



# **REPORT**

## **ON IMPLEMENTATION OF THE NATIONAL STATISTICAL PROGRAMME AND THE ACTIVITY OF THE NATIONAL STATISTICAL INSTITUTE IN 2017**

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## LIST OF ABBREVIATIONS

BAS - Bulgarian Academy of Sciences	WG - Working group
CA - Customs Agency	
CAIS - Central Automatic Information System	
CEA - Classification of Economic Activities	
CPEA - Classification of Products by Economic Activity	
EC - European Commission	
EP - European Parliament	
ESS - European Statistical System	
EU - European Union	
FG - Functional group	
GDP - Gross Domestic Product	
GNI - Gross National Income	
HIAU - Head of Internal Audit unit	
HICPs - Harmonised Index of Consumer Prices	
HO - Head Office	
HPC - Hybrid Private cloud	
IAU - Internal Audit unit	
ICP - Index of Consumer Prices	
ICT - Information and communications technology	
IPA - Institute of Public Administration	
ISBS - Information System “Business Statistics”	
ISSBS - Information system “Short-term Business Statistics”	
MAFF - Ministry of Agriculture, Food and Forestry	
NRA - National Revenue Agency	
NRPP - National register of populated places	
NSI - National Statistical Institute	
NSP - National Statistical Programme	
NSS - National Statistical System	
NSSI - National Social Security Institute	
OECD - Organization for Economic Cooperation and Development	
OP - Operational programme	
PPPs - Purchasing Power Parities	
RA - Registry Agency	
R&D - Research and Development activity	
RSO - Regional Statistical Office	
SMEs - Small and medium-sized enterprises	
TR - Trade Register	
UN - United Nations	
UNWE - University of National and World Economy	

## INTRODUCTION

The Report on implementation of the National statistical programme and the activity of the National statistical institute in 2017 is developed in compliance with Art. 9 (6) of the Law on statistics.

The report is structured into five sections and presents the implementation of the tasks of the National statistical programme and the activities of the NSI and Other Bodies of statistics in 2017.

**The first section** pays special attention to surveys and activities performed for the first time in 2017.

**The second section** describes the results achieved on implementation of horizontal priorities within the current Strategy for development of the National Statistical System of the Republic of Bulgaria, 2013 - 2017.

**The third section** presents the implementation of activities on the production of statistical information in the different thematic areas - demographic and social statistics, macroeconomic statistics, business statistics, statistics on agriculture, forestry and fisheries, multi-domain statistics, information technologies, statistical infrastructure and other activities.

**The fourth section** presents the resources needed in order to implement the activities of the NSI in 2017.

**The fifth section** introduces the audit assignments performed by the Internal Audit Unit and the activities implemented by the Inspectorate and the Finance Controller in 2017.

## MAIN EVENTS IN 2017

- During the past year the work on **the preparation of the Republic of Bulgaria for the Presidency of the European Union** continued. From July, 1, 2017 to December, 31, 2018, the Presidency of Working Group B.8 „Statistics“ of the Council of the European Union was taken over by the representatives of the statistical institutes of the three Member States - Estonia, Bulgaria and Austria. The ceremony to handover the Presidency to representatives of the European Commission (Eurostat) was held in late June in Malta. The representatives of the statistical institutes of the three Member States currently chairing the Working Group by the end of 2018 presented the trio's overall Programme and the organization of work on the preparation of rotating presidencies at national level. The Eurostat also focused on its work, as a body, submitting legislative proposals. The first meeting for the Trio Estonia - Bulgaria - Austria was held in mid - July 2017 in Brussels, Belgium. In late October a coordination meeting on organization of work under the Presidency, co-ordination and determination of the main guidelines for action was held in Vienna.
- In 2017, the NSI continued to work towards **strengthening confidence in official statistics and increasing the statistical culture** of the public. Within the framework of the project DIGICOM, which is funded by the Eurostat, the NSI organized a number of initiatives in this direction:
  - The NSI organized and held the first **National Competition on Statistics for secondary school students** in the country as a preparatory stage for the European Statistics Olympics in 2018. The Competition was held in two rounds. In the first round, the teams passed a test with 30 closed questions in real time on the NSI's website. The second round included an analysis of

predefined statistical data. It was a team competition - each team consisted of three students with a mentor teacher. A total of 59 teams from all over the country participated. 44 teams of them qualified for the second round. The three teams - winners received awards during the official celebration of the 137th anniversary of the establishment of the statistical institution in Bulgaria.

- The NSI started preparations for **2018 European Statistics Olympics**, which will be held jointly with Eurostat and 11 EU Member States during the Bulgarian Presidency of the EU. More detailed information on the Olympics and on the conditions for participation were published on the NSI's website. According to the Regulation, the Olympics will be carried out in two rounds - National and European, and with two categories of secondary school students: pupils from the X - XII grade and students from the VIII - IX grade. It will be a team competition - each team will consist of one to three students with a mentor teacher.
- In 2017, the National Statistical Institute hosted training for young statisticians from six European Neighborhood Policy countries - Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova and Ukraine.

## I. DONE FOR THE FIRST TIME IN 2017

In 2017 the National Statistical Institute implemented a total of **257 statistical surveys and activities**, of which:

- Developed and implemented Information System “Macroeconomic statistics - financial statistics and non-financial national accounts”;
- Developed and implemented web-based application „In-patient and health establishments“ in order to facilitate the respondents and to improve the quality of the statistical information collected;
- Table 29 from ESA 2010 on current pension entitlements with data for 2015 provided to Eurostat;
- Data on financial national accounts for the period 1995 - 2000 implementing granted derogations, provided to Eurostat;
- Preliminary data on energy balances for 2016, reported on a voluntary basis, needed by the Directorate-General „Energy“ of the European Commission in order to prepare a Report on the State of the Energy Union;
- Data on natural gas and electricity prices of households and final non-domestic consumers for the first half of 2017 according to new Regulation (EU) 2016/1952 of the European Parliament and of the Council on European statistics on natural gas and electricity prices, submitted to Eurostat;
- Detailed information for 2014 and 2015 on the development of the physical energy flow accounts included in Annex VI to Regulation No. 691/2011 on European environmental economic accounts, sent to Eurostat;
- Data on the second set of mandatory modules of Regulation No. 691/2011 of the European Parliament and of the Council on European environmental economic accounts: environmental goods and services accounts, environmental expenditure accounts and physical energy flow accounts, reported to Eurostat;
- Experimental data on the physical water flow accounts (2012, 2013 and 2014), which are part of the next planned set of modules of Regulation No. 691/2011 of the European Parliament and of the Council on European environmental economic accounts and reported to Eurostat. Bulgaria is the second European country, which developed the methodology and compiled experimental physical water flows accounts;
- Second series of experimental data on food waste, reported to Eurostat;
- Quarterly producer price indices for „Legal and accounting activities; management consultancy activities“ (Section 69 and Group 70.2 of the Classification of Economic Activities (NACE.BG - 2008), in accordance with the Regulation (EC) No. 1158/2005 of the European Parliament and of the Council, published and sent to Eurostat;
- Published results of two extraordinary sample surveys in households and enterprises, respectively Adult Education Survey and Survey on Continuing vocational training of employees.

## **II. IMPLEMENTATION OF HORIZONTAL PRIORITIES OF THE STRATEGY 2013 - 2017**

Main direction in the activity of the National statistical institute in 2017 was realization of the horizontal and specific priorities of the Strategy for development of the National Statistical System of the Republic of Bulgaria 2013 - 2017. In 2017 a decision to extend the Strategy until 2020 was taken in accordance with the newly adopted Regulation (EU) 2017/1951 of the European Parliament and of the Council of 25 October 2017 amending Regulation (EU) No. 99/2013 on the European statistical programme 2013 - 2017, by extending it to 2020.

### **II.1. Provision of objective, timely and reliable statistical information on the economic, social and demographic development and environment at national and regional level**

#### **Priority 1.1. Provision of statistical indicators for development, monitoring and evaluation of European, national and regional policies**

In 2017, statistical data were developed and provided for monitoring and evaluation of national strategies with the thematic scope of the data from all statistical areas.

The provision of statistical indicators, developing new and updating of existing indicators are priority activities due to the growing needs of a complex and multidimensional statistical information for the purposes of development, monitoring and evaluation of policies and programmes at national and regional level. More effective cooperation between the NSI and the competent institutions at national level was achieved.

During the year the General precondition 7 „Statistical Systems“ of the Agreement on Partnership of the Republic of Bulgaria was implemented, describing the assistance from the European Structural and Investment Funds for the period 2014-2020. In accordance with the terms of the Agreement on Partnership, the framework on statistical validation was developed according to the European Statistics Code of Practice and methodological requirements of the European Commission's and the European Parliament's statistical Regulations, as the implementation was confirmed by the EC.

NSI representatives participated actively in the work of monitoring committees of the operational programs.

An improvement in data accuracy on emissions of air pollutants was achieved by improving procedures for validation of statistical data on country's fuel consumption by maximum use of available information.

In 2017, the National Statistical Institute prepared and provided a large volume of anonymized individual and aggregated data and indicators from different statistical fields for the information provision of the Institute for Population and Human Studies at the Bulgarian Academy of Sciences under the project „Measures for overcoming the demographic crisis in the Republic of Bulgaria“.

Methodological support was ensured and statistical data on R&D, innovation and information and communication technologies were provided in order to monitor and to evaluate European and national policies, such as: Europe 2020 Strategy and National Programme for Development of the Republic of Bulgaria „Bulgaria 2020“; the Operational Programs „Innovation and Competitiveness 2014 - 2020“ and „Science and Education for smart growth“.

In 2017, the work on the provision of indicators included in the scoreboard for the establishment of macroeconomic imbalances continued. The indicators are part of the package consisting of six legal acts (five regulations and one directive) to strengthen economic governance in the EU. According to regulations, the process of early identification of macroeconomic imbalances begins with the publication of the scoreboard accompanied by report of the European Commission containing an economic and financial evaluation. The scoreboard is an instrument for early warning of the emergence of macroeconomic

imbalances, and includes a narrow set of indicators: Current account balance as a percent of GDP; Net international investment position as a percent of GDP; Real effective exchange rates based on HICP deflators; Export market shares; Nominal unit labour cost; House prices relative to a Eurostat consumption deflator; Private sector credit flow in percent of GDP; Private sector debt in percent of GDP; General government sector debt in percent of GDP; Unemployment rate.

### **Priority 1.2. Updating the existing ones and development of indicators for surveys on new phenomena and processes**

The provision of statistical indicators, developing new and updating of existing indicators are priority activities due to the growing needs of a complex and multidimensional statistical information for the purposes of development, monitoring and evaluation of policies and programmes at national and regional level (strategy “Europe 2020”, National Programme for Development of the Republic of Bulgaria “Bulgaria 2020”).

An updating of indicators, measuring the development of information society was made and new variables were added in connection with the dynamic development of information technologies and services.

In 2017, in regular surveys on schools and kindergartens, specialized sections as a pilot were included, collecting information on the availability of gyms and sports facilities. The methodology was developed jointly with the Ministry of Youth and Sports.

### **Priority 1.3. Extending the scope of provided statistical products and services and active dialogue with users**

The implementation of mentioned above priority included a number of activities and events aimed at enhancing the statistical culture of all user groups, applying innovative approaches to present statistical information, using tools for data visualization and facilitating users in their interpretation, undertaking measures so that the Internet to become a major source for dissemination of statistical products and services and active communication with users.

In 2017, the NSI implemented a series of initiatives in order to increase the interest in statistical science and practice, focusing mainly on the younger audience - secondary school students and students.

Along with the traditional press releases on the NSI’s website, **infographics** were published, presenting statistical information in an original and attractive way. During the year the infographics received widespread user feedback (increase of site visitors, facebook likes, and media reflection). They were dedicated to the following topics and events:

- Trifon Zarezan (production, trade and consumption of wine);
- March 8 - International Women’s Day;
- April 7 - World Health Day;
- [Population of Bulgaria in 2016](#);
- Easter;
- May 24 - the Day of Bulgarian Education and Culture and Slavonic Alphabet;
- [September 15 - the first school day in Bulgaria](#);
- [October 1 - International Coffee Day](#).

At the end of last year and the beginning of 2017, the NSI implemented its new initiative, designed for users beginners, aiming to acquire basic knowledge in the field of statistics - **a game with concepts used in statistics**. For this purpose, a 52-card deck was printed, half of which was written in statistical terms. The definitions or illustrations of the concepts were written on the remaining half of the cards. The task was to find matching pairs of cards. The best-performing participants were awarded.

The National Statistical Institute adapted in Bulgarian and published on its site [the section „Statistics 4 beginners”](#), which is part of the Eurostat wiki-based encyclopaedia - Statistics

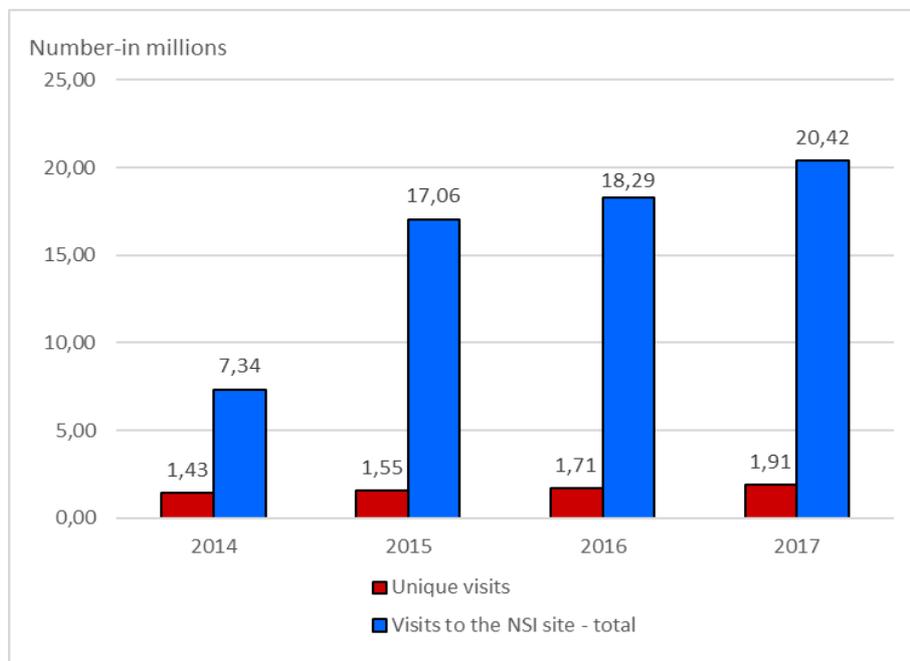
explained. Bulgaria was the second EU Member State after the Netherlands, which provided the opportunity to statistical data users to use the heading in their native language. The purpose of „Statistics 4 beginners“ was to make statistics more understandable and accessible to a wider audience by explaining data and metadata as well as some of the concepts and terms used.

**On 20 October 2017, the European Statistics Day** was celebrated for the second time. With this event, the European Statistical Community aims at raising awareness of European citizens to the importance, value and power of official statistics. The celebration was marked by the high-level conference entitled [„Power from Statistics: Data, Information and Knowledge“](#), organized in Brussels (18 - 19 October). At the conference, a Deputy President of the NSI represented Bulgaria. The National Statistical Institute celebrated the European Statistics Day with the new digital **publication** [„The life of women and men in Europe - a statistical portrait“](#) developed by Eurostat jointly with the Member States' statistical offices and available in 24 languages. The statistical information is presented in an interesting way through short texts, graphics and interactive tools for visualization and reveals different aspects of the lives of Europeans. On the occasion of the holiday, the NSI was co-organizer of the Scientific Practice Conference [„Statistics as Science and Practice - Traditions and Contemporary Dimensions“](#) at the D. A. Tsenov Academy of Economics - Svishtov and officially announced the [European Statistics Olympics for secondary school students](#).

The Facebook page „European Statistics“ of the European Statistical System, launched at the end of 2016, become one of the most popular channels for communicating with users. It provides access to European statistics in an easy and comprehensible way, sharing information, videos, digital publications, quizzes, using innovative means for dissemination of statistical information developed within the ESS.

In 2017 the internet site of the NSI was visited 20 423 3411 times. The number of unique visits reached 1 905 428 (Figure 1), i.e. an average of 6 570 visits per day. On 28 March 2017 - the day with the most visits 21 329 pages were visited.

**Figure 1. Visits to the NSI internet site**



At the end of the year, there were 1 455 time series, 1 547 latest data, corresponding metadata and 708 methodological documents in 42 statistical sections available to users in Bulgarian and English. During the year other materials were also published - 366 press

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Data on the internet site visits and number of the published materials are as of the end of October 2017.

releases in Bulgarian and in English, 120 news (65 in Bulgarian and 55 in English), 2 versions of EKATTE, 49 competitions, 50 lists of admitted/not admitted competitors, 8 public contracts, 6 public invitations and 1 tender.

In 2017, 684 press releases with regional statistical data were published, as the number of visits reached 16 788.

For the first time on the NSI's Internet site the following items were published:

- „Total Business Climate Indicator“ in heading „Business surveys“;
- Registers of the employees of the Regional statistical offices, which submitted declarations under Art. 12, item 1 and item 2 of the Conflict of Interest Prevention and Ascertainment Act, in the subheading „Structure“ of the heading „About NSI“. A PDF file with scanned signed declarations from each employee was added to each register of the employees;
- Information on the projects under OP „Good governance“ in a new subheading „International cooperation“, with created banner quick link on the homepage of the site;
- License for the use of statistical information produced and disseminated by the National Statistical Institute, which clearly defines the rules that users of information must observe when using it. The license can be downloaded in .pdf format from the NSI's website.

During the year, activities continued to align the content of Bulgarian and English version of the NSI's website.

In 2017, the National Statistical Institute developed actively its publication activity by publishing rich in volume and content statistical information under a harmonized methodology with the European Union and in accordance with the high European standards for reliability, timeliness and quality of statistical information. According to the Editing Plan of the NSI a total of 23 publications - printed (with electronic version on CD) and electronic with total circulation of 30 090 items were presented to the users of statistical information. Most of the publications are available in two languages - Bulgarian and English. The publications consist of data, which characterize the population, the economy, the environment, the health, the education, the culture, the tourism and other important sectors at national and regional level. With the publications issued, the NSI strives to meet the expectations and needs of state institutions, businesses and the whole society of objective, useful and qualitative statistical information.

Over the years, the main publication of the NSI „Statistical Yearbook“ established itself as a source of detailed information on the life of Bulgarian society at national and regional level and shows in full the demographic, social and economic development of Bulgaria.

The publication „Statistical Yearbook 2017“ contains the most recent data and reflects in numbers all the diversity and dynamics of social processes. It is intended for a wide range of users: state authorities, NGOs, students, candidate students and pupils, as well as general public.

Each year the NSI publishes advertising leaflets and brochures promoting statistical surveys in different socio-economic areas, as well as a Catalogue of statistical publications with information on publication activity in the next year.

In 2017, „Statistics“ Magazine continued its established tradition to publish on its pages a variety of surveys and analyzes in selected articles and information from famous Bulgarian and foreign authors. The magazine examines current topics related to the socio-economic development of Bulgaria as well as theoretical and practical issues in the field of statistics as a science.

For the second year, the Annual Report was published focusing on the implemented key tasks, on the views of the top management on the implementation of the NSI's main priorities in 2016 as well as on the opinions of various generations of statisticians about the career opportunities at the Institute.

During the year, **the library's** activities were traditionally aimed at enriching digital

information resources. The provision of free online access to the digital archives was among the main priorities in its activity. The creation of user-oriented digital database continued - a total of 23 760 PDF digital pages were created and processed. A collection „Census 1956“ was published, the preliminary results and the results by districts of the „Census 1965“ also were published.

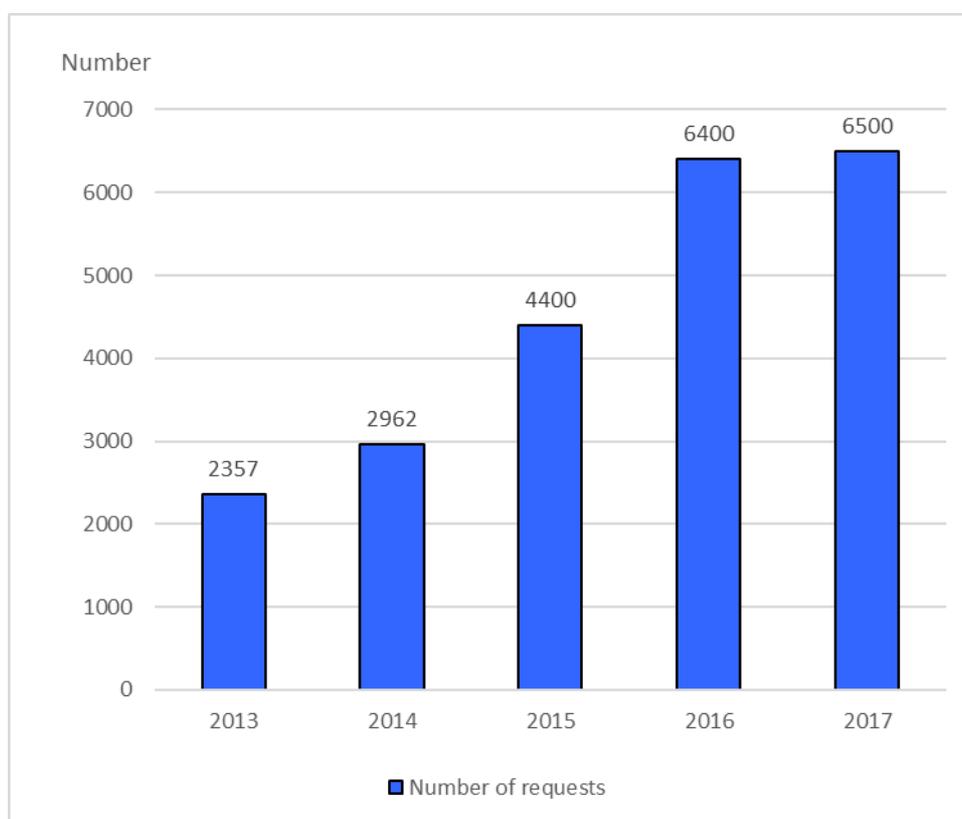
The digital library site was updated, with new interface, which allows searching in Bulgarian and English. A new heading „Did you know...?“ was created, containing curious facts from Bulgarian statistics.

The increase of annual user visits with 44% shows that the digital library increasingly is a sought source of statistical information. 13 022 visits were registered and 52 521 digital pages were reviewed by users.

During the reporting period, the conventional library activity continued: 175 visits were carried out and 422 library units were used; national and international book exchange continued.

In 2017, the NSI satisfied over 6 500<sup>2</sup> single requests for statistical information (Figure 2).

**Figure 2. Single user requests**



In 2017, 12 requests were served in order to provide anonymised individual data for scientific and research purposes in accordance with the Rules for Provision of Anonymised Individual Data for Scientific and Research Purposes of the National Statistical Institute.

At the Bulgarian center for European Statistical Data Support to users, part of the European net of user centers until late September a total of 21 inquiries were received, of which 20 via a web-based tool of Eurostat (ASSIST) and one by email of the NSI (10 standard requests and 8 unconventional requests). 7 of the requests were from trade companies and 2 from the public sector related to availability and verification of data as well as some methodological and technical problems.

<sup>2</sup> The number of single user requests is as of the end of October 2017.

### Priority 1.4. Establishing conditions for production and integration of spatial (georeferenced) information with statistical information

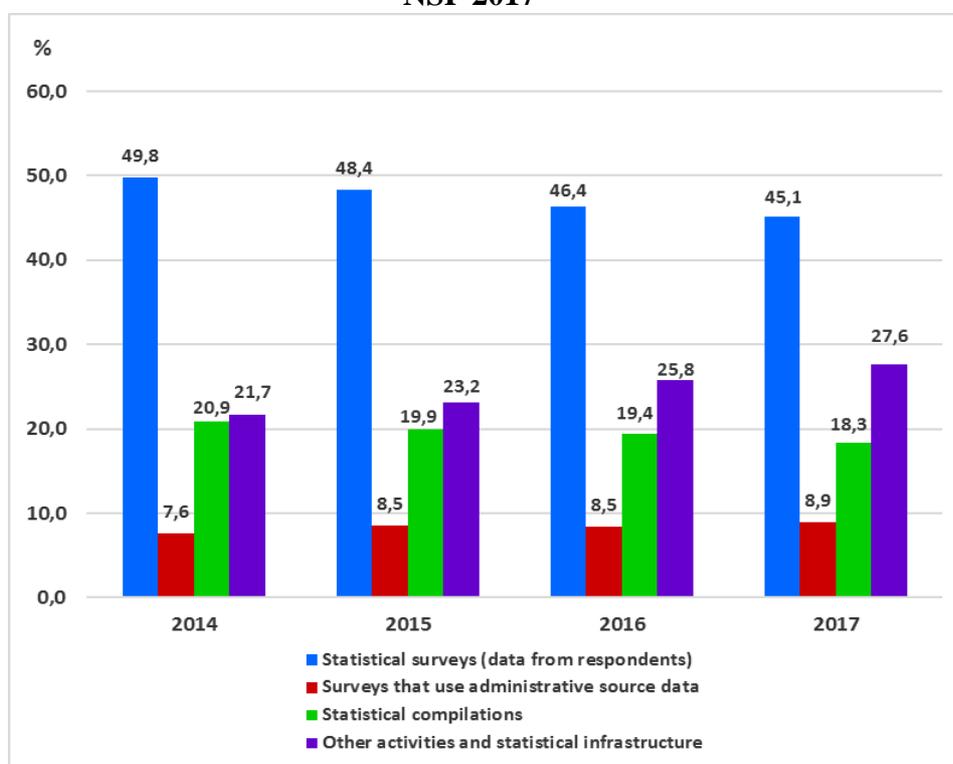
The National Statistical Institute works on its commitments in the field of integration of statistical data, when applicable, in order to create an infrastructure with multiple sources of information to provide spatial-temporal analysis and to expand the use and dissemination of regional georeferenced statistics.

## II.2. Implementation of new data sources and instruments for improving the production and increasing the quality of statistical products and services

### Priority 2.1. Expanding the use of administrative registers and information systems for statistical purposes

In 2017 the share of surveys conducted by the National Statistical Institute that use administrative source data was 8.9% (Figure 3).

**Figure 3. Distribution of statistical surveys by type conducted by the NSI according to NSP 2017**



In order to increase the completeness and reliability of the information data from administrative registers were used successfully in „Survey on Income and Living Conditions” (National Revenue Agency, National Social Security Institute and Social Assistance Agency), as well as results from the NSI’s survey „Annual statistics on employment and labour cost“.

In order to improve the coverage and quality of the statistical data on income in 2017 the NSI continued to use data from the National Social Security Institute, as follows: data on the size of pensions received, supplements to pensions and supplementary compensations and benefits by type and by months from the register „Pensions“, as well as annual data on recipients of compensations and benefits under the Social Security Code (Register of compensations). The NSI used also data on insured persons provided by the National Social Security Institute. Information from the Social Assistance Agency for recipients of benefits, as well as information from **the National Revenue Agency** on persons who have submitted annual tax form were used in order to supplement missing information on income and to

validate data of „Survey on Income and Living Conditions“.

In the field of social protection statistics - European System of Integrated Social Protection Statistics (ESSPROS), **the National Social Security Institute** provided data on revenue and expenditure by schemes from 01 to 06 (core system) as well as data on pension beneficiaries by schemes and functions (module on pension beneficiaries).

In the field of statistics on crime and justice the efforts were aimed at extending the scope and improving the quality of used data from administrative source for production of statistical data at national level.

In the field of business statistics, data from other NSI's surveys and administrative registers were used in order to increase the completeness and reliability of the information in the annual statistical survey on activity of non-financial enterprises.

In the field of energy statistics new administrative sources of information were identified in order to ensure the completeness and quality of statistical data.

The good cooperation and provision of administrative data for the purposes of production of energy statistics from: Customs Agency, National Revenue Agency, State Agency "State Reserve and War-time Stocks", Sustainable Energy Development Agency and the Directorate General "Civil Aviation Administration" continued.

The good cooperation and provision of administrative data for the purposes of environment statistics and accounts continued with a number of institutions: Ministry of Environment and Waters (Enterprise for Management of Environmental Protection activities, Executive Environment Agency, River Basin Directorates), National center of public health and analyses to the Ministry of Health.

During the year **Information System "Infostat"** established itself as a reliable data source for all users of statistical information. In connection with the Regulation (EU) No. 910/2014 of the European Parliament and of the Council, entered into force on 1 July 2016 on electronic identification and trust services for electronic transactions in the internal market, the system was updated in order to work with new qualified certificates for qualified electronic signature for end customers. **The registered visits** into the IS „Infostat“ during the year are **65 399**.

In order to achieve efficient and secure data exchange within the interaction with other institutions (Customs Agency, NRA and NSSI) supporting registers and administrative sources used for statistical purposes, a constant connectivity at database level was established through the unified electronic communications network.

## **Priority 2.2. Using innovative ICT and instruments for collection of primary data**

During the year, the development and implementation of new Information systems and web-based applications for the needs of different statistical surveys in NSI continued.

The **Information System Business Statistics** was updated with the definition of the 15 statistical surveys in the field of structural business statistics included in the ISBS for 2017, the inclusion into them of new forms or the modification of existing forms. In 2017, the unified entrance for submission of the annual activity reports, established by the NSI and the NRA, continued to operate, i.e. the enterprises had the opportunity to submit their annual activity report to one place - online at the ISBS. For this purpose, ToR was developed in order to include new functionality into the ISBS for submitting a corrective annual report on the activities of non-financial enterprises compiling balance sheet electronically. The aim is to give respondents the opportunity, where necessary, to make corrections into the system for the reporting year 2017, which will contribute to the reduction of flow of paper documents.

Algorithms and procedures for retrieving data from the **Information System „Foreign Trade“** were developed for the legal entities, which carried out exports within the reference year and data on employment provided by the National Social Security Institute. An algorithm was also developed in order to compare data from VAT declarations with the turnover of enterprises.

An update of some subsystems of the **Information System „Short-Term Business Statistics“** was carried out in 2017 in order to calculate the required short-term indicators according to the requirements in upcoming for introduction new framework regulation for the integration of business statistics (FRIBS). The existing applications were improved. ISSBS provides an easy and convenient way for online delivery of monthly and quarterly data from reporting units included in the sample. The use of ISSBS contributes both to improve the quality of short-term information through the embedded arithmetic and logical control and to reduce the burden on respondents.

In 2017, **the Information System „Macroeconomic Statistics“** was implemented, which is at present in a period of regular operation.

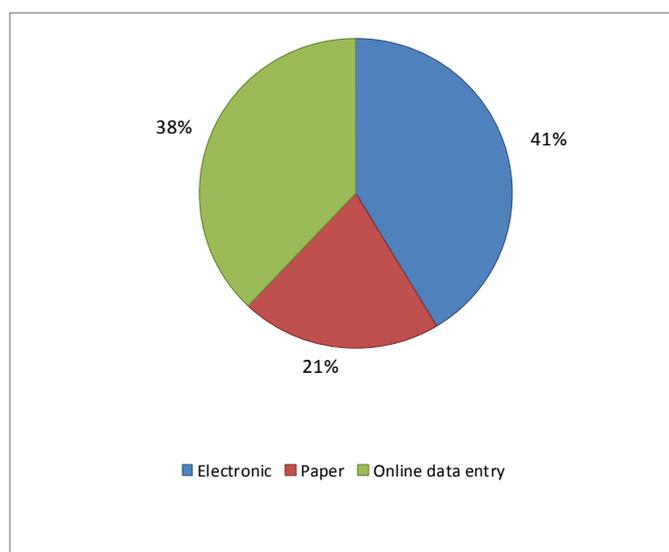
In the field of statistics on justice and crime, a form „Anti-Social Behaviour“ was developed in order to facilitate respondents, to ease of processing and to improve the quality of statistical data.

During the year, the use of tablets and mobile devices to collect primary data was extended. As part of the long-term strategy for use of new technologies to accelerate and facilitate processes for collection and processing of data and to ensure good quality in the field of demographic and social statistics, electronic devices were used to collect information for the purpose of the survey „Statistics on Income and Living Conditions“.

Developing **web applications** facilitated and accelerated work on the entering and control of data and shortened the deadlines for providing the output data. The applications provide both an easy and convenient way of entering data as well as ongoing control during data entry as well as general control of all input data. Appropriate references are provided in the applications in order to monitor the status of input data, the number of respondents answered and other. Both NSI's staff and respondents use the applications. For the needs of different statistical surveys in the NSI, **new web applications** were developed and implemented in the field of statistics on agriculture, environment statistics, statistics on education, statistics on culture, health statistics, statistics on living conditions, structural business statistics and demographic statistics. Among them are: „In-patient and health establishments“, „Prices and indices of feeding“, „Prices and indices of mineral fertilizers“, „Prices and indices of veterinary medicinal products“, „Prices and indices of producer in agriculture“, „Prices and indices of organic farmers in agriculture“, „Prices and indices of seeds and propagating material“, „District Heating and Cooling Systems“, „ESPROSS - Improvement of statistics on Social Protection“. In the field of foreign trade statistics, the NSI enabled users to interactive references through a web-based application for access to multidimensional databases.

In 2017, **79% of the surveys** conducted by the National Statistical Institute in which data collected from respondents **were entered online and by electronic questionnaires** (Figure 4).

**Figure 4. Share of electronic questionnaires for statistical surveys conducted by the NSI via data collection from respondents**



In 2017 regarding current changes in European legislation the efforts were focused on improvement of the system of data collection, development of new tools and updating of existing statistical tools for monthly, semi-annual and annual surveys.

### **Priority 2.3. Implementing a systematic approach for quality management and control in NSS**

The stable quality management of European statistics is a priority direction in the development of the European Statistical System. Quality management of European statistics requires all Member States to implement effectively the legislation in the field of statistics and principles of the European Statistics Code of Practice.

In 2017, the second annual monitoring on the implementation of the „Action Plan for implementation of the recommendations of the Peer Review in the NSI“ was carried out.

At regional level the following activities were carried out in relation to the implementation of Quality management system according to ISO 9001:

- Conducted specialized training for the Regional statistical offices and „Statistical surveys“ Departments related to internal quality auditors according to standard ISO 9001:2015.
- Performed internal audit and recommendations made for adjustments to implemented tool for Quality Management System at regional level.
- Carried out external certification audit, which resulted in quality certificate of electronic services according to the new standard ISO 9001:2015 received by all RSOs.

At national level, within the framework of ISO 9001: 2015 according to ISO 9001: 2015, a regular internal audit and an external recertification audit for the quality of electronic services in NSI were performed.

In the field of Short-term Business statistics the efforts were concentrated on further methodological development and improvement of data quality. In 2017, work continued on the assessment, quality improvement and maintenance of comparability of time series, which are among the main advantages of Short-term Business statistics. The samples of enterprises were updated in order to provide sufficient representativeness and to reflect the changes in the structure of non-financial enterprises.

During the year, the NSI continued to develop and provide to Eurostat **quality reports** for statistical surveys, including quality reports according to the European Standard Structure (ESQRS) in the heading „For users“ and in the newly created sections „Quality reports“ to statistical areas of the NSI’s website. Following quality reports were prepared and provided:

- In the area of demographic and social statistics, the necessary annual quality reports were developed and provided to European commission. They were on demographic statistics, statistics on income and living conditions, statistics on education, health statistics and statistics on residence permits, as well as on extraordinary sample surveys: Adult Education Survey and Survey on Continuing vocational training of employees.
- In the field of macroeconomic statistics report on GNI data quality was prepared for the period 2002 - 2016 year.
- In the field of crop statistics a report on the quality of information was developed and sent to Eurostat.
- Annual reports on data quality in the field of environment statistics and economic accounts.
- According to the requirements of Regulation (EU) No. 995/2012 and of Regulation (EU) No. 859/2013 of the European Parliament and of the Council, the reports on data quality on R&D for 2015 and on ICT usage by households and enterprises in 2017

were provided to Eurostat through ESQR specialized format for online submission of metadata and quality report.

- In accordance with ESQRS 2.0 - Recommendation No. 7 of the Peer Review, reports on the quality of R&D data, budgetary expenditure for R&D, innovation and on ICT usage by households and enterprises were developed and published on the NSI's website.

### II.3. Enhancing the professional and organizational capacity of the National Statistical System

The improvement in the development, production and dissemination of statistical information for users, laid down as a leading objective in the development of the National Statistical System, is impossible without the participation of the key organizational resource, namely human. In this sense, the improvement of qualifications, flexibility and capacity of the NSI's employees is an important precondition towards successful implementation of the priorities set out in the Strategy for Development of the National Statistical System of the Republic of Bulgaria, 2013 - 2017. Not accidentally, in the process of development of the Annual plan for specialized training of the NSI's employees in 2017 specific needs related to the development of methodology and the enrichment of contents of the existing surveys by introducing additional modules and indicators were taken into account.

In connection with the above, a total of 27 trainings to EU training institutions (Table 1) were provided in order to support the development of partnership and cooperation with other statistical offices through the exchange of good practices and experience.

**Table 1. Trainings, seminars and courses of employees of the National Statistical Institute in 2017**

Trainings, seminars, courses	Conducted trainings, seminars, courses	(Number)
		Employees trained
Trainings according to European Statistical Training Programme	27	30
Seminars related to the modernization of surveys included in the National Statistical Programme	24	313
Seminars on improving the professional capacity of the NSI employees	9	273
Seminars on projects	1	38
Trainings on the forthcoming Bulgarian Presidency of the Council of the EU	7	11
Other courses and trainings outside the Annual Training Plan	10	60
Bulgarian Institute of Public Administration (IPA) obligatory training	41	41
<b>Total</b>	<b>119</b>	<b>776</b>

The trainings contributed to the production of high quality statistics in line with the international standards, which means internationally comparable and reliable data. The trainings was in the field of national accounts, combining data from different sources,

implementation of IT tools, financial statistics and energy accounts.

During the year, twenty-four seminars related to modernization of surveys of the National Statistical Programme were held. A total of 313 employees attended from the NSI's Head Office and RSO's Departments.

The priorities of seminars in the field of business statistics were the modernization of Intrastat, the conduction of survey on the ICT usage and e-commerce in enterprises as well as the improvement of the scope and quality of the primary data from enterprises in the construction, transport, trade and services.

The seminars in the field of macroeconomic statistics were related to methodological issues to improve national accounts data and to improve agricultural and forestry surveys in 2017. The household energy consumption theme was also discussed.

The trainings in the area of demographic and social statistics were related to the implementation of Module 2017 Health and Children's Health in the EU-SILC Survey on Income and Living Conditions and the introduction of new core variables in the Household Budget Survey, as well as training of regional health inspectorates on the implementation of new methods of data collection in the field of health statistics.

The rest of the seminars on improving the professional capacity aimed at the examination of the recent situation and the practice of applying the Public Procurement Act, and the work with specialized statistical products.

A total of 273 employees were trained in the seminars on improving the professional capacity.

Involvement of the NSI in the implementation of European projects on the development of statistical methods and conduction of new surveys was crucial for the provision in the Annual Plan for Project Trainings. As a result, the employees trained amounted to 38.

Seven trainings were held in the context of the forthcoming Bulgarian Presidency of the EU Council in 2018 and in relation with the implementation of the Priority 3.4 "Establishment of the NSS as an active member of the European Statistical System and the international statistical community" of the Strategy for Development of the NSS. The Ministry of Foreign Affairs and IPA took part in the organization of these trainings. The target group included senior civil servants and the NSI management. The trainings were focused on the process of negotiating and negotiating techniques, communication skills, the EU institutional framework in the context of the Presidency, the handling of procedures during the Presidency, and others.

The NSI's employees were included in various courses outside the Annual Training Plan in 2017. These courses were aimed primarily at the administrative services and activity of general administration. This can be explained by the fact that the organizer of most of the courses was the Institute of Public Administration in implementation of the project „Capacity building of IPA research, education and application of innovative European practices in good governance“.

There was a very useful cooperation between the NSI and the Centre for Human Resource Development and Regional Initiatives to the Ministry of Labour and Social Policy in the sharing of good practices in human resource management and implementation of the relevant regulatory framework in the different administrations.

The current analysis on enhancing the professional and organizational capacity in the NSI would be incomplete unless a specific group of trainings, namely those of the first-time entrants of civil service, was described. These training are regulated as mandatory in pursuance of the Civil Servant Act<sup>3</sup>. The purpose of these trainings is to support the adoption of new roles and responsibilities which ensure faster and more successful adaptation to the

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<sup>3</sup> Article 35b of the Civil Servants Act (1) First-time entrants of civil service, as well as the civil servants appointed to a managerial position for the first time, shall be subject to compulsory training. The appointing authority shall be obligated to submit a list of those persons to the Institute of Public Administration within one month after the assumption of position.

state administration.

In 2017, the Institute of Public Administration carried out mandatory trainings both for civil servants of expert positions - 41 participants from the Head Office and RSO's departments, as well as for civil servants in management positions - three participants from the Head Office.

### **Priority 3.1. Establishing a motivating work environment and development of professional capacity of the employees in the NSS**

In the dynamically changing conditions in the labour market, development of the employees is an essential prerequisite for the implementation of organizational objectives and tasks. The search and hiring talented people is not a less challenge. The reason is the discrepancy between knowledge, skills and experience that candidates are expected to have, and what they demonstrate in practice.

Overcoming this imbalance is possible by the joint efforts of the academic community and employers. The NSI is a good example in this respect. In implementing the Priority 3.5 of the Strategy for Development of the NSS of the Republic of Bulgaria, 2013 - 2017, the NSI annually attracts trainees from various universities (Sofia University St. Kliment Ohridski, University of National and World Economy, Academy of economics Dimitar A. Tsenov).

The participation of students in organized trainings/practices enabled them to get acquainted with the method of work at the NSI, acquiring valuable work habits and skills. On the other hand, they saw the practical application of knowledge accumulated so far and were able to build valuable professional contacts with their mentors.

In 2017, the NSI accepted a traineeship of 25 young people (Table 3).

**Table 2. Traineeships conducted at the National Statistical Institute**

University/Organization	(Number)
	Traineeships conducted
University of national and world economy – Sofia	23
Sofia University St. Kliment Ohridski - Sofia	1
Bucharest University of Economic Studies - Romania	1
<b>Trainees total</b>	<b>25</b>

The duration of traineeships was different depending on the needs of students. The longest traineeship lasted one month and was organized jointly with the Council of Ministers (Programme for summer student traineeships in public administration). The difference herein was that the initial stage of the application and the subsequent administration of the program were performed by using an online platform.

The NSI successfully implemented the Component 1 of Operational Programme “Career Start” in order to stimulate youth employment. The target group consisted of persons under 29 years of age who do not have professional experience in the completed specialty. As a result of selection, 8 junior experts (of which one expert at the NSI's Head Office and seven - at the RSO's departments) were recruited under labour contract for a period of nine months. After completion of the programme, a part of youth received the chance for permanent realization at the NSI.

### **Priority 3.2. Adapting the organization of work in NSS towards contemporary information and communication technologies**

In 2017, a videoconference was introduced between the NSI Head Office, RSO - Northeast and the Slivek Training Center. It is envisaged to build similar links with the other RSOs.

The possibility of remote work of employees was used during the year, while observing all the security requirements.

A uniform environment for printing, copying and scanning was provided for the needs of the NSI Head Office, which improved the quality of the services provided.

The use of SPSS and SAS analytical platforms for statistical processing was improved making them a major tool for processing statistical information.

### **Priority 3.3. Cooperation and partnership between institutions of NSS and users**

In order to increase efficiency, to achieve optimal organization and coordination of interaction with the institutions and efficient implementation of defined functions and tasks, the NSI, the bodies of statistics and the other state institutions continued their joint work under the concluded agreements in 2017.

In January, the National Statistical Institute and the Ministry of Agriculture, Food and Forestry signed an Agreement for cooperation and strategic partnership in information exchange.

The agreement with the Bulgarian Academy of Science was updated in May, and an Annex to the agreement with the Institute for Population and Human Studies at the Bulgarian Academy of Sciences was signed in June.

In September, the Agreement for cooperation and strategic partnership with Academy of economics Dimitar A. Tsenov was renewed.

In October, the NSI concluded a new agreement with the Agency for Geodesy, Cartography and Cadastre due to changes in the Law on Cadastre and Property Register.

The NSI's employees actively participated in the work of the Monitoring Committee of the Operational Programme "Innovation and Competitiveness" 2014 - 2020.

In the field of transport statistics, the efforts continued in order to achieve more effective interaction with the following institutions providing primary data for the production of official statistics:

- Directorate General "Civil Aviation Administration" to the Ministry of transport, information technology and communications - data on activities of the civil aviation in the Republic of Bulgaria;
- Executive Agency "Maritime administration" to the Ministry of transport, information technology and communications - data on activities of maritime ports and inland waterway ports;
- Ministry of Interior:
  - Directorate General "National Police" – data on road traffic accidents, persons killed and injured; data on motor vehicle registrations;
  - "Communication and information systems" Directorate - data on registered motor vehicles needed to conduct sample survey on freight road transport.
- Road Infrastructure Agency - data on national road network by road category and by type of pavement;
- National Railway Infrastructure Company - data on the length of railway network - total for the country and by region;
- Executive Agency "Automobile Administration" to the Ministry of transport, information technology and communications - data on licensed carriers of passengers and goods for domestic and international transport; data on the number of licensed taxis and cars owned by them.

### **Priority 3.4. Establishment of the NSS as an active member of the European Statistical System and the international statistical community**

#### **Participation of the NSI in the European Statistical System**

The National Statistical Institute actively participated in all four regular meetings of the European Statistical System Committee.

In 2017, eight framework positions were prepared on comitology items under the agenda

of meetings of the ESSC which under Council of Ministers Decree No. 85/2007 were agreed in the Working Group 12 “Statistics” and endorsed by the Council for European Affairs.

The National Statistical Institute, representing the Working Group 12 “Statistics”, regularly participates in regular meetings of the Council for European Affairs where the positions of the Republic of Bulgaria are considered in relation with the obligations deriving from membership in the European Union.

In March, the NSI also took part in a seminar of the Directors-General on the priorities of the ESS after 2020 in Sliema, Malta, organized under the Maltese Presidency.

The President of the NSI participated in the 103 Conference of the Directors-General of the National Statistical Institutes in Europe (DGINS), which was held in September in Budapest, Hungary. The topic of the conference attended by representatives of the candidate countries was „Migration Statistics“.

During the reporting period a total of 73 NSI’s experts participated in the meetings of working and target groups of Eurostat developing strategic documents, legal acts and new methodologies in specific statistical domains.

- A total of 39 experts participated in international seminars and conferences.
- 60 Bulgarian experts and 24 foreign experts participated in international meetings on projects.
- A total of 27 NSI’s experts were trained according to the European Statistical Training Programme which offered a total of 60 training courses for 2017. All training courses completed successfully.

### **Preparation of Bulgaria for the presidency of the Council of the European Union**

In 2017, the Presidency of the Council of the European Union was taken over by Malta and Estonia (the Maltese and Estonian presidencies). Fourteen meetings of the Working Group „Statistics“ to the Council were held, including seven in the Maltese presidency and seven in Estonian. The NSI was involved in the decision-making process in the field of statistics by seconding its representatives to the meetings of this preparatory body of the Council of the EU.

During the Estonian Presidency (July - December 2017), three new dossiers were opened and the NSI drawn up framework positions on them:

- Proposal for a Regulation of the European Parliament and of the Council on the harmonization of gross national income at market prices (GNI Regulation) and repealing Council Directive 89/130 / EEC, Euratom and Regulation (EC, Euratom) No. 1287/2003 of the Council;
- Proposal for a Regulation of the European Parliament and of the Council on railway transport statistics (recast);
- Proposal for a Regulation of the European Parliament and of the Council on statistics on goods carried by inland waterways (codified version).

In January, the NSI participated in a seminar of the European Statistical System within the framework of the Maltese Presidency and the third work package of the ESS.VIP project DIGICOM („Digital communication, User analytics and Innovative products“) entitled „Dissemination of official statistics as open data“ in Valletta, Malta.

**The trainings for the Presidency team** organized by the National Center in partnership with the Permanent Representation of the Republic of Bulgaria to the EU and the General Secretariat of the Council of the EU were conducted in implementation of Measure 6 „Organizing and conducting trainings provided by the General Secretariat of the Council of the EU“ of the Plan for the Preparation of the Bulgarian Presidency of the EU Council in 2018.

Each member of the Presidency team had a prescription for mandatory training courses in

accordance with his/her position in the team. Particular attention was paid to FG 5 and FG 6 members, or to the chairmen and deputy chairmen of Working Group to the EU Council.

In January, the Permanent Representation of the Republic of Bulgaria to the European Union in Brussels held the first training of the General Secretariat of the Council of the EU for the chairmen and deputy chairmen of working groups of the FG5 of the Presidency team. One of the Deputy Presidents of the NSI and member of FG 5 participated in the training.

The seminars were followed by a series of seminars in Sofia aimed at the presidents and deputy presidents of the preparatory bodies of the Council of the EU. These seminars took place between March and June 2017. The President of the NSI participated in the seminars as a member of the FG 5.

In February, the National Center for Preparation and Conduct of the Bulgarian Presidency of the EU Council in 2018 organized in Sofia the first seminars of the General Secretariat training program for the Presidency team. The trainings were intended for coordinators and participants were: the teams of the main horizontal structures on the coordination issues of the Presidency - the National Center for Preparation and Conduct of the Bulgarian Presidency of the Council of the EU in 2018, Directorate for Coordination of EU Affairs to the Council of Ministers, representatives of Directorates of the Ministry of Foreign Affairs, as well as two representatives with a coordinating function from all the central institutions. About 100 officials from the Bulgarian administration were trained within the two one-day long seminars. Two NSI employees participated in the seminars.

Officials of the General Secretariat of the Council of the EU were lecturers of all seminars and they presented a variety of topics of interest to the target group, such as: role of the rotating Presidency of the Council of the EU and the preparation of Bulgaria, role and functions of the General Secretariat of the Council of the EU in supporting the operational work of the Presidency, main planning tools of the Presidency, need for coordination between Sofia and Brussels, procedure rules of the Council of the EU, EU documentation, and others.

The seminars passed very successfully due to the good coordination between the National Center and the training team of the General Secretariat of the Council. Both sides - lecturers and participants - pointed the high professionalism in the organization of the seminars. The lecturers expressed their excellent impressions of the target groups, their questions and the expressed interest in the successful preparation of the Bulgarian Presidency. The trained employees shared their positive opinion of the high level of competence and shared practical experience of the officials of the General Secretariat of the Council of the EU.

In the context of the upcoming Bulgarian Presidency of the Council of the EU, an international seminar entitled „The European Statistical System - conducting the Presidency of the Council within the ESS“ was held in Sofia in mid-October. The purpose of the seminar was to acquaint the Presidency team with preparation, holding of meetings and leading the working groups. The lecturers were two officials of the Statistical Office of Denmark who specialized in holding courses in the Member States before the rotating presidency of their country of the Council of the EU. The last two courses were held in Malta and Estonia. The seminar was attended by the NSI Presidency team, experts from the Ministry of Agriculture, Food and Forestry, the National Revenue Agency and the Bulgarian National Bank, the President and Director of the “European Affairs and International Cooperation” Directorate of the National Institute of Statistics of Romania, officials from the “International Relations” Directorate of the Statistics Austria. The purpose of the training was to acquaint the participants with the preparation and holding of meetings, the institutional and procedural contexts as the basis for the Presidency of the Council of the EU and the leadership of the working groups. The training focused on the overall process of the Presidency of the Council of the EU and the challenges faced by the teams. Role games for presidency and participation were held in the Working Group “Statistics” of the Council.

Deputy Chairman of Working Group B.8 „Statistics“ of the Council of the European Union is the Deputy President of the NSI, who, together with the NSI employee appointed as coordinator for the Bulgarian Presidency of the same WG, presented our country upon the

adoption of the rotating presidency in the field of statistics of the trio Estonia - Bulgaria - Austria from the trio Netherlands - Slovakia - Malta. The ceremony to hand over the Presidency, attended by representatives of the European Commission (Eurostat), took place on 27 June in Malta.

At the end of October 2017, the NSI Leadership took part in an informal meeting of the Presidency trio Estonia - Bulgaria - Austria on topics of the agenda of the Presidency of the Council of the EU.

### **Strengthening cooperation within international organizations in the field of statistics**

The President of the National Statistical Institute took part in the forty-eight regular session of the United Nations Statistical Commission, which was held in March at the UN Headquarters in New York. A number of issues of global importance for the development of statistics worldwide were discussed within the forum.

The 14th meeting of the Committee on statistics and statistical policy of the Organization for Economic Cooperation and Development was organized in late April in Paris, France. The meeting was attended by one of the Deputy Presidents of the National Statistical Institute. The visit continued with participation in the 65th Plenary Session of the Conference of European Statisticians.

In June 2017, the President of the NSI participated in Joint UNECE/Eurostat Workshop on Implementing the Common Statistical Production Architecture - CSPA, held in Geneva, Switzerland.

### **Strengthening regional cooperation**

Between September and early October 2017, the National Statistical Institute **organized for the first time training** of 24 young specialists from the statistical offices of Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova and Ukraine. The training was carried out in the framework of the Programme “Bulgarian Development Aid” (“Building of Administrative capacity and democratic institutions”) of the Ministry of Foreign Affairs of the Republic of Bulgaria. The objective of the Programme is to support the strengthening of the institutional and administrative capacity of partner countries of the Western Balkans and the Black Sea region. The course was entitled “Introduction to the Theory and Organization of Statistical Surveys”. The training was organized by the “Methodological and Training Center” Directorate of the NSI and the Center for Statistical Studies of the University of National and World Economy. The course took place at the NSI’s Training and Qualification Centre in Slivek and at the Training Centre of the University of National and World Economy in Ravda. During the training, the participants acquainted with the practical aspects of statistical surveys conducted in Bulgaria in the field of demographic, macroeconomic and business statistics as well as some new methods for data collection, including the so-called Big Data.

Two **study visits** were carried out during the year:

- In late May, the NSI hosted a study visit of experts from the Statistical Office of Croatia. The aim of the meeting was to present the Bulgarian experience in the field of e-census. The Bulgarian experts introduced their Croatian colleagues to the preparation, organization and conducting of the e-census in 2011.
- In November, the NSI hosted a study visit (in the framework of IPA 2014 Multi-Beneficiary Statistical Co-operation Programme) of experts from the State Statistical Office of the former Yugoslav Republic of Macedonia. The purpose of the training was to acquaint the Macedonian statisticians with the National Statistical System of Bulgaria and the Bulgarian experience in the field of quality management within the NSI.

### **Participation of the NSI in European projects**

The National Statistical Institute successfully continued to perform the tasks associated

with participation in projects of the European Commission, as well as projects on a bilateral and multilateral basis with the statistical offices of the Member - States, implementation of projects under the EC programs in the Western Balkans, European Neighborhood Policy and Eastern Partnership. In 2017, the NSI successfully completed the implementation of **14 projects** funded through grants by the European Commission and co-financed by the state budget in the area of macroeconomic statistics, demographic and social statistics, business statistics and multi-domain statistics. During the year, the NSI applied and signed contracts with the European Commission for **22 new projects**, which are intended to be implemented in the period 2017-2020. The projects are included in the Annual Programme of Eurostat for 2017 and are in pursuance of Regulation (EU) No. 99/2013 of the European Parliament and of the Council on the European Statistical Programme for the period 2013 - 2017.

In 2017, the NSI continued to implement the two-year **twinning project** AZ/14/ENP/ST/32 “Support to the State Statistical Committee in harmonization of the National Statistics System of the Republic of Azerbaijan in line with EU standards”. The NSI participates in the project as a junior partner of the Federal Statistical Office of Germany (DESTATIS). Sixteen expert missions were carried out with the participation of 21 experts from the NSI. The twinning project completed in late November with a final conference in Baku, Azerbaijan, with a high praise for the work of Bulgarian experts on all five components. Within the project, the NSI hosted a five-day study visit of officials from the State Statistical Committee of the Republic of Azerbaijan. The training was entitled: “Modernization of the National Statistical System via institutional restructuring, sharing practice of Bulgaria”. The main objective of the visit was to acquaint the experts with the institutional reform carried out at the NSI in 2015 and its influence on the quality of statistical surveys in the Regional Statistical Offices, and implementation of the quality standard ISO 9001: 2015 at regional level.

In 2017, the National Statistical Institute participated as a partner in two projects within the framework of **transnational programs**:

- The project “Improving institutional capacities and fostering cooperation to tackle the impacts of transnational youth migration (YOUMIG)” started in the beginning of the year and realized within the Danube Transnational Programme (Interreg - Danube Transnational Programme - ERDF). The project aimed at evaluation of youth migration and measurement of well-being of youth in the region. The project duration is 30 months. The YOUMIG partners are local government bodies, research institutes, universities and statistical offices of eight countries (Hungary, Austria, Bulgaria, Germany, Romania, Slovakia, Slovenia and Serbia). The project’s lead partner is the Hungarian Central Statistical Office. The YOUMIG project aims to foster development at a local government level and make municipalities capable of tackling the challenges posed by youth migration through boosting migration data accuracy and knowledge exchanges on a transnational basis. YOUMIG includes six working packages: Management; Communication; Qualitative research - conceptual overview and fieldwork; Quantitative research (data and indicators, survey); Pilot actions (mini-projects for young migrants, establishing a migration team within the municipality) and Building strategies. The National Statistical Institute takes part in the activities of all work packages of the project.
- The project “SME Innovation Capacity Boost - **SMEInnoBoost**” was implemented within the framework of the transnational program “Balkans - Mediterranean 2014 - 2020” (Interreg - Balkan-Mediterranean 2014 - 2020) and aimed at enhancing the innovation potential of small and medium-sized enterprises in the region. The project started in the beginning of August 2017 and has a duration of 24 months. The objective of the project is to boost the transnational innovation capacity of SMEs and to support the creation of sustainable networking formations, including innovation clusters with other SMEs in the Balkan-Mediterranean region, in order to share know-how and to develop innovation through the creation of tripartite partnerships to

provide SMEs with relevant data, tools and systems. Partners of the project are the statistical offices of Bulgaria, Albania and the former Yugoslav Republic of Macedonia, the National Association of Small and Medium Businesses, the Science and Technology Park of Crete at the Foundation for Research and Technology - Greece, the Institute of Information and Communication Technologies at BAS, Foundation for small and medium-sized enterprises - Skopje, the former Yugoslav Republic of Macedonia, the Regional Development Agency of the Korce, Albania; monitoring partners - the Software Engineering and Internet Technologies Laboratory at the University of Cyprus and the Innovation and Technological Development Fund of the former Yugoslav Republic of Macedonia. Leading partner is the National Association of Small and Medium Business in Bulgaria.

### **Participation of the NSI in projects under operational programmes**

During the year, the National Statistical Institute started to work on two projects implemented with the financial support of **Operational program “Good Governance” 2014 - 2020**, co-financed by the European Union through the European Social Fund:

- Project “Implementation of CAIS “Single entry point” for submission of annual financial statements and statistics in machine-readable format and integration with the NRA, NSI, RA (TR)” with duration of 18 months and total amount of 0,6 mln BGN. The implementation of the project aims to reduce the administrative burden on businesses by submission of all the information required by the NRA, NSI and RA in a single place - in NSI’s IS “Business statistics” with the expressed consent of the respondents. The submission of AFS is among the most frequently used administrative services and by joining the TR to the “Single entry point”, the enterprises will be able to fulfil their obligations to RA for publication of AFS. The project started in March 2017 and the following activities were carried out by the end of the year:

The NSI together with the RA made a review of the applicable legislation in order to identify the existing obstacles for the exchange of machine-readable data between the NSI and the RA. This activity resulted in an analysis prepared with concrete proposals for amendment of normative acts. The analysis was sent to the Ministry of Justice, the Ministry of Finance, RA, NRA, the corresponding Deputy Prime Ministers and the State e-Government Agency. Changes in the legal framework are a necessary condition for the implementation of part of the envisaged project activities.

A Technical Specification was prepared to implement an integrated interface for submitting the necessary information from the NSI to the Trade Register (TR) in connection with the requirements to legally obliged persons for submission of AFS.

The implementation of the project also depends on the realization of the RA project “Upgrading the Trade Register in order to ensure the transfer of the registration of the non-profit legal entities from the regional courts to the Registry Agency as well as to ensure its integration with the property register, the single entry point for submission of annual financial statements, the register of the professionally qualified persons, the register for civil registration, the register of the Bulgarian identity documents and the register of the power of attorney”. This project should provide the opportunity to accept the data from the AFS sent by the NSI.

- The project “Aligning of the NSI information assets in accordance with Eurostat requirements and migration to Hybrid Private Cloud” started in late January. The implementation period is 18 months and total project cost is over 1.5 mln BGN. The project started in January 2017 and should complete in February 2018. The activities run on schedule. The project is a keystone to the other NSI projects. Its aim is to ensure the necessary infrastructure, capacity and management for the next projects. Bulgaria has a commitment to Eurostat to be certified in relation to information security in 2018.

- The project for building Information System “Statistical base and Information system for monitoring of European and national strategies and regional policy” is under implementation. The main objective of the project is to develop a statistical framework and procedures for collection of information on monitoring the implementation of national and European strategies in order to use them in decision-making and policy implementation as well as to optimize the activities of the administration at national and regional level through exchange and fuller use of available information to improve monitoring of policy implementation. The following activities implemented during the year: review, analysis and assessment of the current situation and information provision of the monitoring of the national and European strategies; developed technical specification and documentation for conducting a procedure for the selection of a contractor under the Public Procurement Act; launched procurement procedure for the development of application software; a working seminar held with representatives of the central administration and implemented measures for information and publicity.

### **Priority 3.5. Active cooperation with the academic society in the development of new statistical methods, products and services**

Since 2015, the NSI established Scientific - Expert Council as an advisory body to the President of the NSI. The council consists of representatives of the academic community as well as leading experts from the NSI.

In 2017, the NSI co-organised **two scientific conferences**:

- Scientific and practical conference “Statistics as science and practice - traditions and modern dimensions” at D. A. Tsenov Academy of Economics - Svishtov;
- National scientific conference "Guidelines and Problems of the Application of Statistics, Information Technologies and Mathematics in the Socio-Economic Area" at the UNWE - Sofia.

## **II.4. Implementation of innovative and effective information and communication technologies and e-services**

### **Priority 4.1. Development of information systems and e-services in order to reduce the respondents' burden, increase the quality of statistical information and improve the methods of its dissemination**

The NSI continued to develop and implement new information systems and web-based applications for the needs of different statistical surveys.

The activities on project “Implementation of CAIS “Single entry point” for submission of annual financial statements and statistics in machine-readable format and integration with the NRA, NSI, RA (TR)” started in 2017. The project is implemented by the NSI under Priority Axis 1 „Administrative Services and e-Governance“. An analysis of the legal acts and work processes with respect to the automated data exchange between RA and NSI carried out in the frame of the project. A Technical Specification was prepared to implement an integrated interface for submitting the information to the Trade Register in connection with the requirements to legally obliged persons for submission of annual financial statements to the RA. The Technical Specification is pending for approval by the State e-Government Agency.

As part of the State Administration, the National Statistical Institute is obliged to publish public information on the Portal for open data of the Republic of Bulgaria. Data should be in open machine-readable format allowing the reuse. In pursuance of the Roadmap for the implementation of the Common strategy for e-government of the Republic of Bulgaria, 2011 - 2015, the NSI extended the scope of published open data on demographic and business statistics and their number reached to 37. The selected data sets are updated automatically and simultaneously with the updating of the data in the Information System „Infostat“.

The implementation of the project “Aligning of the NSI information assets in accordance with Eurostat requirements and migration to Hybrid Private Cloud” is at an advanced stage. This will provide opportunity for development, construction and implementation of the “Information Security Management System in the NSI” in order to comply with Eurostat's requirements for microdata exchange and certification under ISO / IEC 27001.

**Priority 4.2. Implementation of unified European IT tools, products and standards in order to ensure conditions for integration and harmonisation of statistical production process in the framework of ESS**

The application of technical and statistical standards of the European statistical system is a fundamental principle in activities of the NSI. The scope of data sets exchanged between the NSI, the Bodies of statistics and international institutions continuously expanded.

The process of implementation of the SDMX standard for data exchange in new statistical fields continued. During the year the transition from standard SDMX 2.0 to standard SDMX 2.1 was carried out.

**Priority 4.3. Increasing the effectiveness and allocation of resources in the Data center by implementation of best practice and technologies for infrastructure management**

In 2017, the NSI designed and built the premises for a modern data center meeting all the requirements for the storage and protection of data and information assets. The core of the communications infrastructure was completely redesigned and the active equipment met the new standards for performance, reliability and security. The construction of the new NSI data center completed during the year. The migration of equipment into the new data center implemented successfully without seriously interrupting the provision of information services to citizens and employees.

The NSI prepared for information security certification in accordance with the requirements of the standard ISO / IEC 27001, which should implement by the end of 2018.

The local network was completely redesigned and segmented at the NSI Head Office and modern active equipment was installed. Specialized premises for the Data Center were built in accordance with the requirements of the standards for security and data protection.

**Priority 4.4. Development and upgrading of server and communication infrastructure and personal equipment in order to ensure the ICT development and provision of new services**

The NSI started activities on project “Aligning of the NSI information assets in accordance with Eurostat requirements and migration to Hybrid Private Cloud”. The main objective of the project is to align the NSI information assets in accordance with the ISO / IEC 27001: 2013 „Information Security Management System” by providing server infrastructure, storage infrastructure, software for creation and management of backups and network components. After the implementation of the project, the technical and software resources used will be included as elements of the Hybrid Private Cloud.

### **III. REPORT BY THEMATIC DOMAINS**

#### **III.1. Demographic and social statistics**

##### **Demographic statistics**

In 2017, main priority in the field of demographic statistics was the conducting of statistical surveys included in the National Statistical Programme. The regular processing and production of data from the surveys on fertility, mortality, migration, marriage and divorces,

continued. They provided the necessary information for calculation of the number and structures of population and main demographic indicators in accordance with the requirements of Regulation (EU) No. 1260/2013 of the European Parliament and of the Council on European demographic statistics.

The work continued and the scope of the data provided was extended according to Art. 6 of Regulation No. 862/2007 of the European Parliament and of the Council on “Statistics on residence permits and residents of third countries”.

In 2017, the NSI continued the work on project “Urban audit 2015”, which will be implemented in the period 2016 - 2018. The aim of the project is to provide reliable, complete and comparable in geographic and temporal aspect information on urban areas on the European continent through collection of large data volumes from different statistical surveys. Bulgaria has participated in data provision since 2004. In 2017, the NSI signed a new agreement with Eurostat on the same subject, according to which the work will be carried out in the period 2018 - 2020, and the data to be provided is for the 2017 and 2018 reference years.

In 2017, the NSI signed a grant agreement entitled “Modernisation of the Harmonised European Time Use Survey”. Work on this project started in September and will last for two years. The aim is to test new methods and tools in conducting the survey, which could lead to cost saving in carrying out the survey at intervals shorter than ten years, as it is the practice so far.

During the year, NSI experts actively participated in the new YOUMIG project aimed to foster the local governments in tackling the problems posed by youth migration in Danube region. The purpose of the project is to strengthen institutional capacity, to improve the decision-making conditions aimed at human capital in the region.

The NSI completed the project “Poverty mapping”, which started in 2016 as a part of the Government and the World Bank programme. The project implemented jointly by experts of the NSI and the World Bank and its results were presented in 2017.

### **Labour market**

In 2017, the NSI started conduction of the Labour Force Survey ad hoc module on self-employment as well as preparation for the upcoming Labour Force Survey 2018 ad hoc module on reconciliation between work and family life. Experts in Labour Force Survey participated in working groups and preparation of opinions related to the provision of harmonized definitions used in the Labour Force Survey, which will be included in the future framework regulation for the integration of European social statistics.

In the field of enterprise statistics on wages and labour costs, the work continued on regular annual and short-term surveys on the employment and labour costs.

### **Education and Lifelong Learning**

The regular exhaustive statistical surveys on educational institutions in Bulgaria carried out in 2017 in accordance with the requirements of the national and European legislation under Commission Regulation (EU) No. 912/2013 concerning the production and development of statistics on education and lifelong learning. The NSI provided data in compliance with the joint questionnaires from Eurostat, Organization for Economic Cooperation and Development, and UNESCO for financial and non-financial indicators in the field of education statistics.

The results of the two additional sample surveys in households (“Adult education survey”) and businesses (“Continuing vocational training of employees”) were published during the year, have been. In accordance with the European regulations, the NSI developed and provided micro-data sets, control tables with the main results, and quality reports for the European Commission.

In 2017, the regular surveys on schools and kindergartens included pilot specialized

sections to collect information on the availability of gymnasiums and sports facilities. The NSI developed the methodology jointly with the Ministry of Youth and Sports.

## **Culture**

In 2017, the NSI carried out regular exhaustive statistical surveys in the field of culture (libraries, museums, performing arts, film production, cinemas, radio, television and publishing activity) on the base of methodology corresponding to the requirements of Eurostat and UNESCO.

The work continued on updating the national methodological system of statistics on culture as well as implementing the priorities in the work plan for culture 2015 - 2018 proposed by Cultural Affairs Committee to the Council of the European Union.

## **Public health and health and safety at work**

In implementation of Regulation (EC) No. 1338/2008 of the European Parliament and of the Council on statistics on public health and health and safety at work, in 2017 the NSI conducted regular statistical surveys providing information in the area of resource statistics of the Health system and deaths by causes.

For the first time in 2017, the NSI used the web-based application “Health establishments” as a basic tool for online collection of annual statistical information on resources of the Health system.

The NSI provided data in compliance with the joint questionnaires of Eurostat, OECD and World Health Organization for the financial and non-financial indicators in the field of health statistics.

Pursuant to Regulation (EU) No. 328/2011 of the European Commission in the field of statistics on deaths by cause, the NSI sent to Eurostat individual data on deaths and stillbirths by cause for 2015 at the level of the fourth character of the International Classification of Diseases, Tenth revision.

**The National health data and e-health directorate at the National center of public health and analyses** fulfilled all the tasks included in the National Statistical Programme for 2017. As a Body of statistics and through the regional health inspectorates, the NCPHA carried out the planned surveys and disseminated information on: out-patient and in-patient health establishments, psychiatric establishments, dermato-venereal establishments, emergency healthcare centers, oncological establishments, pneumophthiziatric establishments, centers for transfusion hematology, centers for hemodialysis, registered cases of active tuberculosis and chronic non-specific lungs diseases, malignant neoplasms, venereal diseases, registered cases of infectious diseases, hospitalized cases in health establishments with stationary, and certified and re-certified persons with disabilities, type and degree of disability.

## **Incomes and living conditions**

In 2017, the NSI continued the regular collection and publication of quarterly and annual data on Bulgarian households' income, expenditure and consumption and providing quarterly and annual weights to calculate the harmonized and national consumer price index and national accounts. The Household Budget Survey additionally collected information on kind of trade premises from which the households are shopping and availability of cash receipt for the purchase of goods and services.

On the base of Household Budget Survey data, the NSI calculated Poverty Indicators at national level and by specific groups according to methodology adopted by the Council of Ministers for calculation of the official poverty line in Bulgaria. Poverty line for the country for 2018 was established on the base of these indicators.

The NSI conducted regular panel survey „Statistics on Income and Living Conditions“ (EU-SILC 2017) in implementation of Regulation (EC) No. 1177/2003 of the European

Parliament and of the Council. The module “Health and Children's Health” was included to the survey in 2017 under Commission Regulation (EU) No. 114/2016. The module collects information on financial burden of the household as a whole related to the costs of medical and dental services, periodicity of visits and consultations with a GP and specialist, carrying out physical activities at work and out of work, calculation of body mass index. Children's health issues (0 - 15 years) relate to the general health of children in the household, the limitation of activities due to health problems, unmet needs of dental or medical examination and treatment.

During the year, the NSI finalized and submitted to Eurostat the main data files from the SILC 2016, the accompanying indicators for poverty and social exclusion, and the longitudinal component 2011 - 2016 which contained information on households surveyed over the last six years.

In 2017, the NSI started implementation of the EC grant agreement “Preparation for the revision of EU-SILC - Testing of rolling modules on Health (second priority) in EU-SILC 2017”. In line with the project objectives, the following activities were carried out during the year:

- Studying the recommendations of the ESS agreement on additional health variables (second priority) on technical characteristics; the descriptions of the module variables, the questionnaire proposal, the national practices in this area.

- Preparation of a health questionnaire in accordance with European requirements using the suggested questionnaire model and national features.

- Preparing an interviewer instruction for the variables from the module.

- Training of the experts involved in the project.

- Elaboration a program for inputting primary data.

- Fieldwork. The data were obtained by personal interview or by paper questionnaire or electronic questionnaire (CAPI interview) with regular survey.

- Data processing, weighing and presentation of results at national level.

- Elaboration a program for the transcription of primary data and obtain the specific variables for the module in accordance with the recommendations of the ESS agreement.

### **Social protection**

In 2017, the production of statistical data for 2015 under the Core system and the Module on pension beneficiaries completed in accordance with Regulation (EC) No. 458/2007 of the European Parliament and of the Council concerning the European system of integrated social protection statistics. The Core system contains data on revenue and expenditure by social protection schemes and by function. The NSI followed the requirements of Regulation (EU) No. 110/2011 of the European Commission on the appropriate formats for data transmission, results to be transmitted and criteria for measuring quality in relation to the ESSPROS module on net social protection benefits. The information systems and registers of ministries and institutions governing social protection schemes are data source for social protection statistics. The National Social Security Institute provided annual data on pension beneficiaries by scheme, pensions by type and by sex in accordance with the format for transmission of information on Module on pension beneficiaries.

In 2017, a work under Grant agreement with the European Commission on „Enhancing Social Protection Statistics (ESSPROS)“ started. The main objective of the project is to improve the timeliness of ESSPROS data by improving the efficiency of production of

ESSPROS statistics, maintaining their quality at a high level and improving the interface for sending data to Eurostat.

For the implementation of the project objectives, following activities were completed during the year:

- updating of the ESSPROS national manual including changes to national social protection legislation;
- Studying the possibility of obtaining data from their sources within shorter terms;
- Development for ESSPROS database;
- Development of software for automatic calculation of the distribution by institutional sectors and by type of the insurances provider of the employers and the persons;
- Study on the possibility of alignment with national accounts data;
- Implementation of SDMX standards and tools for regular data collection.

### **Crime and justice**

In 2017, the NSI continued activities related to conducting the regular statistical survey on the crimes, accused and persons convicted (including convicted juveniles) and the activities of the Local commissions for prevention of juvenile delinquency.

In NSI started preparatory activities related to the forthcoming step by step introduction of the International classification of crimes for statistical purposes into practice. It was adopted in 2015 by the 46th session of the UN Statistical Commission, as an international statistical standard for data collection in the field of justice and the process of adapting national data to the requirements of the standard.

A representative of the NSI participated in the activities of Interinstitutional council for management and control of the Unified Information System against Crime (UISAC).

In 2017, the NSI continued to fulfill its commitments as a national coordinator in the field of crime and criminal justice in the collection and transmission of national data and metadata from Ministry of Interior, Ministry of Justice, Supreme Judicial Council, Supreme Cassation Prosecution Office, and other responsible institutions at the request of European Commission, Eurostat, United Nations, UNICEF and other international organizations.

A study on the availability of data for the updated Criminal Justice and Criminal Justice Surveillance Questionnaire of the United Nations Office on Drugs and Crime and Eurostat, harmonized with the requirements of the International Classification of Crime for statistical purposes was conducted. NSI participates in the collection process of the required information together with the responsible ministries and agencies in the country.

In 2017, the NSI continued the cooperation with a number of international institutions by providing national data for persons assisting foreigners to reside or cross the country in violation of the law in connection with an EC survey on illegal migration.

Together with other responsible institutions in the country, the NSI took part in a Eurostat survey on the data availability in EU Member States on human trafficking related to the fulfillment of the obligations resulting from Directive 2011/36/EU of the European Parliament and of the Council on preventing and combating trafficking in human beings and protecting its victims.

NSI experts took part in a bilateral meeting Bulgaria - Romania, organized by the European Institute for Gender Equality on theme „The role of law enforcement and judicial authorities in the process of collecting comparable data on violence against women.“

## **III.2. Macroeconomic statistics**

### **Annual economic accounts**

The main tasks in the field of national economic accounts were related to the timely

development and provision of data under the Eurostat National Accounts Data Submission Program. The work continued on methodological development and improvement of data quality as well as on increasing the degree of harmonization with the EC regulations and shortening of the deadlines for data provision. The NSI continued regular production of annual data on GDP and its components by three methods - production method, method of income and method of final consumption expenditure. Annual data on employment and hours worked, regional accounts, quarterly and annually accounts by institutional sector were developed and published.

The NSI took active part in joint projects with Eurostat and EU Member States in order to provide optimum methodological compliance of the indicators of national accounts between the Member States.

The work on development and improvement of financial national accounts continued in 2017. Data for 2016 were developed and provided in 2017 in pursuance of Eurostat's program on data provision in the field of national accounts.

In 2017, the work finished on the grant agreement with the European Commission entitled „Progress towards full implementation of the ESA 2010 and its transmission programme for quarterly and annual National Accounts and lifting of respective derogations, full implementation of SDMX for National Accounts, development and implementation of quality framework for National Accounts data”. According to the agreement were developed: Table 29 of ESC 2010 for accrued at the moment current pension rights with data for 2015; Report - Description of sources and methods for estimating GDP and GNI data; translation of the Eurostat Guide for Regional Accounts; applying validation procedures concerning data in the field of national accounts; quality reports for tables according to the Eurostat National Accounts Data Submission Program.

### **Quarterly accounts**

The NSI continued regular production of quarterly data on GDP and its components by three methods - production method, method of income and method of final consumption expenditure.

The NSI continued to develop and publish data on: GDP at 42 - 45 days, and 60 days after the reporting period.

Also NSI continued to develop and publish data on employment and man-hours worked. The NSI took part in the Eurostat initiative for experimental data transmission of employed persons, 45 days after the reporting period.

### **Government finance statistics**

The efforts in the field of government finance statistics were orientated towards further methodological development and improvement of the data quality.

The NSI continued to work on reporting Notification tables on deficit and debt of General Government sector semiannually - preliminary and final data. Data for the period 1997 - 2016 were developed and provided in accordance with ESA 2010.

The work continued on development and publication of monthly, quarterly and annual data on the deficit of EU Member States in accordance with the obligations under the Council Directive 2011/85/EU.

According to the requirements to provide additional data pursuant to Directive 2011/85/EU, the work continued on provision of information on an annual basis for non-performing loans to “General Government” sector; obligations of state-owned enterprises and government involvement in the capital of enterprises as a percentage of GDP.

The NSI and NSSI jointly provided an additional information on the table 9 “Taxes and social contributions by sectors of General Government” of Eurostat's programme on data

provision in the field of national accounts for 2016.

Revised data according to ESA 2010 were developed and submitted in compliance with the Eurostat's program on data provision in the field of national accounts:

- Table 2 “Main macroeconomic indicators for the General Government sector” for 2015;
- Table 9 “Taxes and social contributions by sectors of General Government” for 2015;
- Table 11 “General Government sector costs by functions” total and by subsectors at second level according to COFOG classification for 2015;
- Table 25 “Quarterly non-financial accounts for General Government sector” for the period 1999 - 2015.

### **Monitoring own resources**

According to Art. 2, paragraph 2 of the Council Regulation (EC, Euratom) No. 1287/2003 of 15 July 2003 on the harmonization of Gross National Income at market prices, each year before 22 September, the Member States are obliged to provide the European Commission (Eurostat) in the context of national accounting procedures with figures for GNI and its components. The main tasks in the field of monitoring own resources referred to data provision on gross national income, report on data quality and description of the sources and methods used to develop the data. Based on these documents, Eurostat assesses the quality and exhaustiveness of data on GNI and their compliance with the ESA 95 and ESA 2010.

The NSI developed data on weighted average VAT rate for 2016. They were based on the developed methodology and calculation of the weighted average VAT rate in accordance with Art. 4 of Council Regulation (EEC, Euratom) No. 1553/89 of 29 May 1989 on the definitive uniform arrangements for the collection of own resources of the EU on the basis of value added tax and “Manual of administration of the European Communities’ own resources in the Republic of Bulgaria” by the Ministry of Finance.

### **Consumer prices**

The main working priority was to conduct monthly statistical surveys on consumer prices, which provided necessary information for calculation of National consumer price index, Harmonised Index of Consumer Prices and Price Index of a Small Basket of 100 goods and services considered as socially useful and vital for living for the 20% of households with lowest income, and the HICP at constant tax rates (HICP-CT) and HICP administered prices (HICP-AP).

The work proceeded on improving the methodology, design and production of consumer price indices in relation to compliance with the European and international standards. In 2016 the sample of outlets for monitoring was updated, the selection of goods and services included in the consumer basket was improved and the scope of some sub-indices was expanded.

The statistical weights system for the construction of consumer price indices was improved. The NSI extended the usage of information from additional sources in accordance with the requirements of Commission Regulation (EU) No. 114/2010 as regards minimum standards for the quality of HICP weightings.

The quarterly statistical surveys of housing prices provided the necessary information to calculate the housing price indices and the owner occupied housing indices. In 2017, the activities continued on constructing the owner occupied housing indices that comprised price indices of houses, which are new for “Households” sector; price indices of services associated

with the acquisition and ownership of dwellings; price indices of insurance related to the dwelling; and price indices of major repairs and maintenance of dwellings. The NSI continued the regular submission of these indices to Eurostat.

Within the EC's pilot projects, the NSI continued the work on the improvement of the pilot system for producing housing sales indicators (*Housing Sales Indicators - HIS*) with aim to provide regular quarterly frequency and detailed information (by region, new and existing housing).

The NSI completed the activities planned under EC's projects in connection with the implementation of methodological and practical improvements and improvements in HICP. Pilot studies were conducted on providing access and using scanner data and other data on sales in order to register the prices and to use them as a source for calculation of the HICP, and on improving internal consistency of the weights, and the construction of weights for household purchases over the Internet. The software and the data transmission system between the electronic price recording devices and the central database were improved.

The Republic of Bulgaria as an equal EU member, represented by the NSI, continued its participation in the European Comparison Programme of purchasing power parities, the comparative price levels and GDP per capita, which is a part of the current statistical program of the European Commission and is coordinated by Eurostat/OECD.

The NSI's activity is organized and implemented according to Regulation (EC) No. 1445/2007 of the European Parliament and of the Council establishing common rules for the provision of basic information on purchasing power parities and for their calculation and dissemination. As regards the system of quality control used for purchasing power parities, the NSI applied Commission Regulation (EU) No. 193/2011.

The National Statistical Institute has achieved the goals laid down in the European work plan for calculating PPPs in 2017, which is annually approved by the Eurostat PPP Standing Working Group.

In 2017, the NSI conducted the planned six price surveys, two of them of goods and services in accordance with coherent European consumer basket: E17-1 „Services“ and E17-2 „Equipment and health care“. Four special price surveys were carried out: “Health services in hospitals”, “Residential rents in selected real estate agencies in the capital”, “Investment goods” (machinery and equipment) and “Contingent selected construction sites”.

The necessary additional national statistical information: questionnaires on CPI/HICP - PPP, on housing services (in kind and in value), on wages and compensation of employees in General Government by selected professions and occupations and on GDP by 250 main groups of final consumption expenditure, was prepared and promptly transmitted to Eurostat according to work schedule.

Quality and protection of the transmitted individual information has continuously improved by using specialized software tools developed by Eurostat for online work in database regarding PPP. This is due to improvement of methods for data control during prior surveillance period and during several sequential stages of analysis and validation both of input and results.

The report on the sources and methods used for compiling PPPs was updated and provided to Eurostat within a period.

### **III.3. Business statistics**

#### **Structural Business Statistics**

In 2017, the NSI continued to work on improving the data quality in the field of structural

business statistics and Foreign affiliates statistics (FATS), production and sales of industrial goods (PRODCOM), foreign direct investments, expenditure on acquisition and the acquired tangible fixed assets, statistics on financial and non-financial enterprises, and annual specific surveys by economic activities.

The NSI completed all tasks resulting from contracts, agreements and requests for provision of statistical information from these surveys.

During the year, expert level opinions were prepared on Eurostat's proposals related to preparation of the new FRIBS in the field of structural business statistics, foreign affiliates statistics and PRODCOM. NSI experts participated in the work meetings on the indicated statistical areas at Eurostat.

In 2017, the NSI started work on the project "International Sourcing Survey", its main objective being to implement and test the revised methodology and tools of the Globalization Measurement Module, which will be included as a mandatory three-year observation in the new Framework Regulation Integrating of Business Statistics (FRIBS). The project can be considered as a very important future tool for acquiring a deeper knowledge of internationally fragmented production chains.

The implementation of the activities under the project "Modernization actions for compiling PRODCOM statistics" started during the year. The main project aim is preparation of the implementation of new PRODCOM (statistics on production of industrial goods) data requirements in the FRIBS, namely for the collection, processing and transmission of data to Eurostat on the Production manufactured on sub-contracting basis. As a result availability of information on the Production on sub-contracting basis as a component of Sold Production at the level of the European Union will be ensured and full consistency and comparability of Sold Production data with other EU member states data will be achieved.

In 2017, NSI launched a project "**Link Business Demography to data on trade by enterprise characteristics**". Eurostat in cooperation with the OECD and UNECE is developing the entrepreneurship indicator program (EIP) that collects important indicators on enterprises and their economic performance, in particular of small and medium sized enterprises. In the context of the Eurostat/OECD entrepreneurship indicator program, information on the international trade in goods of newly created enterprises are of high relevance. The main objective of the project is linking business demography (BD) data to data on international trade in goods statistics by enterprise characteristics (TEC). Of particular importance for the evaluation of Small Medium Enterprises is the behavior and economic success of young enterprises and their involvement in international trade. The project will be carried out with the available statistical data in NSI without any additional burden on enterprises.

### **Short-term Business Statistics**

During the year, all regular surveys from the NSP (Sales in industry, construction, trade and services, Activity of non-financial enterprises, Producer price in industry and services, Expenditure on acquisition of tangible fixed assets, Construction of new buildings permitted and started) were carried out with high quality, in time and in accordance with the requirements of national and European legislation. All short-term indicators are calculated in accordance with the requirements of the regulations on short-term business statistics, are published at the national level and are transmitted to Eurostat within the specified deadlines and in the required quality.

The institute continued to work on improving the methodology, improving the CBS data quality and evaluation, improving quality and maintaining comparability of time series. The company samples have been updated so that they are sufficiently representative and reflect changes in the structure of non-financial enterprises.

According to the Regulation (EC) No. 1158/2005 of the European Parliament and of

the Council, the work on extension the scope of the indicator “Producer prices indices in services” successfully completed. The NSI started regular publishing on the Internet site and submission to Eurostat of quarterly producer price indices for “Legal and accounting activities; consultancy activities in the field of management ”(Section 69 and Group 70.2 of the CEA - 2008).” It was thus reach 100% coverage of the activities for which current Regulation on short-term statistics required index of producer prices in the service sector.

The work on the transition to the new baseline 2015 for short-term business statistics (for all short-term indicators that are calculated in the form of indices) started. The weights of 2015 were made and provided in accordance with Eurostat requirements. The system of weights for calculating the SBS indicators has also been developed and prepared to be imported into the IS „Short-term statistics” to calculate the indexes for the new base. In accordance with Art. 11 of Council Regulation (EC) No. 1165/98 the rebased time series with indicators presented in indexes will be published and sent to Eurostat in early 2018.

The implementation of the SDMX-ML technical standard in the short-term business statistics has been completed. After a successful experiment completed in mid-2017, from October began the regular transmission of all Eurostat indicators in XML format.

The work on the project “Setting up production processes for new indices of services production - implementation of STS statistics” launched last year continued. The general objective of the Grant project is to set up the process for regular compilation of monthly ISP at NACE Rev. 2 section and division level, for all service activities that will be covered in the future as requirement for SBS under FRIBS. In 2017, the main planned activities to achieve the final goals are:

- Continuation of the work started in the framework of Grant 2014 on comparison, analysis and evaluation of administrative data from VAT declarations by months and activities with information available from existing monthly statistical turnover survey. The goal at the end of the project is to decide on the most appropriate source of information for a regular calculation of a monthly turnover index in services.
- Continuation the work on the review, analysis and assessment of the existing methodological information for the production of adequate deflators for calculation of the Index of services production for each services activity in accordance with the expected STS requirements under FRIBS.
- Establishment of the process of monthly calculation of ISP for sections G, H to N (with the exception of K, M701, M72 and M75) of NACE Rev. 2.

## **Energy Statistics**

Work on the specialized statistical surveys included in the NSP 2016 continued in 2016. The energy balances and overall energy balance of the country have developed on their basis.

All monthly and annual surveys on energy statistics were conducted in accordance with Eurostat methodology, the requirements of Regulation (EC) No. 1099/2008, Commission Regulation (EU) No. 147/2013 on energy statistics, Directive 2009/28/EC on the promotion of the use of energy from renewable sources, Directive 2012/27/EU on energy efficiency and Commission Regulation (EU) No. 431/2014 as regards the implementation of annual statistics on energy consumption in households.

The collection of semi-annual data on the prices of electricity and natural gas continued. The data are prepared on the basis of the requirements of the new Regulation (EU) No. 2016/1952 of the European Parliament and of the Council on European statistics on natural gas and electricity prices. Regarding the requirements of Directive 2012/27/EC on energy efficiency the “Combined heat and power units (CHP units)” survey was updated and a new statistical survey “District heating and cooling systems” was prepared.

As regards the amendments of the Regulation (EC) No. 1099/2008 on energy statistics

the monthly reports on „Solid fuels“ and „Electricity“ have also been updated. With a view to optimizing the statistical tools and reducing the respondent’s burden, some indicators, duplicated with other surveys, as well as products with insignificant consumption in the EU, have been removed.

In August 2017, the NSI sent an application form to apply for Eurostat Grant on theme “Disaggregation of the statistics on final energy consumption (FEC) in the industry sector”.

In 2017, experts took an active part in international and national consultations on:

- The proposal for amendment of Regulation 1099/2008 on energy statistics and related changes in five-year and seven-month questionnaires on energy statistics, namely: including new indicators and new energy products, updating existing methodologies, harmonizing definitions and instructions between annual and monthly questionnaires and others.

- The form, content and instructions of the “Combined heat and power units” questionnaire and the new “District heating and cooling system” questionnaire.

- Preparation of several Eurostat Guidelines for reporting monthly, semi-annual and annual data and their validation.

- Draft legislative acts and other documents regulating the „energy“ field, within the framework of the participation in WG 14 „Energy“ at the Ministry of Energy.

During the year, experts participated in the meetings of the Eurostat Working Group on Energy Statistics, which elaborates strategic and program documents, draft legislative acts and methodologies in the field of energy statistics.

## **Transport Statistics**

The work on regular annual and short-term surveys included in NSP 2017 in the field of transport continued in 2017.

In the field of transport statistics, the NSI with the assistance of Bodies of statistics: **Directorate General “Civil Aviation Administration”** and **Executive Agency “Maritime Administration” (EAMA)** at the Ministry of Transport, Information Technology and Communications conducted surveys in the field of air transport and on activities of inland waterway ports and maritime ports. Fruitful cooperation between NSI and two agencies led to increased quality of the data obtained by more detailed data verification.

During the year, **Executive Agency “Maritime Administration”** continued the work on regular preparation and provision of statistical information on the activities of inland waterway ports and maritime ports. The data collection and data transmission to Eurostat is in accordance with the specific nomenclatures and reporting forms of the following regulations and directives: Regulation (EC) No. 1365/2006 of the European Parliament and of the Council; Commission Regulation (EC) No. 1304/2007; Commission Regulation (EC) No. 425/2007 and Directive 2009/42/EC of the European Parliament and of the Council. The information submitted by ports and port terminals covers 100% of the activity of inland waterway ports and maritime ports of the Republic of Bulgaria related to treatment of goods and passengers.

In 2017, **Executive Agency “Maritime Administration”** continued to work on improvement of the new Statistical Information System „PORTSTAT“ for data collection and data processing. The system reports passenger traffic and goods passing through the maritime ports and inland waterway ports in Bulgaria and it is fully consistent with the latest Eurostat’s recommendations to collect new data on the activities of inland waterway ports and maritime ports. The NSI assisted the EA “Maritime Administration” in improvement of the new statistical information system, which led to improved quality of statistical information due to enshrined internal controls for data validation.

The NSI continued to assist the Managing Authority of Operational Programme „Transport

and Transport Infrastructure 2014 - 2020“ regarding the provision of information on the result indicators under this operational program within the competence of the NSI according to the implementation of general precondition 7 „Statistical systems“ of the Partnership Agreement.

In 2017, the responsible institutions reached a compromise on the proposed amendments to two of the regulations in the areas of transport statistics - statistics of inland waterway transport and railway transport statistics. The aim of regulations is to update, simplify and optimize the existing legal framework for European Statistics and to adapt it to the new institutional context in the field of transport statistics as well as to ensure full and continuous provision of statistical data.

### **Tourism Statistics**

In 2017, NSI timely fulfilled the tasks on provision of regular statistical information for the development of tourism in the country regarding trips of Bulgarian residents in abroad and arrivals of visitors from abroad to Bulgaria, activities of the accommodation establishments, tourist trips and tourism-related expenditure of the population, and tourism satellite accounts. All monthly and quarterly surveys were conducted according to the World Tourism Organization’s recommendations and in accordance with requirements of Regulation (EU) No. 692/2011 of the European Parliament and of the Council concerning European statistics on tourism and Commission Implementing Regulation (EU) No. 1051/2011 implementing Regulation (EU) No. 692/2011 of the European Parliament and of the Council concerning European statistics on tourism, as regards the structure of the quality reports and the transmission of data.

During the year, the work on improving the methodology and developing the tables on satellite accounts in tourism in line with international standards continued. In relation with the Eurostat initiative, NSI voluntary participated in reporting data for 2014 on tourism expenditure of residents and non-residents in the tourism satellite accounts tables.

Within the twinning project AZ/14/ENP/ST/32 “Support to the State Statistical Committee in harmonisation of the National Statistics System of the Republic of Azerbaijan in line with European standards” all tasks under Component 5 „Tourism Statistics“ were fulfilled.

### **Business register**

The methodological work on defining statistical units “enterprise”, „local unit” and “enterprise groups” in the Register of statistical units continued in 2016. The scope of the register concerning kind of statistical units and their obligatory features was studied. All data from Inquiry on enterprise groups included in the Annual Report of Enterprises in 2015 were processed. The characteristics of statistical units in the Register of statistical units were regularly updated by using information from annual statistical surveys and external administrative sources. The Register of statistical units continued to ensure full coverage of the population of active statistical units “enterprises” or “local units” as well as to provide conditions for sample design by certain criteria for statistical surveys.

The Register of statistical units has been used as the main source of information in preparing the business demography of enterprises, which describes the life cycle of enterprises and presents data on the number of active enterprises, the number of newly born enterprises, the share of survived enterprises, the number of dead enterprises as well as data on change in employment at specific time.

The NSI provided to Eurostat the population of Bulgarian legal units, members of enterprise groups at European level and identified the foreign legal units participating in the multinational enterprise groups at national level.

NSI has completed the work on the “Statistics for family businesses” project under the program for the Competitiveness of Enterprises and Small and Medium-sized Enterprises, 2014 - 2020 (COSME program).

The activities related to profiling of large multinational enterprise groups and data validation in the EuroGroups Register (EGR) have been completed, by using the interactive module EGR IM - Steps towards implementing the definition of statistical units for business statistics and profiling in the framework of the ESS.VIP ESRs project - EC Project.

### **Statistics of foreign trade**

The main priorities in the field of foreign trade statistics that the experts worked in 2017 include: better use of administrative data sources; provision of timely and reliable statistics and improvement of data quality; adaptation of the National System for production and dissemination of foreign trade statistics in accordance with the changed requirements of EU legislation and with the users' needs of foreign trade data; involvement in Eurostat's work on discussion of strategic issues concerning the future development of international trade in goods statistics.

In order to ensure the full coverage of exports and imports to / from third countries and to ensure the provision of reliable and timely data on foreign trade statistics, the NSI continued to use simplified customs declarations received in the Customs Agency under the Single Authorisation for simplified procedures in other countries.

As a result of the wider and more efficient use of the data available in NSI and in response to the users' needs for more detailed and up-to-date information, the Foreign Trade Statistics Department provided to Eurostat additional data for enterprises business characteristics for Canada - partner country.

NSI experts participated in the implementation of project activities of „Link Business Demography to data on trade by enterprise characteristics (TEC) - EC Project“, which aims to produce new indicators without increasing the respondents burden.

During the year, the NSI continued its work on improving the quality of primary data declared by traders. The NSI's experts have made direct contacts with Intrastat operators, as well as contacts in cooperation with the NRA. As a result, some inaccuracies in submitted Intrastat declarations were corrected. The NSI provided methodological assistance to the respondents in declaring data in specific cases, which contributed to facilitating business in carrying out monthly obligations for submission of Intrastat declarations.

In the field of data collection activities by the National Revenue Agency for Intra-Community trade through IS „Intrastat“ during the year more than 150 thousand declarations were accepted and validated (82.6 thousand declarations by stream „arrivals“ and 67.8 thousand declarations by stream „dispatches“ through which 6.5 million trade transactions were declared). The total number of Intrastat operators during the year reached 13.4 thousand, of which 7.3 thousand in streams for "Arrivals" and 6.1 thousand in streams for „Dispatches“.

The activity for improvement the quality of the collected data on IS “Intrastat” continued, by introducing additional rules for validation and verification of the collected data by comparison with data from other administrative sources - mainly the VAT system and the Eurostat database “COMEXT”.

In May, via teleconference link the experts from the NRA and NSI discussed with Eurostat the measures, which is planned to be taken at national level to reduce the administrative burden by the IS „Intrastat“ applying.

The Intrastat Directorate of the NRA has prepared and submitted to Eurostat detailed comments on the specific provisions on international trade in goods statistics in the draft text of the Regulation implementing the FRIBS.

In order to facilitate users of statistical information in disclosure of new monthly data, the NSI prepared and published two press releases on a monthly basis, respectively for trade in goods with third countries and Intra-community trade in goods. The maintenance of means for storage and dissemination of data on foreign trade statistics continued via Information System “Foreign Trade”. The system provides users with direct access to more detailed data than those published in the press releases.

In 2017, the NSI’s experts contributed to the overall innovation activity in the field of international trade in goods statistics at European level through participation in leadership, target and working groups of Eurostat.

The NSI’s experts participated actively in the work on integrating the provisions for Intrastat and Extrastat in the base act of the Framework Regulation Integrating Business Statistics. The active participation in integrating the provisions for Intrastat and Extrastat in the base act and the implementing acts of the Framework Regulation Integrating Business Statistics was one of the key directions in the NSI's work.

#### **III.4. Statistics on agriculture, forestry and fisheries**

At the beginning of 2017, the agreement of cooperation and strategic partnership in exchanging information in the field of agricultural statistics between the Ministry of Agriculture, Food and Forestry (MAFF) and the NSI was updated. The National Statistics Institute and the Executive Agency for Fisheries and Aquaculture started the signing of a bilateral agreement.

In 2017, the “Agrostatistics” department of the Ministry of Agriculture, Food and Forestry started the building-up of two information systems:

- Information system for agrostatistics;
- Farm Accountancy Data System.

With the implementation of the Information system for agrostatistics, the Agrostatistics Department will have an instrument, incl. an online option for collecting, processing and disseminating farm structure survey data and 10 other European agricultural statistics legislation for which the Ministry of Agriculture, Food and Forestry is committed to providing data to Eurostat.

With agricultural accounting information system will be automated process for collecting, controlling, validation and analysis of the results of farm incomes at national and regional level in accordance with Implementing Regulation (EU) No. 2015/220 of the European Commission. It introduces new categories of data and changes the structure and transmission way of the data from the farm accountancy form to the European Commission’s.

The implementation of both systems is following the recommendations of the European Commission conducted an audit mission of the Farm Accountancy Data Network in 2011 and 2014 and of the Eurostat peer review held of National Statistical System of the Republic of Bulgaria in 2014. As a result, the administrative and respondents burden will be reduced and the deadlines for processing and publishing the results of statistical surveys will be optimized.

In 2017, experts from the Agrostatistics Division took part in the preparation of the draft framework Regulation of the European Parliament and of the Council on integrated farm statistics. The aim is to develop a harmonized and comparable statistics on the structure of agricultural holdings into a single framework for European statistics by linking structural information with other information at farm level.

The second survey on users’ satisfaction of the statistical data provided by MAFF in 2016 was completed at the beginning of the year and new survey for 2017 started. The survey is conducted online on the MAFF website.

In 2017, in compliance with the commitments related to the process of coordination of

activities for the production, distribution and exchange of statistical information within the National Statistical System of Bulgaria, NSI experts participated in the meetings of the National Council on Farm Accountancy Data System, of the WG on the structure of agricultural holdings, the activities of the expert commissions of the Ministry of Agriculture, Food and Forestry on the construction and adoption of the information system for agrostatistics and for Farm Accountancy Data System, as a fail and the Permanent interinstitutional working group to assess the European structural and investment funds.

Within the framework of a seminar organized by NSI, a discussion was held on the need to improve communication and coordination between institutions involved in the production of information on agriculture, forestry and fisheries in Bulgaria was held. It was attended by experts from the NSI partner institutions (MAFF, the Executive Agency for Forests, the Bulgarian Food Safety Agency and the Executive Agency for Fisheries and Aquaculture).

During the year the activities for fulfillment of NSI obligations under General Prerequisite 7 of the Partnership Agreement were completed, within which were developed metadata for the performance indicators for reporting the progress of the implementation of the Rural Development Program and the "Maritime Affairs and fisheries" Program for the period 2014-2020.

NSI and MAFF experts participated in the work of the Monitoring Committees of the Rural Development Program and the Maritime Affairs and Fisheries Program for the period 2014 - 2020, the interinstitutional WG 7 „Agriculture“ and WG 8 „Fisheries“, and in the meetings of the Eurostat working groups on agricultural statistics.

To increase the professional qualification, NSI experts participated in:

- the activities of the EC project „Implementation of SDMX technical and statistical standards in the National Statistical Institute of Bulgaria“;
- training courses for introduction of risk management in accordance with ISO 31000: 2009 and ISO 31010: 2009 standards and maintenance of NSI Quality System according to ISO 9001: 2015;
- training seminar with the participation of experts from RSO (Statistical Survey departments) on „Changes in statistical tools and methodology of agricultural price surveys in 2017 and their impact on the respondent burden and of the statistical information quality“.

In 2017, in the field of agriculture, forestry and fisheries statistics a total of 32 statistical surveys were carried out - 20 from the "Agrostatistics" Department at the Ministry of Agriculture, Food and Forestry and 12 from the NSI.

At the beginning of the year, the „Agrostatistics“ department completed the collection of information on the structure of agricultural holdings in 2016 and continued the Eurostat Grant Agreement activities.

An organization to conduct the survey on the structure of permanent crops in 2017 was carried out.

In 2017 in the field of crop products statistics, the MAF collected information on the area under cultivation and harvested area, average yield and crop production of main agricultural crops, vegetables, vineyards and fruit trees, the yields of wheat and barley (estimates for 2017 harvest) and the activities of enterprises processing fruits and vegetables.

Within the period from June to August, the MAFF conducted the survey on land cover and land use of the territory of Bulgaria (BANCİK 2016). The collected information covered data on agricultural area, including main crops by six statistical regions (NUTS2).

In the field of livestock statistics, the MAFF carried out statistical surveys on livestock number in Bulgaria as of 01.11.2017 and on the status of poultry and bee-keeping in Bulgaria in 2015. Monthly and yearly information on the activity of slaughterhouses, milk processing enterprises and hatcheries was collected.

In accordance with the requirements of Regulation (EU) No. 2015/220 of the Commission of 3 February 2015, the statistical data collection form for farm incomes was updated through

the Farm Accountancy Data Network. Data for the reporting years 2016 and 2017 (agricultural farms not applying accountancy) was collected.

The results of the surveys conducted by the Agrostistics Department are published regularly in specialized bulletins on the MAFF's website, in the NSI's annual publications - Statistical Yearbook, Statistical Reference book, in the electronic review of the statistical information, in the spreadsheets of Eurostat and Food and Agriculture Organization (FAO). In 2017, was added the published public information in open format on the Open Data Portal.

In 2017, the NSI produced annual data (preliminary and final for 2016) and quarterly data for 2017 (including for the flash estimates) for national non-financial accounts for economic activity "Agriculture, forestry and fisheries" at current and constant prices.

According to Regulation (EC) No. 138/2004 of the European Parliament and of the Council, the NSI developed and transmitted to Eurostat annual data on economic accounts for agriculture - first and second estimation of income in agriculture, preliminary data for 2016, final data for 2015 and first estimation of income for 2017 at current and constant prices. The NSI also developed data on regional economic accounts (at NUTS1 and NUTS2), as well as statistics on unit values in agriculture and "bridge tables" to the national accounts for 2015.

In accordance with the current Gentleman's agreement between Eurostat and the Member States in the field of agricultural prices and indices, the NSI calculated and transmitted to Eurostat quarterly data for 2017 and annual data for 2016 and 2017 (estimation), data on prices and indices of agricultural production, and data on agricultural input.

In 2017, the application software for online data collection by respondents was fully updated in the context of agriculture price surveys. As a result of the changes made, optimization of the process of collection and processing of statistical data was achieved, the quality of the statistical information was improved and the respondents' burden was reduced.

In 2017, for the first time was collected information on producer prices of organic products of plant and animal origin and biological rising livestock.

The weighting scheme for the calculation of agricultural output and input indices in the new base 2015 = 100 was developed and sent to Eurostat. Data on agricultural production and agricultural inputs in the new Eurostat base 2015 = 100 were produced, which will be sent according to the schedule for the Member States.

The NSI calculated and transmitted to Eurostat data on the average price of agricultural land and rents for 2015 at national level and regional level NUTS1 and NUTS2. In accordance with the agreement reached between Eurostat and Member States, ESMS metadata was developed using the ESS Metadata Handler.

Data on economic accounts for forestry for 2015, prepared together with the Executive Forest Agency, and material flow accounts for 2016 were calculated and sent to Eurostat according to Regulation No. 691/2011 on European economic accounts for the environment for agriculture, forestry and fisheries.

Tables with data and texts for press releases were prepared for publishing on the NSI website and IS "Infostat" in accordance with the Calendar presenting the results of the statistical surveys carried out according to the NSP for 2017. Data tables for publication in the printed/electronic editions of the NSI were prepared according to the schedule of the Editorial plan for 2017 – Statistical Yearbook and Statistical References.

### **III.5. Multi-domain statistics**

#### **Business Trends**

In 2017, the work on all statistical surveys in the field of business trends included in the National Statistical Program continued. They are carried out with the financial assistance of the European Commission according to "The Joint Harmonised EU Programme of Business

and Consumer surveys”.

Monthly business surveys in industry, construction, retail and services provided information on the business environment in the country. Business surveys show managers' views on the current and future economic situation in the country. This information is highly relevant because the data refers to the month in which surveys were carried out. The indicators of these surveys could be used as components of composite leading indicators for analysis and detection of turning points in the economic cycle.

The Consumer surveys provided information about trends in public opinion on key economic processes and phenomena such as the general economic situation in the country, inflation, unemployment, savings, plans for making major expenditure on durable goods and buying a home or car.

The survey of investment activity in industry (conducted in March and October) provided data on the investments made and the investment plans of the enterprises in the sector. Based on the survey results, a percentage change of the investments in the current year compared to the investments in the previous year is calculated as well as the forecast investments in the following year compared to the investments in the current year.

Users of the business trends data are public institutions, the Bulgarian National Bank, the European Commission, the European Central Bank and other.

### **Indicators for monitoring national and European policies**

NSI provide statistical data on indicators for the implementation of priority objectives in the strategy „Europe 2020“ and a system of indicators of sustainable development.

Statistical data for monitoring and evaluating national strategies with thematic data coverage of all statistical domains and data for monitoring the activities under the operational programs required by the managing authorities were developed and provided.

In 2017, the NSI started its work on the preparation of the Statistical System Indicator for Sustainable Development 2030 adopted by the UN and representatives of NSI took part in thematic workshops organized by the UN Statistical Commission and international organizations.

### **Environmental Statistics and Accounts**

A major priority in the field of environmental statistics and accounts was the improvement of the methodology and the provision of reliable status information, types of pressures and the main trends of the economy's impact on the environment. The statistical surveys carried out provided detailed information about:

- **The amount of emissions** generated by the economy and discharged into the atmosphere by economic activities (data used for national inventories of emissions of harmful substances and greenhouse gases into the atmosphere);
- **The amount of waste generated and treated (hazardous and non-hazardous, including household and construction)** according to the European Waste List broken down by economic activity (integrated statistical and administrative data subject to mandatory Eurostat reporting under Regulation 2150/2002 on waste statistics). Information on hazardous waste and installations for waste recovery and disposal has been provided by the Environmental Monitoring and Assessment Directorate of the Executive Environmental Agency of the Ministry of Environment and Water, which is the body of statistics. Data on the number and size of landfills, the population covered by waste collection services as well as the revenue from taxes and fees of municipal administrations and on the cost of municipal waste management is provided;
- **The quantity of packaging** - placed on the market as well as recycled and incinerated packaging waste (integrated statistical and administrative data reported to Eurostat);

- **Tangible fixed assets with ecological use** in value - stock at the beginning and at the end of the year broken down by economic activities;
- **Environmental protection and recovery costs** - for the acquisition of fixed assets and their ongoing maintenance by economic activities and directions (protection of air, soil, biodiversity, forests, waste water treatment, waste treatment, etc.), as well as the relevant sources of financing;
- **The value of produced ecological goods and services** by type, economic activities and by environmental directions;
- **Seized water for the economy and the population**, the water used and the waste water discharged into the water bodies by economic activities at national, administrative and basin level; the capacity of urban waste water treatment plants; plumbing and sewerage networks built; population related to water supply, wastewater and sewage services, and others (wastewater data is used for national inventories of emissions of harmful substances and greenhouse gases into the atmosphere);
- **Stocks and extraction of underground resources**, the area of the localities and the employed by economic activities;
- **Noise levels** at national and regional level.

One of the main priorities for the work in 2017 was the development and improvement of environmental economic accounts under Regulation (EC) No. 691/2011 of the European Parliament and of the Council. Environmental economic accounts show the interaction between the economy, households and environmental factors. The NSI provided data to Eurostat for the first group of modules: 1) accounts for physical flows of air emissions (including greenhouse gases), 2) material consumption accounts (input/output material flows and changes in inventories in the economy) and 3) accounts for environmental taxes in value terms (national economy revenues from environmental taxes). According to the Regulation, data were also reported for the second group of modules: 1) accounts for environmental goods and services, 2) accounts for environmental costs and 3) accounts for physical energy flows.

The development of the methodology and data collection for environmental subsidies and transfers started as part of the additional group of accounts under Regulation (EC) No. 691/2011. Work on the methodology for assessing the import and export of waste for Bulgaria is also underway.

The implementation of a priority national task beyond the NSI's plan began - the methodology update and the recalculation of air emissions since 1990 according to the Inventory Guide for Harmful Substances - EMEP/CORINAIR (2016). The extraordinary task stems from the entry into force of Decree of the Council of Ministers No 227/16 October 2017 amending the Ordinance on the Procedure and Method of Organizing the National Inventories of Harmful Substances and GHGs in the Atmosphere. The recommendations to Bulgaria are specified in a report from the visit of the review team of international experts, which took place in September 2017 in connection with the technical review of the national emission inventory under Directive (EC) 2016/2284.

The NSI is also involved in the process of validating the data on the National Report on the Status and Environmental Protection issued by the Executive Environmental Agency of the Ministry of Environment and Water.

Eurostat approved the application forms for a grant on the topic „Improvement of the methods for allocating emissions from road transport and energy use from the Households by Economic Activities“ and „Pilot study of the scope and condition of ecosystem accounts in physical terms“.

NSI expert participates in EU twinning project MK 12 IB ST 01 „Support of the State Statistical Service for Capacity Building and Improvement of the Harmonization of Statistics with EU Standards“ with the Former Yugoslav Republic of Macedonia „Implementation of the Module in the Producers Sector of ecological goods and services“.

## **Housing Fund Statistics**

In 2017, the NSI continued the production of data from the surveys on new residential buildings and dwellings, destroyed buildings and dwellings and housing fund.

## **Regional Statistics and Geographic Information Systems**

In 2017, the work on dissemination of regional statistics continued. In order to extend users' access to regional statistics, the NSI improved thematic rubric "Regional Statistics" as well as the contents of electronic publication "Regions, Districts and Municipalities in the Republic of Bulgaria". Published data were presented at the lowest level, as far as the nature of the statistical survey allowed to obtain reliable data and such data, which do not infringe statistical confidentiality. The produced data were from level NUTS 0-3 to settlement level.

The NSI performed a monitoring and updating of categorization of administrative-territorial units and territorial units in the Republic of Bulgaria.

In order to meet specialized information needs of different external users, the NSI proceeded to work on the application of GIS technology for development of thematic graphic layers of statistical information and maintaining digital models of big cities. The digital models based on statistics collected on the buildings and housing fund in the country were updated. The activity on cartographic presentation in statistical issues continued in 2017.

The NSI participated in the permanent working group to the interinstitutional council on spatial data and the thematic working subgroups „Administrative Units“ and „Address“ as data holder. The NSI is a reference authority on the themes of statistical units and distribution of population of Annex III of the Spatial Data Access Act and Directive 2007/2/EC of the European Parliament and of the Council establishing an Infrastructure for Spatial Information in the European Community (INSPIRE).

## **Science, Technologies and Innovations**

According to the requirements of the Commission Regulation (EU) No. 995/2012 of Community statistics on science and technology, in 2017 the NSI proceeded to work on production and dissemination of statistics on R&D and innovations.

The data from the annual R&D statistical surveys and the R&D spending were published in due time on the NSI website and were sent to Eurostat for the first time in SDMX format.

The statistical survey of innovation activities of enterprises in the period 2014 - 2016 was conducted in full compliance with the harmonized questionnaire and methodology of Eurostat (CIS 2016).

## **Information Society**

In 2016 the NSI conducted two regular statistical surveys in the field of Information society according to the Eurostat's recommendations and the requirements of the Commission Regulation (EU) No. 2016/2015 concerning Community statistics on the Information society. Data from these surveys provided reliable and internationally comparable information on the ICT usage in households and in enterprises in Bulgaria.

This year, the low-level data validation process was streamlined and standardized with the help of the EDIT autonomous application provided by Eurostat.

The NSI conducted a specialized training of the responsible persons in RSOs in connection to the research on the use of ICT and e-commerce in enterprises. The training presented goals, objectives and organization of the study in 2017, and discussed methods to improve data quality.

The annual data on ICT usage in households and in enterprises for 2017 were processed in accordance with the quality requirements and were published in December.

## **III.6. Information and communication technologies, statistical infrastructure and**

## **other activities**

### **Information and Communication Technologies**

The main priority was to increase the capacity and degree of information systems backup by using effective means for storage and restoration of information systems and data from statistical surveys. The NSI applied reliable policies for backup of databases and components of information systems through specialized software and maintenance of a backup media library. Important information from certain workstations was additionally backed up.

The processing of user requests received by the Support center via phone and other channels (e-mail, letters, etc.) continued in order to facilitate the respondents of statistical surveys. The center assisted users on technical and/or methodological problems. The implemented system for management and control of users' requests was guarantee for timely response to requests.

In view to effective maintenance of actual data on enterprises, the NSI and the Registry Agency implemented replication of data on registries in the Commercial Register and in Bulstat Register. The NSI updated the system for receiving data from Bulstat register after upgrading the system by the Registry Agency. An access to files of traders registered in the Commercial Register was ensured to some NSI's employees via digital certificates.

The NSI improved the exchange of data with other administrations (National Revenue Agency, Customs Agency, National Social Security Institute) by using a direct connection through the network of the state administration, which ensured the security of exchanges and data protection. With the view of maximum protection of individual data in exchange of microdata on intra-Community trade, the NSI communicated with Eurostat and other Member States via the National Gateway of Common Customs Network (CCN).

The NSI maintains the National register of populated places (NRPP) and the General Register of the traders. All changes in territorial and administrative-territorial units reflected in NRPP. The NSI ensured Internet access for references in NRPP. In addition, in order to facilitate other administrations the NSI developed and published on its website up to date version of the Unified classifier of the administrative-territorial and territorial units.

The process of building centralized information systems and building new virtualisation environments continued in 2017.

### **Development of statistical information systems**

Scripts to define the research included in the 2017 system, rules for logic control (metadata update) were developed. Current and new .pdf forms have been updated to enter data on individual forms for annual surveys in 2017.

NSI continued the work on development of analytical outputs and specific analyses for various statistical surveys by using statistical package SPSS Statistics Server (20.0) and SAS, which were the main analytical platforms in the NSI.

The maintenance and update of IS "Business statistics" proceeded, as well as the activities related to the updating, development and exploitation of the applications developed in the previous years.

### **ICT Infrastructure**

The development of information and technology infrastructure was a key priority in 2017 to overcome the technological lag in technical means used in the NSI. Moreover, another key objective was to achieve reliable operation of the information systems and to ensure continuity of the services provided to respondents and users of statistical information.

NSI's experts perform continuous monitoring of the performance of technical resources and information systems building the information structure of the NSI, and carry out maintenance of all components of the IT infrastructure.

The migration of the E-mail service to the new Microsoft Exchange Server 2010 platform has been successful, improving capacity, performance, reliability, and new functionalities.

A part of the active communication equipment was replaced, which contributed to the better network connectivity and the fail-safe operation of IS in the NSI. Replacement of network equipment in RSO and Divisions „Statistical Studies“ is on the way.

One of the highlights of the activity was the administration of operating systems, tools for antivirus protection and installation and updating of software used in the NSI.

## **Methodology, statistical metadata, classifications and standards**

During the reporting year, the NSI continued to work on implementation of the Special standard for data and metadata exchange (SDMX) in the national statistical practice. The NSI transmits reference metadata to Eurostat through web application “National Reference Metadata Editor” (NRME) and participates in the Eurostat’s annual monitoring on status of the National metadata system.

The NSI continued and finished the work on a project entitled “Horizontal and vertical integration: implementing technical and statistical standards in the NSI”. The aim of the project is to update the implemented ESMS (Euro-SDMX Metadata structure) and ESQRS (ESS Standard for quality reports structure) structures; development and publication of quality reports in ESQRS format on the Internet site of the NSI, extension of the established within the previous project national database on reference metadata. Within the project, national metadata structure for statistical processes by expanding Euro process metadata structure (EPMS). It has been successfully tested in five statistical areas: structural business statistics (industry and services), agricultural statistics, labor force survey, household budget monitoring and SILC. When creating the national metadata structure for the process, a national „Common Model of Statistical Production Process“ was developed in line with the GSBPM (Generic Statistical Business Process Model), ver. 5.0, which is adapted to the needs of the Bulgarian statistical system in terms of the collection, processing, analysis and dissemination of statistical information at national level. This model provides a standard framework and harmonized terminology to help each statistical organization modernize its statistical production processes and share methods and components. It can also be used to standardize metadata, as a process documenting template, to harmonize statistical infrastructure, and to evaluate process quality and future improvements.

One of the main tasks in 2017 was the maintenance of statistical classifications up to date and provision of methodological assistance to users regarding the usage of classifications in statistical and social practice.

For the purposes of statistical processing and continuation of the time series and because of changes occurred in the Combined Nomenclature, the NSI developed code tables of transition. New classification versions of product classifications were also developed. The NSI updated the lists of T and Z codes for the purposes of the PRODCOM survey, and carried out annual update of self-explanatory texts of the Combined Nomenclature (CN) for the purposes of foreign trade statistics and IS “Intrastat” of the NRA.

To make it easier for users to use classifications „Nomenclatures describing transportable goods related to the repair, installation, rental and all three types of commerce based on the Classification of Products by Economic Activity - 2015 (CPIP-2015)“ were developed. They can be used as a means of classifying statistical units, interpreting the Classification of Economic Activities or developing explanatory notes or alphabetical lists (indexes). They help statisticians in carrying out statistical surveys and improve comparability in an international perspective.

During the year, the NSI continued its participation in maintenance of the National Classification of Occupations and Positions 2011 (NCOP-2011) and in the update of the list of the names of positions and of the corresponding tables. During the year, an extraordinary update of the List of positions was made twice due to changes in the legislation of the Republic of Bulgaria.

During the reporting year, the provision of data and metadata continued in accordance with the International Monetary Fund's Special Data Dissemination Standard Plus (SDDS Plus).

During the year, the activities related to the ongoing maintenance of the Statistical Classification Information System, the electronic dictionaries of the statistical terms and the standardization and harmonization of the statistical terminology continued. A „List of the Standard Statistical Indicators for 2017“ was prepared.

In the course of the current year, a quarterly NSI management bulletin containing analysis of macroeconomic indicators was developed.

The ‘Big Data Pilots - I’ under the ESSnet project on Big Data as successfully completed, with NSI being an active partner in **WP 2 ‘Web scraping/Enterprise Characteristics’** and **WP 9 ‘Dissemination’**. Within WP 2 specialized software to identify enterprise websites, IT platforms for e-commerce, and their presence on social networks was developed. As an additional activity, it was tested how similar software product developed by the Italian Statistical Office works in the Bulgarian NSI. This project initiated the experimental use of the "big data" approach in official statistical practice. It has a practical value for other statistical domains: the statistical business register and the ICT enterprise survey in terms of updating business characteristics in the business register and providing Benchmark in the ICT survey.

As part of WP 9 in February this year, the NSI hosted and co-organized (together with the Belgian Statistical Institute) an international conference on Big Data, where the results of the various work packages included in the first grant agreement (SGA-I) were discussed, together with all European countries - participants in the project, interested experts, representatives of Eurostat, the European Commission, international organizations, the scientific community and business in Bulgaria. The closing session of the seminar was devoted to a broad discussion on the influence of Big Data on official statistics and the future of the European Statistical System.

In the beginning of 2017, NSI started the work on ‘Big Data Pilots - II’ project, which is a natural extension of SGA-I, as additional areas of work are the methodology and quality of statistical assessments based on ‘big data’.

In October, the NSI started work on two new directions:

- modeling and forecasting of indicators included in short-term business statistics;
- improving the quality of Labor Force Survey under a grant agreement with Eurostat.

### **Other activities**

The NSI developed and provided statistical data on the crisis events occurred in 2016.

## **IV. RESOURCE ASSURANCE**

### **Personnel**

The National Statistical Institute is organized into a Head office and six Regional Statistical Offices. The Regional Statistical Offices perform the functions and tasks of the NSI for production and dissemination of statistical information at the regional level. The Regional Statistical Offices of the NSI are as follows:

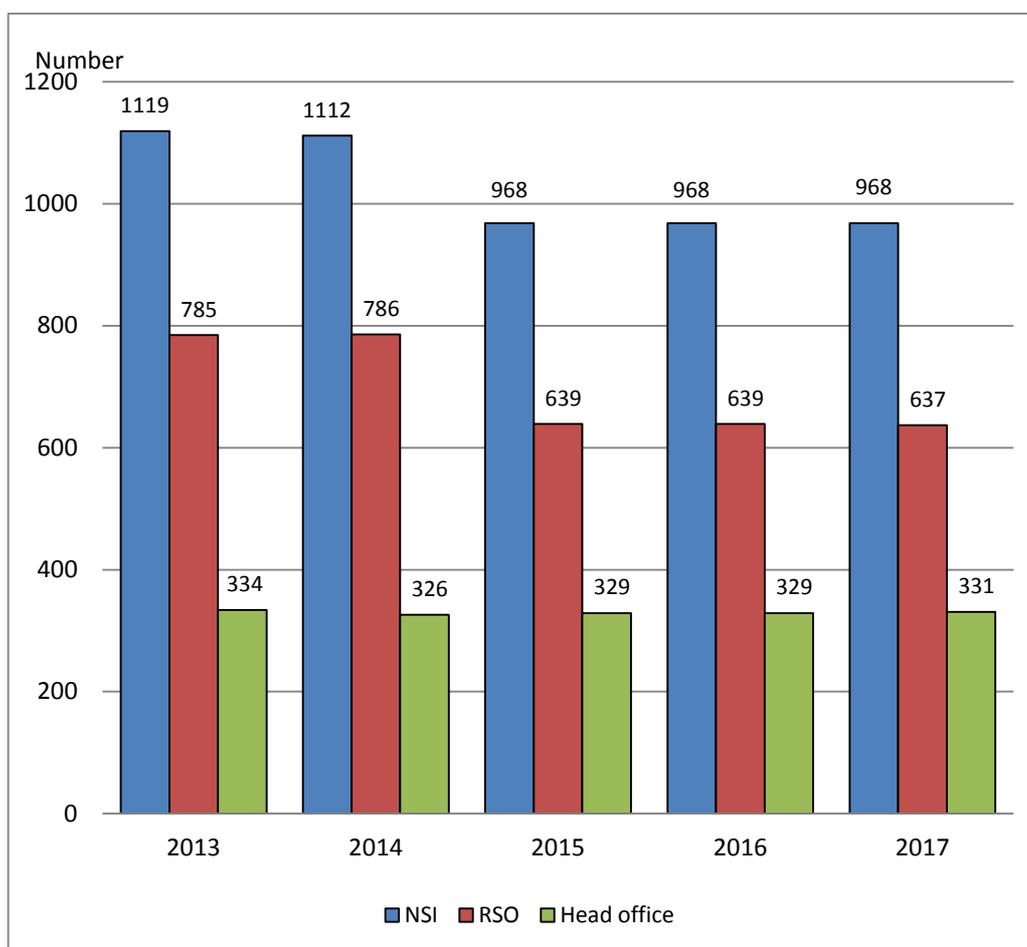
- The RSO - Severozapad

- The RSO - Sever
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The structural units in the NSI's Head Office are organized into General administration and Specialized administration according to the Administration Act.

The total number of personnel within NSI's structural units in 2017 was 968, of which 331 on the pay roll at the Head office and 637 - at RSOs (Figure 5). According to the Rules of Procedure of the NSI, the Head Office is organized into seven directorates: "Business statistics" Directorate, "Demographic and Social statistics" Directorate, "Macroeconomic statistics" Directorate, "Multi-Domain Statistics and User services" Directorate, "Information systems and Infrastructure" Directorate, "General administration" Directorate and structures directly subordinated to the President of the NSI: "Methodological and Training Center" Directorate, Expert on Public relations, сектор "Security of Information and DM" Division, "Inspectorate", Finance Controller, "Internal Audit" Unit and "International Cooperation" Department. Five directorates are in the Specialized administration and one directorate – in General administration.

**Figure 5. Staff positions in NSI within the period 2013 - 2017**



Over the past five years, there has been a tendency to absolute reduction of the employees within the NSI system. This is a result of optimizing the structure of the Regional Statistical Offices and the NSI's Head Office and due to introduction of new organizational approaches in management of the processes for collection, processing and production of statistical information and in HR management. For the period 2015 - 2017 there is no absolute reduction of staff.

### Carrying out competitions for vacant positions

The organizational changes led to implementation of policies on recruitment of personnel aiming at replacement of retiring employees with young people with perspective thinking, who have just completed their tertiary education or continuing their education in Bulgarian universities. The NSI carried out 46 competitions on vacant positions during the period from the beginning of the year until the end of October. In the NSI's Head Office the competitions were 26 and in the RSOs - 20.

### Employees by age groups and by education in NSI

The situation of the National Statistical Institute's staff is presented in Tables 3 and 4, which summarize the structure of total NSI's staff, including for NSI's Head Office and for RSOs.

#### 3. Structure of the employees by age groups in NSI

(Number)

Age groups						
Structures	Up to 29	30 - 45	46 - 55	56 - 65	Over 65	Total
Head Office	38	110	72	80	4	304
RSO	34	194	210	189	0	627
NSI	72	304	282	269	4	931

#### 4. Structure of the employees by education in NSI

(Number)

Education degree							
Structures	Doctor	Master	Bachelor	Professional bachelor	Secondary education	Primary education	Total
Head Office	5	261	22	3	13	0	304
RSO	0	386	76	15	150	0	627
NSI	5	647	98	18	163	0	931

The data show a high level of education among NSI's employees as the share of employees with tertiary education is over 82%. The analysis shows that highlighted trend towards a predominance of specialties with economic orientation persists, and they are about 59% of all specialties. Statisticians who work not only in specialized, but in general administration, stand out as the most numerous - 36% of the total on the pay roll. Similar to the other administrations, the predominance of employees in the higher age groups is observed in the NSI.

Table 5 shows the number of employees who are continuing their education at present to acquire a higher education degree.

#### 5. Education of NSI's employees in Bulgarian universities

(Number)

Type of education	NSI	Head Office	RSO
<b>Tertiary education to obtain an educational degree</b>			

Doctor	5	5	0
Master	9	2	7
Bachelor	6	1	5
<b>Total</b>	<b>20</b>	<b>8</b>	<b>12</b>

## Budget

The implementation of the NSI's budget 2017 is according to the adopted Law on State Budget of the Republic of Bulgaria for 2017 and adjustments made as of 31.10.2017 (Annex 1).

The planned revenues are implemented according to the specified plan as of 31.10.2017 - 45%.

The implementation of the total expenditure for the same period amounts to 76%, including current costs (wages, salaries and other payments to staff and maintenance) - 74%.

## V. INTERNAL AUDIT AND ADMINISTRATIVE CONTROL

At the beginning of the year, the "Internal Audit" Unit carried out a risk assessment of all structures within the NSI system, including the RSOs. The deadline to update the Strategic plan for the period January 2017 - January 2019 on the activities of "Internal Audit" Unit was observed. In accordance with The Strategic plan, the NSI prepared an Annual plan on activity of the Internal Audit Unit and Training plan of internal auditors in 2017, approved by the President of the NSI within the required deadlines.

In February 2017, the NSI prepared an Annual report on Internal Audit activities and a table for summary information on the activity on internal audits for the previous year. These two documents were submitted to the Minister of Finance within the statutory deadline.

The NSI implemented the following activities during the year:

- Participation of Internal Audit Unit as a consultative body and coordinator for definition and assessment of risk management for 2016 and 2017 at the Head Office of the NSI, as well as by RSOs.
- Participation of the EIA as a coordinator and organizer in connection with the preparation of a summary report and a questionnaire on the status of the Financial management and control system (FMCS) in 2016 in the NSI system.
- Participation through presence in the food and production inventory at the Slivek Training and Qualification Center. Tracking the implementation of an audit recommendation of the Slivek Training Center.

In pursuance of the Annual plan on activity for 2017, the Internal Audit Unit implemented five audit assignments for giving confidence, as follows:

- Follow-up of the recommendations made on audit engagements committed in 2016.
- The second audit engagement was planned and executed according to a letter sent by the Minister of Finance for the purpose of: „Reviewing, analyzing and assessing the level of implementation of payments under Art. 4, para. 1 and 3 of the Law on the Limitation of Cash Payments and the Effectiveness of their Implementation in NSI Central and Regional Headquarters“. The main recommendation for the implementation of POS terminals in the NSI system was adopted by the management of NSI. Terminal POS devices are currently implemented and implementation of the recommendation is currently being implemented and will be followed by the Internal Audit Unit at a later stage.
- The third audit assignment covered the topic „Verification and assessment of compliance with the normative and internal regulations in conducting public procurement procedures and contracting of NSI public procurement contracts“ and 20 recommendations were formulated. Verification has been carried out to implement the

recommendations. Recommendations are underway.

- The fourth audit assignment covered the topic „Evaluation of the internal control established and the order of accounting of the received revenues and the expenses incurred in RSO - Severozapad“.
- The fifth assignment covered the topic „Evaluation of the control environment and the control activities introduced in the Head office of the NSI“.

According to the approved Training plan, during the year, auditors from the Internal Audit Unit took part in a seminar on public procurement; training on „Internal Auditor and IT Audit in Public Administration“; National Conference of Internal Auditors in Bulgaria and Training Seminar on „International Standards for Professional Practice in Internal Auditing“.

In 2017 the activity of the NSI **Inspectorate** was determined depending on the objectives set in the Annual Plan:

- Ensuring the control functions of the President of the NSI in the process of management and leadership of the structures for realization of the state policy in the field of statistical activity;
- Creation of conditions for increasing the efficiency of the administrative units in the NSI system by exercising continuous control over the observance of the administrative acts and the prevention of corrupt practices;
- Use of an optimal system for monitoring, analysis and evaluation of the administrative processes as a main element for prevention and correction of violations in its functioning.

The Inspectorate worked with priority in several key areas in order to implement the objectives set in the year. In this respect, the main focus was on increasing efficiency in planning, organizing and carrying out continuous control activities. Inspection objects were separate elements of the work of the specialized and wide range of issues of the overall activity of the general administration. However, as a guiding principle, the approach to timely assistance in eliminating identified deficiencies and weaknesses was adopted as early as in the course of the examination.

In 2017, the Inspectorate carried out fifteen administrative checks in departments of the Head Office and regional structures of the NSI, of which four- planned and 11- unplanned. Along with them, in order to extend the scope of the control activity during the year, day-to-day monitoring was carried out covering the implementation of the President's orders, the executive resolutions, the decisions of the Council to the President, the results of the international missions, the contracts concluded and others. The implementation of the requirements of the 10 inspections carried out by external control bodies was monitored, and the results were reported on a monthly basis.

As a result of the control carried out by the Inspectorate, 19 recommendations were made to the heads of the units under review and subsequent checks were carried out to verify the implementation of the control cycle. The analysis and evaluation of the efficiency of the administration was carried out in RSO - Sever and in some structures assistance was provided for the need to update the internal regulatory framework.

During the reporting period, NSI received a total of 26 signals and recommendations. In accordance with the approved Internal Rules, the recommendations and signals were filed both in the relevant register at the Inspectorate and in the NSI registry. Subsequently, all were verified, incl. those from an anonymous sender, and within the statutory deadline, the respective response were sent by the Inspectorate or by the specialized administration.

In order to increase the quality of the control activity carried out during the reporting period, the necessary attention was paid to the improvement of the qualification of the NSI Inspectorate staff, where the inspectors took part in two courses.

During the period from the beginning of the year to the end of October, the Finance controller registered and inspected 1 998 records with documents and issued the same number of checklists for undertaking obligation and performing expenditure.

The Finance controller has always performed his opinion on the proposals for undertaking

obligations and performing expenditure within the deadlines appointed by the President of the NSI and described in the Internal Rules on implementation of ex-ante control in the NSI.

During the period, the Financial controller often requested an additional presentation of documents or information, and also made on-the-spot-visits in order to optimize the control and to give accurately and efficiently opinion in filling the checklist.

In the first half of 2017, the Financial controller participated in the preparation of the Annual Inventory report at the NSI Slivek Training Center and in the end of January he was seconded for three days in the Training and Qualification Center.

In February, the Financial Controller participated in the training courses „Introduction to the International Standard for Risk Management ISO 31000“, „Internal Auditors of Quality Management Systems ISO 9001: 2015“ and in a specialized seminar „Public Procurement Management. Applicable legal requirements and practice in the application of the Public Procurement Act“.

During the reviewed period, in order to pursue optimal control on the implementation of the contracts on time and to protect the interests of NSI, at the beginning of each month, the Financial controller provided the Head of Inspectorate, Head of „Legal Activities“ Department and Head of „Property Management and Maintenance“ Department with reference for contracts that expire in the next six months. The Financial controller provided the “Financial - Accounting Activities” Department with permanent access to all information on all contracts (commitments and all payments made to date).

The analysis of results from the performed preliminary control imposes the following conclusions:

- The preliminary control on the files did not find illegal activities and events as well as presence of grave and substantial violations related to providing and compiling files with the necessary documents;
- All submitted files were processed promptly and the work of NSI was not hindered. In order to optimize ex-ante control, in many cases, one checklist was issued for the same types of liabilities and expenses, although all the documents submitted for these groups of costs and liabilities were checked. In order not to delay the process, the Financial Controller has repeatedly had to check files both in non-working hours;
- Notes on the undertaking obligation / or performing expenditure was expressed in only a few isolated cases, which is a good characteristic of maturity in the processes of self-control and professionalism in the structural units at the NSI Head Office.

## Annex 1. NSI Budget 2017

Indicators (in BGN)	Law on state budget of the Republic of Bulgaria for 2017	Specified plan for the year as 31.10.2017	Report as of 31.10.2017	Implementation of the plan/ report (%) as of 31.10.2017
1	2	3	4	5
<b>I. REVENUES - TOTAL</b>	<b>950000</b>	<b>950000</b>	<b>427621</b>	<b>45</b>
Own revenues				
Non-tax revenues				
Property revenues and incomes				
- Net revenues from sales of services, goods and production	850000	850000	503378	59
- Rental property revenues	100000	100000	29337	29
State fees			8	
Fines, sanctions and penalties			10227	
Other revenues				
Revenues from the sale of non-financial assets				
VAT paid			-115329	
<b>II. EXPENDITURES - TOTAL</b>	<b>19591400</b>	<b>19759245</b>	<b>14686106</b>	<b>74</b>
Total expenditure	19591400	19759245	14686106	74
Current expenditure	17267400	17387745	14434585	83
Personnel	13751900	13766516	11434105	83
Salaries and remunerations to the personnel under the Labour Code and the Civil Service Act	9627000	9627000	7981891	83
Salaries and remunerations to the personnel under the Labour Code	1294516	1294516	1062029	82
Salaries and remunerations to the personnel under the Civil Service Act	8332484	8332484	6919862	83
Other salaries and payments to the personnel	1224000	1236000	967348	78
Mandatory social security contributions from employers	2900900	2903516	2484866	85
Social insurance contributions from employers for the State Social Insurance (SSI)	1830500	1832500	1554243	84
Health insurance contributions from employers	780400	780900	637289	82
Contributions to additional compulsory insurance from employers	290000	290116	293334	98
Maintenance	3365500	3471229	2869602	82
Taxes paid, charges and administrative sanctions	125000	125000	107206	85
Expenditure for membership contributions and participation in non-profit organizations and activities	25000	25000	23672	95
Capital expenditure	2324000	2371500	251521	11
Fundamental repair of tangible fixed assets	223400	595144	101255	17

## Annex 1. NSI Budget 2017

(Continued and end)

Acquisition of tangible fixed assets	693000	1282742	76652	6
Acquisition of intangible fixed assets	1407600	507696	73614	15
<b>NATURAL INDICATORS</b>				
Staff positions - total	968	968	925	
Average annual full-time positions - total	968	968	927	
Staff positions	968	968	925	
<b>III. TRANSFERS</b>	<b>18641400</b>	<b>18809245</b>	<b>14218765</b>	<b>75</b>
<b>III. A. TRANSFERS (SUBSIDIES, CONTRIBUTIONS) BETWEEN CENTRAL/STATE BUDGET AND OTHER BUDGETS</b>	<b>18991400</b>	<b>19041400</b>	<b>10692344</b>	<b>56</b>
Transfers (grants/contributions) from the central budget (Net) - Transfers (subsidies) from the central budget (+)	18991400	19041400	10692344	56
<b>III. B. TRANSFERS BETWEEN BUDGET ACCOUNTS AND EXTRABUDGETARY FUNDS/ACCOUNTS</b>	<b>-350000</b>	<b>- 232155</b>	<b>- 117218</b>	<b>50</b>
- Transfers received (+)		105729	105729	100
- Transfers granted (-)	-350000	- 350000	- 246310	70
- Transfer from MLSP under programmes of temporary employment (+/-)		12116	23363	192
<b>III. C. TEMPORARY NON-INTEREST LOANS BETWEEN CENTRAL BUDGET, BUDGET ACCOUNTS AND EXTRABUDGETARY FUNDS AND ACCOUNTS</b>				
<b>IV. BALANCING ITEM (+/-) (I - II + III)</b>				
<b>V. FINANCING OPERATIONS</b>				

## Annex 2. Organization chart of the NSI

Organization Chart 03/01/2017

