanovo, Veles, Stip, Bitola, Ohrid and Strumica).

The main role of the regional departments is collecting data, coding and preliminary control of the statistical forms collected from reporting units. For some statistical surveys (in the field of demography), data entry and processing are also performed in the regional departments. In addition to these responsibilities, the regional departments also have an important role in developing and updating the network of interviewers. The regional departments are instrumental in the process of registration and selection of candidates for interviewers that make up the SSO network of interviewers, as well as in maintaining daily contact with them in carrying out the surveys.

Given that the reporting units are still the primary sources of data collected in the field via statistical forms, despite the growing importance of administrative data sources (for 35 surveys), the SSO regional departments will still have a major role in collecting statistical data from the field.

3. CLASSIFICATIONS AND REGISTERS

3.1. Classifications

Several national classifications and nomenclatures were adopted as SSO standards in 2016:

- Classification of Institutional Sectors, 2016, Decision of the Government of the Republic of Macedonia ("Official Gazette of the Republic of Macedonia", No. 75/2016);
- Nomenclature of types of constructions and construction works, 2015, SSO standard;
- Transport classification of goods, 2015, SSO standard;
- Classification of Environmental Protection Activities and Expenditures, 2015, SSO standard.

Correspondence tables were made between:

- Classification of Institutional Sectors (2016) and Classification of Institutional Sectors (2005);
- National Classification of Occupations (2015) and National Classification of Occupations (2011).

3.2. Statistical registers

Statistical registers are an important instrument of the State Statistical Office for fulfilment of its statutory responsibilities. Taking this into account, and in order to complete the process of establishment of statistical registers in the SSO, a working group was set up in 2015 to examine the availability and possibility of using administrative data sets for statistical purposes. The working group prepared a comprehensive report on its work, which was submitted to the Methodological Council of the SSO in May 2016.

3.2.1. Statistical Register of Territorial Units

During 2016, the SSO continued updating the data in the web cartography application. Also, in 2016, the text of the Memorandum of Cooperation with the Agency for Real Estate Cadastre was drafted, and it is expected to be signed in 2017. Sketches of enumeration areas and detailed maps were prepared for the implementation of the Census of Retail Capacities and the Census of Catering Capacities.

3.2.2. Statistical Business Register

The Statistical Business Register is updated on a regular basis and the accuracy and quality of the data are checked regularly, in particular the data on activity, size, address data, etc.

The enterprise groups database was updated with 2014 and 2015 data.

Within the pilot project on profiling, desk profiling was made of two enterprise groups and intensive profiling of one enterprise a group.

3.2.3. Statistical Farm Register

The Register is updated continuously with data from administrative sources and statistical surveys.

The Statistical Farm Register is used as a sampling frame for statistical surveys in the field of agriculture.

3.2.4. Data warehouse for national accounts

One of the main activities in the upcoming period is upgrading the data warehouse for national accounts and the creation of inputs and outputs for the warehouse.

As a result of the signed service contract for "Tailor-made software development for data warehouse for economic statistics", the first phase of the preparation of tender documentation for the project for redesigning the data warehouse for national accounts, under the IPA 2013 project, was completed.

4. EUROPEAN INTEGRATION AND INTERNATIONAL ACTIVITY

4.1. European integration

The process of European integration of the Republic of Macedonia in the field of statistics is carried out in close cooperation with Eurostat, which provides aid and support to the SSO, as the national coordinator of the statistical system of the country, in the process of harmonisation of national statistical standards and data with international statistical standards and data, especially from EU Member States.

The SSO, as coordinator of the Working Group 18 – Statistics, organises and coordinates the activities of the Working Group for the purpose of regular, quality and timely monitoring and reporting about the progress in adopting the Acquis, with monthly, quarterly and annual periodicity.

In December 2016, the final version of the National Programme for Adoption of the Acquis (NPAA) 2017 was submitted to the Secretariat for European Affairs.

The twelfth meeting of the Sub-Committee on Economic and Financial Affairs and Statistics was held in June 2016 in Skopje. The European Commission, as in the previous year, praised the progress of the SSO in the period between the two meetings.

In June 2016, an annual Eurostat mission was held in the State Statistical Office, where the future plans and needs for support of the SSO were presented.

In September 2016, Mr. Pieter Everaers, Director of Eurostat's Directorate for Cooperation in the European Statistical System; International Cooperation; Resources, visited the SSO and the other participants in the statistical system of the Republic of Macedonia. At the meeting, discussions were held regarding the progress of Macedonian official statistics in the harmonisation with the statistics of the European Union, as well as the future plans and commitments for further progressive integration of the State Statistical Office in the European Statistical System by strengthening the institution and its coordinating role in national statistical system.

In 2016, preparatory activities began for organising the Joint UNECE/Eurostat Work Session on Statistical Data Confidentiality, which will be held in the period from 20 to 22 September 2017 in Skopje and hosted by the State Statistical Office.

The cooperation between Eurostat and the SSO in the application of EU legislation is carried out through continuous consultations, assessments and recommendations by Eurostat.

4.2. International projects where the SSO was included

4.2.1. Ongoing projects of the European Commission

- National projects

IPA 2012/2013 National Programme

The State Statistical Office is beneficiary of the IPA 2012/2013 National Programme as part of the sector fiche for private sector development.

As part of the IPA 2012 Programme, the twinning project "Support to the State Statistical Office for capacity building and improving compliance of statistics with EU standards" is in progress. The implementation period is October 2016 - February 2018. The project is implemented by the State Statistical Office of the Republic of Macedonia, the Consortium of the National Institute of Statistics of Italy, as the Lead Member State Partner, and the Statistical Office of the Republic of Slovenia, as the Junior Member State Partner.

As a result of the signed service contract for "Tailor-made software development for data warehouse for economic statistics", specifications were developed based on which the first phase of the preparation of tender documentation for redesign of the data warehouse for national accounts, under the IPA 2013 project, was completed in 2016.

The State Statistical Office is also a beneficiary of a supply contract for personal computers under IPA 2013, for which tender documentation was prepared and submitted to CFCD, and the procurement procedure was carried out at the beginning of 2017.

- Multi-beneficiary projects

IPA 2014 Multi-Beneficiary Statistical Cooperation Programme

The implementation of the IPA 2014 Multi-Beneficiary Programme is underway. The Programme started on 1 October 2015 and will end on 31 August 2017. The interim report on the implementation of the Programme was submitted to Eurostat.

The grant contract covers the following 13 pilot projects:

1. National accounts methodology;
2. European System of Accounts – Transmission programme; Quarterly national accounts;
3. Government finance statistics;
4. Price statistics – PPP;
5. Business statistics – profiling;
6. International trade in goods statistics;
7. Adult education survey;
8. ICT usage in households, by individuals and in enterprises;
9. Short-term business statistics;
10. Price statistics – harmonised index of consumer prices;
11. Crop production statistics;
12. Animal production statistics;
13. Ad hoc – Farm structure survey.

In addition to the grant contract with Eurostat, four pilot projects are implemented through service contracts with the consulting company - GOPA, as follows:

1. Developing a metadata system;
2. South East Europe 2020 (SEE2020) indicators;
3. Source (basic) data required for the calculation of Macroeconomic Imbalance Procedure (MIP) indicators;
4. Quality management.

Planned projects of the European Commission

IPA 2015 Multi-Beneficiary Statistical Cooperation Programme

The contract for the IPA 2015 Multi-Beneficiary Statistical Cooperation Programme was signed between the State Statistical Office and Eurostat. The implementation of the Programme is expected to begin in July 2017 and end in July 2019. The programme includes the following pilot projects: government finance statistics, harmonised index of consumer prices, purchasing power parity, business register, short-term business statistics, transport, tourism, labour force survey, ESSPROS, annual crop statistics, animal production statistics, sample design, methodological aspects of the data warehouse for national accounts, and pilot census of population and housing.

IPA 2017 National Programme

In 2016, the State Statistical Office worked on programming the IPA 2017 National Programme. The SSO is part of the sector fiche for Public Administration Reform, where the planned activities are aimed at improving statistics to strengthen the decision-making process.

SSO participation in projects of other institutions

The State Statistical Office was involved in the project for establishment of a national interoperability framework implemented by the Ministry of Information Society and Administration through the IPA programme. This project standardises and improves the quality of services and data in the public administration as a whole. The existence of an interoperability framework is of particular importance for the SSO considering that it uses data from administrative sources in accordance with the Law on State Statistics.

The standardisation and redesign of the databases in administrative institutions under the interoperability framework will contribute to improving the quality of data, and thus their usability for statistical purposes.

Within this project, ICT equipment and software were purchased and installed, which are necessary for using the web services available through the interoperability platform.

As part of the OECD Competitiveness Outlook 2018 Cycle, under the authority of the Office of the Deputy Prime Minister of the Republic of Macedonia in charge of economic affairs, 17 policy dimensions are analysed, and the Republic of Macedonia is assessed in terms of

competitiveness and ranked among the countries of South East Europe. The State Statistical Office was involved in delivering indicators for 13 policy dimensions. The data were submitted successively until 31 December 2016.

The State Statistical Office, in cooperation with the national statistical institutes of Albania and Bulgaria and non-governmental organisations from the three countries, started preparations for a survey on innovation activities in small and medium-sized enterprises. Documentation was prepared for applying for funds for the implementation of the project during 2017 and 2018.

4.3. Communication and cooperation with other institutions

In 2016, the SSO continued the practice of signing memoranda of cooperation with higher education institutions in the country, and a Memorandum was signed with the University of Information Science and Technology "St. Paul The Apostle" from Ohrid.

In 2016, activities were launched for defining the cooperation between the SSO and the Agency for Real Estate Cadastre of the Republic of Macedonia.

There were also several presentations in the field of statistics for secondary schools and higher education institutions in the country.

In 2016, the SSO celebrated the Day of Macedonian Statistics, 1 June, marking 71 years of the establishment of the Office by organising an exhibition of drawings by students from primary schools in the Republic of Macedonia who took part in the art contest on the theme "World in Figures".

As part of the celebration of European Statistics Day, the SSO organised an Educational Caravan that visited a number of high schools throughout the country promoting the significance of statistics.

5. CHALLENGES THAT THE SSO WAS FACING

The main challenges of the SSO in 2016 were as follows:

- Modernisation of statistical production,
- Failure to submit, inaccurate and late submission of data by some reporting units,
- The condition of the SSO premises.

The structure of the SSO budget for 2016 is unfavourable (paragraph 1.1.3). The largest portion of the budget is dedicated to salaries of employees for implementation of the statistical activity of the SSO. However, unlike previous years, it must be noted that in 2016 the funds required for the implementation of statistical surveys were provided with direct support of the Ministry of Finance. Some statistical surveys that were postponed in previous years due to lack of funds were conducted in 2016.

However, the lack of finances adversely affects the modernisation of statistical production in terms of the methods of collecting and processing data. The situation is particularly unfavourable regarding the purchase of modern IT equipment.

The problem of failure to submit and the inaccurate and late submission of data by some reporting units (business entities), which has persisted for some time, results mostly from the lack of statistical culture and awareness of business entities, reporting units, and the fact that due to the non-existence of appropriate departments for filling in statistical forms in the companies and the unresolved business issues between the accounting bureaus that complete statistical forms on behalf of the companies, statistical reports are not delivered to the SSO. To overcome this problem, SSO employees put in extra efforts (sending written reminders, making telephone calls, etc.), and made direct visits to reporting units. Furthermore, the State Statistical Office, in direct communication with business entities and by organising meetings with the economic chambers, raised awareness about the importance of statistical data for the business entities and the purpose and manner of using official statistics.

The condition of the building and the overall installations (heating system, electrical wiring, etc.) of the premises of the SSO and the regional departments in Skopje and Tetovo is a constant problem that has lasted for several years, for which the Government is continuously informed. The problem with workspace would be completely resolved by taking over the office premises of the Ministry of Transport and Communications and relocation of employees and equipment from the Regional Department in Skopje to the Central Office, and activities are undertaken that should also solve the problem of the Regional Department in Tetovo. Also, a complete renovation of the building will be necessary in the coming period.

6. COORDINATION OF THE STATISTICAL SYSTEM AND AUTHORISED BODIES

In accordance with Article 21 of the Law on State Statistics, the SSO, as coordinator of the statistical system, in cooperation with the authorised bodies, prepares a report on their activities in relation to the implementation of the Programme of Statistical Surveys 2013-2017. The entities that have the status of authorised bodies are determined in the Law on State Statistics and the Five-Year Programme of Statistical Surveys. In addition to the National Bank of the Republic of Macedonia, other authorised bodies are: Ministry of Finance, Employment Agency, Pension and Disability Insurance Fund, Ministry of Justice, Ministry of Interior, Hydrometeorological Service and Institute of Public Health. The current Programme of Statistical Surveys covers the period 2013-2017.

Reports were received from all authorised bodies, except the Ministry of Justice.

6.1. National Bank of the Republic of Macedonia

In 2016, the National Bank of the Republic of Macedonia conducted a total of 24 statistical surveys, 3 fewer than in 2015. This decrease is due to the fact that three surveys that were carried out in 2015 were integrated into a new single survey in 2016. Of the conducted statistical surveys, 12 are monthly, 9 are quarterly, 2 are annual and one is a semi-annual survey.

Methodological improvements in statistical surveys

- Regarding the statistical surveys in the Programme of Statistical Surveys 2013-2017 pertaining to monetary statistics (2.03.03/01/01: "Balance sheet, survey of the NBRM (1SR, 1SF)", 2.03.03/01/02: "Balance sheet, survey of other depository corporations (2SR, 2SF)", 2.03.03/01.03: "Depository corporations survey (3SF)", 2.03.03/01/06: "Money supply, loans and deposits (5SR, DEP, CRED)"), the National Bank made further alignment with the latest international standards, i.e. a new time series of the monetary data set was prepared in line with the latest IMF Monetary and Financial Statistics Manual from 2016, with improved classification of financial instruments by sector and currency and a new methodology for the money supply, which will be published during 2017.
- The statistical survey 2.03.03/01/09: "Flow of funds - basic level (FoF)" has been discontinued, in order to intensify the activities for the preparation of detailed sector financial accounts.
- With respect to 2.03.03/01/16: "Financial account", intensive efforts were made in 2016 to improve the quality of data in the originally prepared version of the financial account, as well as to determine the most adequate sources of data and develop a detailed methodology. As part of the activities for establishing new data sources for the needs of the financial account, the data set was enriched with more detailed data on financial assets and liabilities of non-financial corporations.
- Furthermore, in cooperation with the Ministry of Finance, a new quarterly report on the stock and flow of financial assets and liabilities of budget users was introduced in order to

obtain more detailed data on the Government sector. In addition, for providing data on securities, after the introduction of statistics on investment in securities by residents abroad, further progress was made in 2016 by supplementing the available data set with securities issued on the domestic market (in accordance with the data exchange agreement with the Central Securities Depository).

- In the surveys 2.08.02/01/01: "Balance of payments", 2.08.03/01/02: "Foreign direct investment stocks (FDI STOCKS)" and 2.08.03/01/04: "International investment position (IIP)", the scope of data was improved for: direct investments (by including detailed data on trade credits) and portfolio investments (by including comprehensive data on investments of residents in securities on foreign financial markets). In addition, in order to improve the methodology for estimating private transfers in the balance of payments, activities were undertaken for conducting a new survey on private transfers.
- Concerning the statistical surveys in the field of payment statistics (2.03.03/01/12, 2.03.03/01/13 and 2.03.03/01/14 of the "Programme of Statistical Surveys 2013-2017"), for the purpose of compliance with international statistical standards, a new statistical survey was introduced in 2016 - 2.03.03/01/16: "Statistical reports on submitting payment operations data", which replaced the aforementioned statistical surveys. The replacement of the existing surveys with a new statistical survey resulted from the need for production of unified payment statistics, which at the same time will ensure greater international comparability.

Novelties in statistical surveys

- As of January 2016, the National Bank passed new bylaws pertaining to a new methodology for presenting payment statistics, thus achieving a significant degree of compliance with the requirements of Regulation (EU) No 1409/2013 of the European Central Bank on payments statistics. The new methodological framework and the new software application for submitting data from reporting units provide better coverage and more accurate statistical presentation of the key indicators for payment operations and payment instruments, which contributes to the improvement of the quality of statistical data.

In the area of external statistics, the NBRM started with: (1) regular semi-annual production of the report on investments in securities held as foreign exchange reserves (SEFER), and its delivery to the IMF; and (2) regular semi-annual production of data on portfolio investments, assets, i.e. the Coordinated Portfolio Investment Survey (CPIS), and delivery to the IMF. Participation in the CPIS fulfilled another of the required criteria for membership in the Special Data Dissemination Standard Plus (SDDS Plus) of the IMF, thus bringing the Republic of Macedonia closer to meeting the necessary requirements for joining this standard.

Regarding the efforts for proper application of the international statistical classifications, the NBRM adjusted some of the bylaws to the new National Classification of Institutional Sectors, thereby completing the process of implementing a unified sectorisation with the SSO.

- The cooperation with the State Statistical Office (SSO) and the Ministry of Finance (MoF) in respect of methodological improvements in the statistical surveys of common interest was further strengthened through the establishment of interinstitutional working groups on financial accounts statistics and excessive deficit procedure. The close cooperation between

the NBRM, the SSO and the MoF was intensified through further improvement of the mutual coordination of the statistical function and increased volume of data exchange, which was also supported by the signing of a new Annex to the Memorandum of Understanding and Cooperation in the area of macroeconomic and financial statistics.

Number of National Bank employees working on statistical surveys

A total of 52 National Bank employees work on statistical surveys, as follows:

- 6 employees work on the inflation expectations survey, bank lending survey and real estate prices;
- 5 employees work on calculation of financial soundness indicators;
- 39 employees work on statistical surveys in the field of monetary and financial statistics, as well as external statistics;
- 2 employees work on statistical surveys in the field of payment statistics.

Dissemination of statistics

Data from the statistical surveys of the National Bank are published on the website of the National Bank in accordance with the periodicity and publication deadlines set out in the Programme. Regarding the communication with users, regular publication of news releases for the basic statistical data sets of the NBRM started in 2016, simultaneously with the publication of the data.

Concerning the survey 2.08.03/01/03: "Foreign direct investment flows (FDI FLOWS)", regular publication of a time series on direct investments - flows (inward and outward), by country and by activity, has started.

International activities and foreign assistance

In 2016, the National Bank continued the practice of improvement of statistical capacities via training courses and cooperation with the central banks of EU Member States through the instrument for pre-accession assistance to candidate countries for EU membership - TAIEX. More specifically, the following activities were carried out:

- Expert mission on securities statistics for the needs of monetary and financial accounts statistics, which took place in March 2016 in cooperation with the Bank of Italy;
- Expert mission on monetary financial institutions interest rates statistics, which took place in April 2016 in cooperation with the Central Bank of Austria;
- Expert mission on the necessary adjustments to the system for collecting data for the needs of external statistics in accordance with the requirements of BPM6, held in October 2016, in cooperation with the Central Bank of Germany;
- Additionally, a visit was made by the Director General Statistics of the European Central Bank, and a lecture was given on the topic "Challenges related to the growing importance of central bank statistics for economic policies in the post-crisis period".

6.2. Ministry of Finance

In 2016, the Ministry of Finance conducted a total of 18 statistical surveys. Of these surveys, 12 are monthly, 4 are quarterly and 2 are annual surveys.

Number of Ministry of Finance employees working on statistical surveys

The Ministry has five employees engaged in conducting statistical surveys.

Dissemination of statistics

Data from the surveys are regularly published on the website of the Ministry according to the release calendar.

International activity and foreign assistance

International activities and foreign assistance are implemented within the Regional Project of the IMF and the GFS/ESA methodology.

Information about methodological improvements, novelties in statistical surveys and about the problems the Ministry faced in 2016 was not delivered to the SSO as requested in Form 1 concerning the surveys and activities carried out in 2016 in accordance with the Programme of Statistical Surveys 2013-2017.

6.3. Pension and Disability Insurance Fund

In 2016, as in 2015, the Pension and Disability Insurance Fund implemented a total of 5 annual statistical surveys.

Number of Fund employees working on statistical surveys

One employee of the Fund works on statistical surveys.

Dissemination of statistics

Data from the statistical surveys are regularly published on the website of the Pension and Disability Insurance Fund.

Information about methodological improvements, novelties in statistical surveys and about the problems the Fund faced in 2016 was not delivered to the SSO as requested in Form 1 concerning the surveys and activities carried out in 2016 in accordance with the Programme of Statistical Surveys 2013-2017.

6.4. Ministry of Interior

In 2016, as in 2015, the Ministry of Interior carried out a total of 3 statistical surveys, of which 1 monthly and 2 annual surveys.

Number of Ministry of Interior employees working on statistical surveys

The Ministry has 5 employees working on statistical surveys.

Dissemination of statistics

Data from the statistical surveys are regularly published on the website of the Ministry of Interior, and submitted to the State Statistical Office on monthly and annual basis.

Information about methodological improvements, novelties in statistical surveys and about the problems the Ministry faced in 2016 was not delivered to the SSO as requested in Form 1 concerning the surveys and activities carried out in 2016 in accordance with the Programme of Statistical Surveys 2013-2017.

6.5. Hydrometeorological Service

In 2016, the Hydrometeorological Service conducted a total of 6 statistical surveys, of which 3 are monthly, 1 is quarterly and 3 are annual. The number of surveys is the same as in 2015.

Number of Hydrometeorological Service employees working on statistical surveys

A total of 15 employees of the Hydrometeorological Service are engaged in conducting statistical surveys.

Dissemination of statistics

Dissemination is carried out via publication of data, preparation of information to the media and various data users, monthly and annual reports on the quality of surface water to the Ministry of Environment and Physical Planning (MOEPP), and data are submitted annually to the State Statistical Office.

International activity and foreign assistance

International activities and foreign assistance are implemented through GIZ (German Technical Assistance) within the project Adapting to Climate Change in the Drim Basin and UNDP Monitoring Programme for Strumica River Basin.

Problems that the Hydrometeorological Service was facing

The following problems have been noted by the Hydrometeorological Service regarding the implementation of their activities, which are in direct correlation with the quality of the data from the surveys:

- shortage of skilled staff;
- lack of budget funds for effective maintenance of the meteorological and hydrological monitoring system;
- need for utility vehicles for operational activities and maintenance of the meteorological and hydrological monitoring system;
- lack of budget funds for maintaining and upgrading the climate database and adequate statistical software;
- need for adequate databases;
- need for adequate training.

6.6. Institute of Public Health

In 2016, the Institute of Public Health of the Republic of Macedonia conducted a total of 16 annual statistical surveys.

Number of Institute employees working on statistical surveys

The Institute has 23 employees working on statistical surveys.

Dissemination of statistics

Data from the statistical surveys are regularly published on the website of the Institute, and submitted to the State Statistical Office on annual basis.

The Institute has an extensive publishing activity, and issued a total of 21 publications in 2016.

International activity and foreign assistance

International activity and foreign assistance are implemented through the Global Fund – maintaining a low HIV-AIDS prevalence in RM - sustainable development and the SECID (South East European Centre of Infectious Diseases Surveillance and Control) project funded by SDS - Surveillance and Response to Avian and Pandemic Influenza.

Information about methodological improvements, novelties in statistical surveys and about the problems the Institute faced in 2016 was not delivered to the SSO as requested in Form 1 concerning the surveys and activities carried out in 2016 in accordance with the Programme of Statistical Surveys 2013-2017.

6.7. Employment Agency of the Republic of Macedonia

In 2016, the Employment Agency of the Republic of Macedonia carried out a total of 3 statistical surveys with monthly periodicity.

Information about methodological improvements, novelties in statistical surveys, number of employees working on statistical surveys, publishing activity, international activities, foreign assistance and about the problems the Agency faced in 2016 was not delivered to the SSO as requested in Form 1 concerning the surveys and activities carried out in 2016 in accordance with the Programme of Statistical Surveys 2013-2017.

6.8. Observations of the State Statistical Office

From the submitted reports, it may be concluded that some authorised bodies (except the National Bank and the Ministry of Finance) still do not fully meet the required criteria, nor do they exercise in full their powers prescribed in the Law on State Statistics and the Programme of Statistical Surveys. This is due to the fact that the statistical surveys are carried out by employees who are inadequately trained or for whom statistics represent an additional work

activity. Therefore, additional funding is required for training in order to achieve greater staff involvement in the implementation of statistical standards and methodologies, the collection, processing and dissemination of statistical data, and the protection of confidentiality of data at their disposal.

All this affects the quality of statistical data provided by some of the authorised bodies, bearing in mind that the data resulting from the statistical surveys contained in the Five-Year Programme of Statistical Surveys represent official statistics. In the coming period, the authorised bodies need additional staffing, as well as regular training for easier acceptance and observance of European methodologies and standards and planning new forms of cooperation.

In the coming period (in 2017 and 2018), the SSO will take appropriate actions in cooperation with the authorised bodies and other stakeholders in the statistical system of the country, particularly in the process of preparing the new Programme of Statistical Surveys for the period 2018-2022, in order to overcome these problems and to implement the European standards in the field of statistics.

Abbreviations:

SSO – State Statistical Office

COICOP – Classification of Individual Consumption According to Purpose - EU

IPA – Instrument for Pre-Accession Assistance

Eurostat – Statistical Office of the European Union

eStat – IT system for automatic metadata-based generation of web forms for data collection over the Internet.

IMF – International Monetary Fund

ESS – European Statistical System

ISCED – International Standard Classification of Education

IT – Information Technology

eDamis – Electronic Data files Administration and Management Information System

ESSPROS – European System of Integrated Social Protection Statistics

NKD – National Classification of Activities Rev. 2

GDP – Gross Domestic Product

FISIM – Financial Intermediation Services Indirectly Measured

SILC – Survey on Income and Living Conditions

RD – Regional Departments

NIP – Nomenclature of Industrial Products

NBRM – National Bank of the Republic of Macedonia

NPAA – National Programme for Adoption of the Acquis

NRME – National Reference Metadata Editor

PIM – Perpetual Inventory Method

SMIS+ – Statistical Management Information System

SBPM – Statistical Business Process Model

SDDS – Special Data Dissemination Standard

SDMX – Statistical Data and Metadata Exchange

CATI – Computer-Assisted Telephone Interviewing

HICP – Harmonised Index of Consumer Prices

PR – Peer Review