



**REPORT**  
**ON IMPLEMENTATION OF THE NATIONAL STATISTICAL**  
**PROGRAMME AND THE ACTIVITY OF THE NATIONAL**  
**STATISTICAL INSTITUTE IN 2016**

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## LIST OF ABBREVIATIONS

AE – Academy of Economics	ICT - Information and communications technology
BAS – Bulgarian Academy of Sciences	IMF - International Monetary Fund
BFSA – Bulgarian Food Safety Agency	IPA - Institute of Public Administration
BNB – Bulgarian National Bank	IS – Information system
BS – Business Statistics	ISBS - Information System “Business Statistics”
BSEC - Organization of the Black Sea Economic Cooperation	ISSBS - Information system “Short-term Business Statistics”
CA - Customs Agency	MAF – Ministry of Agriculture and Food
CEA - Council of European Affairs	MEI – Main macroeconomic indicators
CES - Conference of European Statisticians	MEW – Ministry of Environment and Water
CMD – Council of Ministers Decree	MI – Ministry of Interior
CPEA - Classification of Products by Economic Activity	MLSP – Ministry of Labour and Social Policy
EA – Executive agency	MV - motor vehicles
EAMA – Executive Agency “Maritime administration”	NACE.BG – Classification of economic activities
EAVW - Executive agency on vine and wine	NC – National company
EC – European Commission	NCPHA – National Center for Public Health and Analyses
EKATTE – Unified classification of administrative-territorial units and territorial units	NRA – National Revenue Agency
ESIF - European Structural and Investment Funds	NRPP – National register of populated places
ESS – European Statistical System	NSI – National Statistical Institute
ESSC - European Statistical System Committee	NSP – National Statistical Programme
EU – European Union	NSS – National Statistical System
FADN – Farm Accountancy Data Network	NSSI - National Social Security Institute
GDP – Gross Domestic Product	OECD - Organization for Economic Cooperation and Development
GNI - Gross National Income	OOH-HPI – Owner-occupied housing price indices
HICPs - Harmonised Index of Consumer Prices	OP – Operational programme
HO – Head Office	PPPs – Purchasing Power Parities
HPI - Housing price indices	PRRBEU - Permanent Representation of the Republic of Bulgaria to the European Union
IAU – Internal Audit unit	RA – Registry Agency
RSO – Regional Statistical Office	R&D - Research and Development activity
	SFA – State Fund Agriculture

SBS – Structural Business Statistics  
STBS – Short-term Business Statistics  
SU – Sofia University  
SWU – South-West University  
TC – Training centre  
  
UISAC - Unified Information System  
Against Crime  
UN - United Nations  
UNWE – University of National and  
World Economy  
WG – Working group  
WHO – World Health Organization

## INTRODUCTION

The Report on implementation of the National statistical programme (NSP) and the activity of the National statistical institute (NSI) in 2016 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 NSP 2016 and the NSI activities in the past year.

**The first section** consists of surveys and activities performed for the first time in 2016.

**The second section** includes 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 2016.

**The fifth section** introduces the audit assignments performed by the Internal Audit Unit (IAU) and the activities implemented by the Inspectorate and the Finance Controller in 2016.

## MAIN EVENTS IN 2016:

The main directions in activity of the National Statistical Institute during the past 2016 were related to:

- Providing statistics on **indicators for the implementation of the priority objectives** under the strategy “Europe 2020” and under the system of indicators for sustainable development;
- Signing of an **Agreement on cooperation in the field of statistics between the National Statistical Institute of the Republic of Bulgaria and the National Statistics Office of Georgia**;
- **Celebration of the 136th anniversary of the establishment of statistical institution** in Bulgaria. The event was accompanied by a visit to the Chairman of the State Statistics Committee of Azerbaijan, during which both presidents **planted a tree** in the Park “Zaimov” as they buried a **time capsule with a message to future generations** into the roots;
- Signing of the **second Action Plan between Republic of Bulgaria and the Republic of Azerbaijan** for the period 2016 – 2018 within the framework of existing Agreement on bilateral cooperation in the field of statistics. The aim of the planned activities was to continue the cooperation between the National Statistical Institute and the State Statistical Committee of the Republic of Azerbaijan and in other areas within the arrangements in December;
- **For the first time** the National Statistical Institute hosted the **training of young specialists from the State Statistical Committee of the Republic of Azerbaijan** on “Introduction to the theory and organization of statistical surveys”. The “Methodological and Training Center” Directorate at the NSI and the Centre for Statistical studies at the University of National and World Economy were organizers of the training;
- **Preparation of Bulgaria for the presidency of the Council of the European Union in 2018** (the first half of 2018), realized in following activities:
  - Two visits to Latvia and Italy realized in order to get acquainted with their experience in organizing Presidency, leading the meetings of the Working Group “Statistics” to the EU Council and negotiations
  - Active participation of NSI’s experts in Working group “Statistics” at the EU Council
  - Participation in the introductory meeting of the Presidency Trio Estonia - Bulgaria - Austria and training on Presidency in Tallinn, Estonia.
- The National Statistical Institute is actively involved in the work of the **European Statistical System Committee** during the year, which adopted two very important documents related to its further development: Vienna Memorandum related to the production of statistics on income, consumption and wealth, as well as **Quality Declaration of the European Statistical System** adopted in 28 September, 2016;
- **Expanding the use of administrative registers** and information systems for statistical purposes in many statistical areas as labour market statistics, statistics on income and living conditions, energy statistics, foreign trade statistics, crime statistics and others;
- Participation of the NSI as a beneficiary in **projects under the Operational**

**Programme “Good Governance”** co-financed by the European Social Fund of the European Union;

- Publication of the **2015 Annual Report** as the tradition to present briefly conducted statistical surveys and activities of the NSI to users was revived. The report introduces the public with the main directions in the work of the NSI, new priorities and results achieved;
- Implementation of the standard **ISO 9001:2015** within the Quality management system;
- Bulgaria's accession to **the IMF's Special Data Dissemination Standard Plus (SDDS Plus)**, as our country became the eleventh country in the world, connected to the highest international standard for data dissemination. The accession to this IMF's standard was the result of joint efforts of the Bulgarian National Bank, National Statistical Institute and the Ministry of Finance;
- The National Statistical Institute actively participated in a number of events organized jointly by government institutions, NGOs and business: Conference “Made in Bulgaria - an advantage or disadvantage” and National Contest “Exporter of the Year” - held under the patronage of the Ministry of Economy; National Conference entitled “Modern transformation of IT services: clouds, managed services, outsourcing”; 2016 IBM Infobahn Forum and conference on “Strategy on cybersecurity in the EU - compliance and risk approach”; Conference on Information Security under the patronage of Deputy Prime Minister Rumiana Bachvarova, etc.

## **I. DONE FOR THE FIRST TIME IN 2016**

In 2016 the National Statistical Institute implemented a total of **248 statistical surveys and activities**, of which:

- Quarterly survey on producer prices for “Legal and accounting activities; management consultancy activities” (division 69 and group 70.2 of NACE.BG according to the Regulation (EC) No 1158/2005 of the European Parliament and of the Council.
- Quarterly producer price indices for “Architectural and engineering activities; technical testing and analysis” (division 71 of NACE.BG) as data were published and submitted to Eurostat.
- Sample survey in households entitled “Adult education survey” according to the requirements of Commission Regulation (EU) No 1175/2014.
- Sample survey in enterprises entitled “Continuing vocational training of employees” (CVTS5) according to the requirements of Commission Regulation (EU) No 1153/2014.
- “Young people on the labour market” - Labour Force Survey ad hoc module – conducted throughout 2016.

In 2016 the NSI carried out the following **new statistical activities**:

- Provided data to Eurostat on credit mobility for students pursuant to Commission Regulation (EU) No 912/2013.
- Provided data and metadata on System of health accounts pursuant Commission Regulation (EU) 2015/359 as regards statistics on healthcare expenditure and financing.
- Published indicators of poverty by ethnicity, including estimates of poverty from “Survey on Income and Living Conditions 2015” in response to the growing needs of information on households by ethnicity.
- Transmitted to Eurostat GDP data developed 30 days after the end of the reporting period.
- Reassessed all main macroeconomic indicators based on improvements introduced in the work on Bulgarian national accounts for the period 1995 - 2015 year.
- Implemented methodological improvements in the estimates of GDP and GNI concerning the last reserve set by the European Commission - Implementation of the perpetual inventory method in calculating the consumption of fixed capital for non-market producers.
- Provided an opportunity for respondents (non-financial enterprises, insurers, investment companies and pension companies) to enter electronically consolidated annual reports on activities in real time in Information System “Business statistics”.
- Began collecting an additional set of data on subcomponents of the prices of gas and electricity, in particular of the network and tax-based price components.
- Provided to Eurostat data under the questionnaire “Accounts of physical energy flows” on a voluntary basis.
- Began mandatory reporting on energy consumption in households by type of use according to the requirements of Commission Regulation (EU) No 431/2014 on energy statistics, as regards the implementation of annual statistics on energy consumption in households.

- Participated in the preparation of the Eurostat’s survey on administrative burden on Intrastat reporters: current situation and potential alternatives for Intrastat.
- Published press releases with regional statistics.
- Published regional data for quarterly housing price indices by statistical regions and for six cities in Bulgaria with population over 120 thousand residents.
- Developed nomenclatures based on the Classification of products by economic activity (CPEA 2015) thereby providing the linkage of repair, installation, renting and three types of trade in manufactured products.
- Began providing data and metadata in accordance with the IMF’s Special Data Dissemination Standard Plus (SDDS Plus) following the accession of Bulgaria (from May 31, 2016) to the new IMF’s statistical standard.
- Introduced the new version of Classification of fields of education and training (ISCED-2015) for the purpose of statistics on education.
- Started work on a project related to methodology of collecting, processing and sharing of “big data” with the official statistics.
- Developed national Generic Statistical Business Process model based on GSBPM<sup>1</sup> ver. 5.0, published on the NSI’s Internet site.

Over the past year the National Statistical Institute developed and implemented the following **information systems**:

- Information System "Tourism" with two subsystems “Accommodation establishments” and “Trips” as a main tool for online collection of monthly statistical information from statistical surveys in the field of tourism.
- Information System “Housing Prices” for online collection and processing of quarterly reports from firms and institutions carrying out sales of dwellings to households.
- Information System “Automatic consolidation of business indicators” in order to consolidate information for certain enterprise groups and to facilitate the implementation of statistical unit by kind “enterprise groups” at national level.
- In March 2016 the work on building of the Information System “Macroeconomic statistics – financial statistics and non-financial national accounts” started.

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<sup>1</sup> Generic Statistical Business Process Model.

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

Main direction in the activity of the National statistical institute in 2016 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 2016, for the first time since 2011, a small increase in the amount of current expenditure was observed, which allowed normal operation of the activities of NSI and implementation at great extent of horizontal and specific priorities set in the Strategy for Development of the National Statistical System.

### **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**

Statistical data was developed and provided in 2016 for monitoring and evaluation of national strategies with the thematic scope of the data from all statistical areas. More effective cooperation between the NSI and the competent institutions at national level was achieved.

NSI representatives participated actively in the work of all thematic working groups on the development and implementation of the OP and in monitoring committees of the operational programs.

Task Force was formed in the NSI in order to prepare the monitoring of operational programs in implementation of the principle of partnership. In 2016 the NSI in cooperation with managing authorities of the following programmes “Rural Development Programme”, “Maritime and Fisheries Programme” and Operational Programme “Environment” continued development of metadata on result indicators and ensured the implementation of precondition 7 “Statistical systems”. The developed metadata are part of methodological documents of the operational programmes and documents when announcing the programming procedures.

The statistical data on indicators for the implementation of the priority objectives of the strategy “Europe 2020” and of the System of sustainable development indicators were provided.

Methodological support was ensured and statistical data on R&D, innovation and information and communication technologies were provided for monitoring and evaluation of European and national policies such as: strategy “Europe 2020” and National Programme for Development of the Republic of Bulgaria “Bulgaria 2020”; operational programmes “Innovation and Competitiveness 2014 – 2020” and “Science and education for smart growth”.

The work on the provision of indicators included in the scoreboard for the establishment of macroeconomic imbalances continued in 2016. 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 % of GDP; Private sector debt in % of GDP; General government sector debt in % of GDP; Unemployment rate.

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

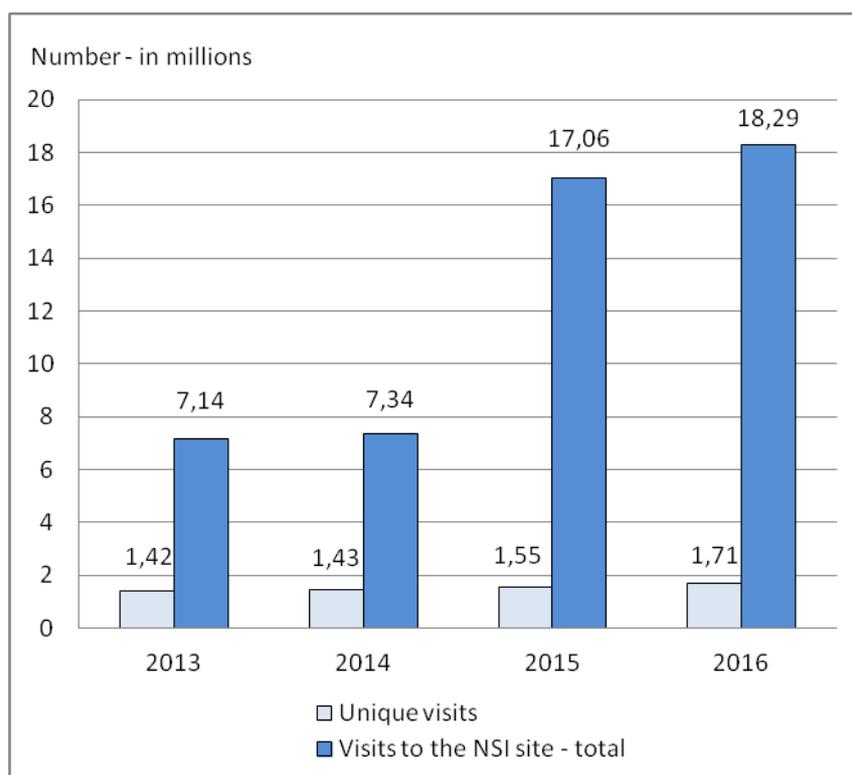
The provision of statistical indicators, developing new and updating of existing indicators are priority activities due to the growing needs of a complex and multidimensional statistical information for the purposes of development, monitoring and evaluation of policies and programmes at national and 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.

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

In 2016 the internet site of the NSI was visited 18 291 184<sup>2</sup> times and the unique visits were 1 709 752<sup>3</sup> (Figure 1).

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



There were 5 896 visits average per day as the most visits were 23 598 on 29 March 2016.

All materials were published according to the Release calendar, reports and normative documents and within the deadlines specified.

At the end of the year, there were 1 560 time series, 1 625 latest data, corresponding metadata and 725 methodological documents and quality reports in 42 statistical sections

<sup>2</sup> Data on the internet site visits and number of the published materials are as of 17.10.2016.

<sup>3</sup> Unique visit – the first visit from one IP address of at least one page of the website during the reporting period.

available to users in Bulgarian and English. During the year other materials were also published – 356 press releases in Bulgarian and in English, 64 news (39 in Bulgarian and 25 in English), 5 versions of EKATTE, 55 competitions, 67 lists of admitted/not admitted competitors, 9 public contracts, 8 public invitations, 4 tenders and others.

During the year a separate system for management of the content was implemented through which for the first time press releases with regional statistical data were published. Within nine months of system implementation 472 regional press releases were published. They consist of demographic and economic information for 28 administrative districts of Bulgaria. An access from the section “Press Release” to the newly created website was provided for press releases with regional statistical data.

The Rubric “For the respondents” was restructured by themes as for the first time some information on IS “Accommodation establishments” and on IS “Housing prices” was published there.

On the homepage of the NSI’s Internet site a separate section entitled “Projects” was established, which publishes news on the topic.

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

- Glossary of statistical terms “Basic theoretical concepts used in the practice of the NSI”
- Information “Generic statistical business process model in the NSI”
- Identification of employees and interviewers of the RSO under the rubric “For the respondents”
- Classification of fields of education and training (ISCED-2015)
- Quality management system according to the standard ISO 9001: 2015
- Data in the new subheading “Housing price indices” under the rubric “Housing price statistics”
- Producer price indices on the international market (2010 = 100) under the rubric “Business statistics”.

The layout and the content of some rubrics and subheadings were changed as follows:

- Subheading “European legal basis” under the rubric “Legal basis”
- Rubric “Justice and Crime” under the section “Demographic and social statistics”
- Rubric “Housing price statistics” under the section “Macroeconomic statistics”.

According to the Editing Plan in 2016 the National Statistical Institute presented to the users of statistical information a total of 23 publications – printed (with electronic version on CD) and electronic with total circulation of 36 260 items. All electronic publications as well as the electronic versions of printed publications are available free of charge in .pdf format on the NSI’s Internet site. Most of the publications are available in two languages – Bulgarian and English. Data published in them characterize the population, the economy, the environment, the health, the education, the culture, the tourism and other important sectors at national and regional level.

“Statistical Yearbook” is the main publication of the NSI, which provides detailed information to users from the country and abroad about demographic, social and economic development of Bulgaria. In the yearbook the data are presented for the country as a whole, by statistical zones, by statistical regions and by districts and municipalities. Data included in the International Review Section allow for making comparisons between Bulgaria and other

countries in the relevant area. The circulation of issued Statistical Yearbook 2015 amounted to 550 printed and 450 electronic (on CD) copies.

“Statistical Yearbook 2016” consists of the most recent and topical at the time of issue data and is intended for a wide range of users: state authorities, NGOs, students, candidate students and pupils, as well as general public.

In order to increase the knowledge of the general public on statistical surveys, along with information leaflets on household budgets and labour force, the NSI issued a leaflet entitled “Consumer Price Index and inflation” in circulation of 4500 printed copies.

In 2016 the NSI published advertising information leaflet “Bulgaria 2016” in Bulgarian and English as well as the annual Catalogue of statistical publications with information about the upcoming publication activity in 2017. The leaflet and the Catalogue are available free of charge. The publications “Main macroeconomic indicators 2015” and “Structure of Earnings 2014” were prepared for printing as both of them will be available in early 2017.

Jointly with the Regional Statistical Office - Yugozapad, the NSI issued bilingual printed and electronic edition “Sofia in Figures 2015” (in Bulgarian and in English), intended for state and local authorities, businesses, NGOs, policy makers, researchers, teachers, students, specialists and all citizens interested in socio-economic development of the capital. The issue is a continuation of periodicals “Sofia in Figures” issued every five years and it contains rich statistical information about demographic, social and economic development of the district Sofia (stolitsa) for 2010 - 2014 period. Data for 2015 are also published on some indicators.

Within the project “Urban Audit” funded by Eurostat the NSI issued publication “Cities and their functional urban areas in the Republic of Bulgaria” in Bulgarian and in English (printed and electronic version). The project aimed at providing reliable and internationally comparable information on cities and their functional urban areas (defined by the European Commission). The collected data on demographic, social, economic, environmental and cultural development of cities and their urban areas serve as a basis for development of regional and local plans for sustainable development. The publication is intended for state and local authorities, businesses, policy makers, researchers, teachers, students, specialists and all citizens interested in socio-economic development of regions in Bulgaria.

The NSI presented to the attention of users the printed edition “Annual Report 2015”, which was prepared on the basis of the Report on the Activity of the NSI in 2015. The publication contains information systematized in several sections which cover the statistical surveys and activities carried out for the first time in 2015, the horizontal and specific priorities under the Strategy for Development of the National Statistical System of the Republic of Bulgaria, 2013-2017, the practical implementation of the statistical surveys and activities included in the National Statistical Programme by specific thematic areas, as well as the implementation of priority tasks in the field of international cooperation. The resources needed for the implementation of activity of the NSI are presented, as the priorities for 2016 are indicated.

In 2016 four issues of “**Statistics**” **Magazine** were published. The issue is in Bulgarian language with summaries in Bulgarian, English and Russian. The prominent experts and members of the scientific community by NSI, UNWE, “Dimitar A.Tsenov” Academy of Economics and other universities and research institutes published articles in the magazine. With their developments and ideas they promote statistical science and practice, cultivate and maintain statistical way of thinking in research work. “Statistics” Magazine is published in electronic format on CD and online on the NSI’s website, as well as in printed format in order to meet fully the users’ demands of statistical information.

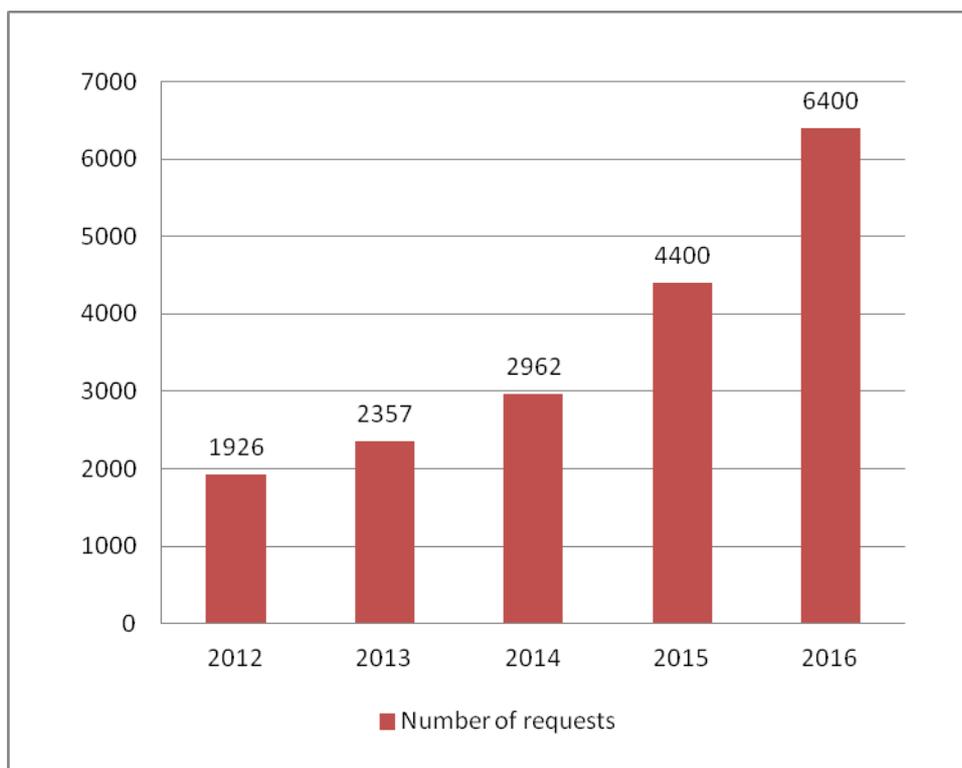
The NSI publishes on its website press releases containing the results of main statistical surveys according to the Release calendar. In 2016 monthly average press releases published in English and Bulgarian were about 26 in number.

The NSI's library continues to occupy a leading position nationwide in the field of building, management and online dissemination of digital information resources.

In 2016 priority in the activity of the NSI's library was the provision of free online access to the digital library information resources. The development of user-oriented digital database continued - converting PDF files to PDF pages, displaying the content, full-text and index of digital copies. The processed bases were attached to iLib-navigator in the electronic catalogue of the integrated information-retrieval library system. The performed activities allowed globally full and free Internet access to digital resources created. 57 336 digital PDF pages were converted through software processing. At present the library successfully manages an impressive volume of 1 200 000 pages of digital information. The digital copies of statistical collections "Economy of Bulgaria" for the period 1969 - 2012 and "Population census of December 31, 1934" were published on the Internet. The digital center of the library created 5123 digital pages as the digital library recorded 9 025 visits and 20 850 references in the digital database.

In 2016, the NSI satisfied over 6 400<sup>4</sup> single requests for statistical information (Figure 2).

**Figure 2. Single user requests**



In 2016, statistical information was also provided to users from the country and abroad who requested by a letter that they want to receive data from a particular survey immediately after their official announcement (table 1).

<sup>4</sup> The number of single user requests is as of 17.10.2016.

**Table 1. Responses to requests for regularly provision of information**

	(Number)
<b>Requests from the country</b>	<b>35</b>
Responses with monthly data	288
Responses with quarterly data	44
<b>Requests from abroad</b>	<b>1</b>
Responses with monthly data	12

In 2016 a new questionnaire focused on awareness and assessment of new ways of dissemination of statistical information was developed. Over 250 questionnaires were online completed.

In 2016, 11 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.

During 2016 the Bulgarian center for European Statistical Data Support to users, which is part of the net of national centres called European Statistical Data Support (ESDS), continued its work. Until 30 September a total of 19 requests were received - 14 via a web-based tool of Eurostat (ASSIST) and 5 by email of the NSI. Ten of all requests are standard and 9 - unconventional, for which the answer can be given after consultation with the EC Central Helpdesk. The largest number of requests came from commercial companies - 13, from individuals - 3 and from students or scientists - 3. The number of requests about the availability of data amounts to 12, about verification of data - 4, and about methodological, technical and other problems - 3.

#### **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.

In 2016 the NSI finished successfully EC Project “Merging statistics and geospatial information”. Basic statistical data on health and spatial information were integrated, following the specifications of the data laid down into INSPIRE concerning the human health. The results expand the opportunities for analytical use of information on the project for the purposes of planning and management of health system and they are basis for application of approach in other statistical areas.

### **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**

The use of administrative sources in the field of labour market statistics continued in order to improve the scope and quality of statistical data from enterprises and to reduce the impact of non-response.

A constant connectivity at the database level through the network of public administration was established in order to achieve efficient and secure data exchange in interaction with other institutions (CA, NRA and NSSI) maintaining registers and administrative sources used for statistical purposes.

Data from administrative registers (NRA and NSSI) and results from the NSI survey “Annual statistics on employment and labour cost” were successfully used in order to improve the completeness and reliability of the information of the “Survey on Income and

Living Conditions”.

In order to improve the coverage and quality of the statistical data on income in 2016 the NSI continued to use data from the National Social Security Institute – 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 National Revenue Agency** provided information on persons who have submitted annual tax form, as well as data on insured persons in order to supplement and validate missing information on income for the purposes 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 improving the scope and quality of primary information, as well as at expanding the use of data from administrative source - Unified Information System Against Crime, supported by the administration of the Prosecutor General.

In 2016 the NSI implemented EC Project “Micro data linking of Structural Business Statistics and other business statistics” within which new statistical data on the structure, activity, function and development of enterprises in Bulgaria were produced. Micro data linking is regarded as an important future tool for acquisition of additional knowledge and statistical information using existing data sources without carrying out any specific new surveys, which will allow reducing the respondents’ burden.

In the field of foreign trade statistics in 2016, the NSI experts continued to work on one of the main directions connected with orientation of the production of foreign statistics to the growing needs of users through broader use of data already collected by other administrations or other departments of NSI, without an increase in the respondents’ burden.

For the purposes of improving production and increasing the quality of statistical products and services in the field of environmental and energy statistics in 2016 the efforts were aimed at identifying new administrative sources of information. Along with the administrative data obtained on the basis of existing agreements on exchange, in 2016 the NSI continued the use of detailed data on the amount of waste remaining after recycling operations, composting and incineration, collected by Executive Environment Agency.

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.

During the year **Information System “Infostat”** established itself as a reliable data source for all users of statistical information. The system provides possibility to create tables with data on various indicators, as well as for their graphical visualization. The users access the system through the NSI’s website. A link to all pages under the rubric “Statistical data” is provided for easier access. During the year the IS “Infostat” was visited 9 677 334<sup>5</sup> times and the unique visits amounted to 36 463.

The tables with time series in Excel format on the NSI’s website were replaced with data tables for a shorter period of time due to available comprehensive information in IS “Infostat”. The number of tables in Excel under the section “Business statistics” was reduced.

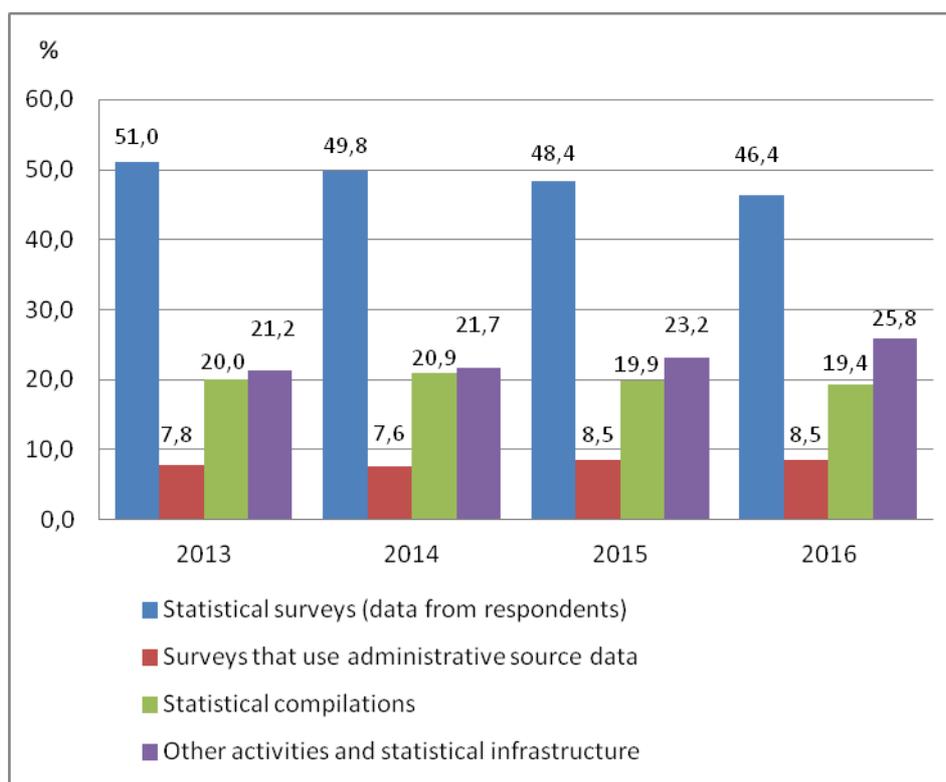
In 2016 the share of surveys conducted by the National Statistical Institute that use

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<sup>5</sup> Data on visits of IS “Infostat” are as of 17.10.2016.

administrative source data was 8.5% (Figure 3).

**Figure 3. Distribution of statistical surveys by type conducted by the NSI according to NSP 2016**



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

In 2016, the development and implementation of new Information systems and web-based applications for the needs of different statistical surveys in NSI continued. An update and extension of existing Information systems “Business statistics”, “Short-term business statistics” and “Consumer Price Index” were conducted.

In order to reduce the respondents’ burden in 2016 four new surveys in the field of Structural Business statistics were included in Information System “Business Statistics” - consolidated annual report on activities of non-financial enterprises, consolidated annual report on activities of insurance companies, consolidated annual report on activities of specialized investment companies, consolidated annual report on activities of pension companies, which the respondents entered electronically in real time. New questionnaires to the existing surveys were included, which facilitated the data transfer between enterprises and NSI and provided qualitative, timely and widely accessible statistical information upon protection of statistical confidentiality.

Through the ISSBS data on the affiliates outside the European union controlled by Bulgarian enterprises (OFATS) were collected according to the Regulation (EC) No 716/2007 of the European Parliament and of the Council on Community statistics on the structure and activity of foreign affiliates. Until 2015 this information was collected and processed by the BNB.

In 2016, new subsystem to the Information System “Short-term business statistics” was included. The existing applications were improved. The ISSBS provides an easier and convenient way to provide online monthly and quarterly information from the reporting units included in samples. The use of ISSBS contribute to improvement of quality of short-term information by integrated arithmetic and logic control, as well as to reduction of respondents’ burden.

The use of Information System “Register of enterprise groups”, as well as the module to the Information system “Register of statistical units” led to optimization of the process of preparing the data for multinational enterprise groups at the national level. The exchange between statistical business register of the NSI and the European Enterprise Groups Register of Eurostat continued.

A new Information system “Automatic consolidation of business indicators” was developed and implemented as well as new applications in order to collect, control and processing of statistical data: “Report on combined production of electricity and heat” and “Data on foreign trade transactions of a company”.

In 2016, in order to facilitate the respondents, to relieve the processing and to improve the quality of statistical data in the field of statistics on education and health the following activities were implemented:

- Online system for data input on Continuing vocational training of employees survey (CVTS)
- Electronic questionnaire for “Creches” survey.

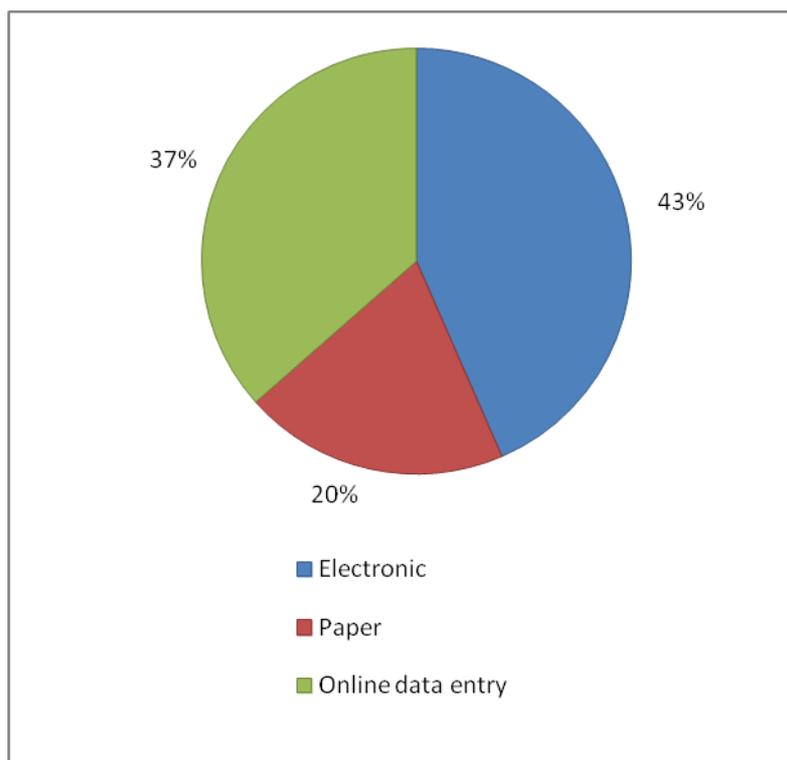
In 2016, as part of a long-term strategy of using new technologies in order to accelerate and facilitate the process of collecting and processing of data and to provide good quality electronic devices were introduced in 70% of the sample to the survey “Statistics on Income and Living Conditions”.

In 2016 in order to facilitate the users and to improve the quality of collected statistical information web-based applications for the needs of different statistical surveys in NSI were developed and implemented: “Accommodation establishments”, “Questionnaire for Bulgarian and foreign residents entering Bulgaria”, “Questionnaire for Bulgarian and foreign residents coming from Bulgaria”, “Prices of plant protection products”, “Data on foreign trade transactions of a company”. The first three applications were united into unified Information system, which facilitated work on entry and control of data and shortened the deadlines for providing the resultant statistics. The applications are used by the NSI’s employees, as well as by the respondents.

The use of tablets and mobile devices in order to collect primary data was extended.

In 2016, 80% 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 2016 in order to provide objective, timely and reliable statistical information in the field of energy statistics the efforts were focused on improvement of the system of data collection, development of new tools and updating of existing statistical tools for annual, semi-annual and monthly surveys regarding current changes in European legislation and liberalization of the energy market in the country.

In the field of statistics on agriculture, forestry and fisheries the statistical tools (statistical forms, nomenclature of the products observed and software for collecting and processing of data) was updated for the surveys on prices of plant protection products and veterinary medicinal products. Applied software for online data collection from respondents included in the surveys on prices of plant protection products was developed. As a result of the changes made an optimization of the process of collecting and processing of statistical data was achieved, the quality of statistical information was improved, the respondents's burden was reduced.

In the field of statistics on innovation new statistical tools was developed and terms of reference for processing of data from the statistical survey on innovation activity of enterprises was updated in full compliance with harmonized questionnaire and methodology of Eurostat (CIS 2016).

### **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 2016 the first annual monitoring on the implementation of the "Action Plan for implementation of the recommendations of the Peer Review in the NSI" was performed. Quarterly newsletter for top management of NSI, containing analysis of macroeconomic indicators was developed.

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

- Conducted specialized training for internal quality auditors according to standard ISO 9001:2015.
- Performed internal audit and recommendations made for adjustments to implemented tool for Quality Management System.
- Carried out external certification audit, which resulted in quality certificate of electronic services according to the new standard ISO 9001:2015 received by NSI.

In 2016, the Concept on population for the purposes of sample surveys of individuals and households was developed for internal use (within the NSI), as well as in order to meet the external users' needs. The Concept defines the content, scope and characteristics of the list of population, as well as the rules and procedures for access and formation of samples for the purposes of sample surveys.

In the field of Short-term Business statistics the efforts were concentrated on further methodological development and improvement of data quality. In 2016, 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 with a view of sufficient representativeness and reflecting 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.

In 2016 for the first time in the field of demographic statistics report on data quality was prepared for statistics on residence permits for foreigners and foreign residents that come from so-called third countries.

During the year, the necessary annual quality reports in the field of statistics on population and demographic projections, statistics on education, statistics on health, statistics on income and living conditions and household budget survey were prepared and transmitted to Eurostat.

In the field of macroeconomic statistics report on GNI data quality was prepared for the period 2002 - 2015 year.

Pursuant to the requirements of Commission Regulation (EU) No 275/2010 five detailed national report on the quality of data on Structural Business statistics and IFATS 2013 were developed and provided to Eurostat using European Statistical System Metadata Handler (ESS MH) application for online submission of data.

In 2016 2016 new report on the quality of data on energy statistics was prepared. It includes information on all national questionnaires which collect data under Regulation (EC) No 1099/2008 on energy statistics.

Annual reports on data quality were prepared and presented in Eurostat in the following fields: waste, air emissions, environmental taxes and fees and material flows in economy.

Pursuant to the requirements of Commission Regulation (EU) 2015/995 and Commission Regulation (EU) No 859/2013 reports on the quality of data on innovation for 2014 and on ICT usage by households and enterprises in 2016 were developed. They were provided to Eurostat through ESQR specialized format for online submission of metadata and quality report.

### **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 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. In the development of the Annual plan for specialized training of the NSI employees in 2016 specific needs related to the development of methodology and the extension of contents of the existing surveys by introducing additional modules and indicators were taken not coincidentally into account.

**Table 2. Trainings, seminars and courses of employees of the National Statistical Institute in 2016**

Trainings, seminars, courses	(Number)	
	Conducted trainings, seminars, courses	Employees trained
Trainings according to European Statistical Training Programme	19	20
Seminars related to the modernization of surveys included in the National Statistical Programme	10	317
Seminars on improving the professional capacity of the NSI employees	12	328
Seminars on projects	3	188
Trainings on the forthcoming Bulgarian Presidency of the Council of the EU	3	5
Other courses and trainings outside the Annual Training Plan	29	58
IPA obligatory training	25	71
<b>Total</b>	<b>100</b>	<b>987</b>

In pursuance of the Strategy the NSI's experts participated in 19 trainings according to the European Statistical Training Programme for statisticians (Table 2). The trainings were intended for experts in the following fields: demographic and social statistics, macroeconomic statistics, business statistics, multi-domain statistics, dissemination of statistical information and general administration. The trainings contributed to qualification improvement, which will redound to production of internationally comparable and reliable high quality statistical data in accordance with the international standards.

During the year, ten seminars related to modernization of surveys of the National Statistical Programme were held. A total of 317 employees attended from the NSI's Head Office and RSO.

The NSI's experts participated in seminars related to recent changes in the Public Procurement Act and the practice of its applying, as well as working with SAS - specialized statistical software product. A total of 328 employees were trained in the seminars for increasing the professional capacity.

Involvement of the NSI in the implementation of European projects on the development of statistical methods and conduction of new surveys determined three trainings on projects in the Annual Plan. As a result, the employees trained amounted to 188.

In the context of the forthcoming Bulgarian Presidency of the EU Council in 2018 and in relation with the implementation of the Strategy for Development of the NSS three trainings organized by IPA were conducted. The trainings were intended exclusively for senior officials of the central administration. The training were focused on negotiation process and techniques, communication skills, the EU institutional framework in the context of the

Presidency, dealing with the procedures during the Presidency and others.

The NSI's employees were included in various courses outside the Annual Training Plan in 2016. These courses were aimed primarily at the administrative services and activity of general administration. The Institute of Public Administration was an organizer of the majority of the courses implementing the Project S13-22-1/04.16.2014 "Capacity building of the Institute of public administration (IPA) research, education and application of innovative European practices in good governance".

There was a very fruitful cooperation between the NSI and the Centre for Human Resource Development and Regional Initiatives to the MLSP. The Centre was an organizer of seminar entitled "Business skills for conducting meetings and negotiations. Image and success". The aim of the seminar was to share best practices in the human resources management and to apply corresponding legislation in different administrations.

The experts employed for the first time as civil servants also attended mandatory training, whose conduction is regulated as mandatory in pursuance of the Civil Servant Act. The aim of these trainings is to support the acquiring of new roles and responsibilities, ensuring more rapid and successful adaptation in the public administration.

In 2016 mandatory trainings for civil servants of expert positions, as well as of managerial positions were carried out by the Institute of Public Administration. The trainings were attended by 25 participants from the NSI's Head Office and departments in the RSO.

In pursuance of the Annual Training Plan for 2016 the financial controller participated in specialized course entitled "Preliminary control of the lawfulness prior commitments and prior incurring of expenditure and dual signature system in public sector organizations".

Outside the Annual Training Plan a course for working with specialized software "PovMap", developed by the World Bank for poverty mapping was conducted.

During the year in accordance with the approved Concept on training of the NSI's employees the following training seminars were carried out at the Training and Qualification Center – Slivek by themes:

- Modernization of the surveys in the National Statistical System - 14 seminars with 593 participants
- Enhancing the professional capacity of the NSI's experts - 11 seminars with 291 participants.

In 2016 videoconference between the NSI's Head Office and the RSO was introduced. A building of such link is envisaged between the HO and Training and Qualification Center in Slivek.

The use of the possibility of teleworking of the employees in compliance with all security requirements gradually expands.

The use of analytical platforms SPSS and SAS for statistical data processing was improved as they become a basic tool for processing of statistical information.

### **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 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, University of economics – Varna, Academy of economics Dimitar A. Tsenov – Svishtov and others).

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 2016, the NSI accepted a traineeship of 28 young people (Table 3).

**Table 3. Traineeships conducted at the National Statistical Institute**

University/Organization	(Number)	
	Head Office of the NSI	RSOs
University of national and world economy – Sofia	13	4
University of economics – Varna	-	3
South-West university Neofit Rilski - Blagoevgrad	2	-
Academy of economics D. A. Tsenov – Svishtov	-	1
Sofia University St. Kliment Ohridski	4	-
University of Burgundy-France	1	-
<b>Trainees total</b>	<b>20</b>	<b>8</b>

The duration of traineeships was different depending on the needs of students. The initial stages of the application, as well as the subsequent administration were performed by using an online platform.

In order to stimulate youth employment the Component 1 of Operational Programme “Career Start” was successfully implemented in the NSI. 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 two experts at the NSI’s Head Office and 6 - at the RSOs) 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 2016 the process on implementation of advanced technology products and resources continued. Some of them were: geospatial information software - ArcGIS; expanding the use of web-based questionnaires through LimeSurvey, VB.NET and others; use of innovative methods in surveys conducted by inquiry (CAPI interview through electronic devices for data collection) and extended application of SDMX standard for transmission and dissemination of statistical data. The use of IS “Infostat” for dissemination of statistical information and provision of interactive references for users expands. Information resources of the NSI’s library are available on the Internet through specialized software and technical equipment.

Basic analytical platforms in the NSI are SPSS Statistics Server and SAS, which apply to development of analytical outputs, specific statistical analyses and processing of data from statistical surveys in various statistical fields. These specialized software products provide acceleration of the statistical process and improvement of data quality.

Direct connectivity through a secure channel from the network of public administration and exchange of administrative data for statistical purposes between the NSI, the NSSI and the NRA were provided. Reliable channel for data exchange was also built with the BNB.

### **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, bodies of statistics and other state institutions continued their joint work on the concluded agreements in 2016.

In order to improve the scope and the quality of surveys on households and individuals in 2016 the NSI concluded agreements on exchange of personal data with the National Revenue Agency and the National Social Security Institute.

In January 2016 the National Statistical Institute and the World Bank signed an agreement for joint activities on the project for poverty mapping.

During the year a draft agreement on information cooperation and data exchange with the Ministry of Education and Science was prepared.

In March 2016, the NSI signed agreements on cooperation and strategic partnership with the New Bulgarian University and the Center for Prevention and Countering Corruption and Organized Crime, as well as an Annex to the Agreement on exchange of demographic data with the Ministry of Regional Development and Public Works.

In July 2016 in order to achieve greater consistency of activities and to optimize the deadlines of production of statistics the NSI concluded an agreement on cooperation and strategic partnership in exchanging information with the National Social Security Institute.

In September 2016, the NSI concluded an agreement on cooperation with the Economic Research Institute at BAS.

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

During the year the partnership between the NSI and the Executive Environment Agency continued. The NSI's experts in the fields of environment, energy and transport participated in the preparation, verification and consistency of statistical data in the "National Report on the status and protection of the environment in Bulgaria in 2015", which provides information on key economic indicators and actively participates in the analysis and evaluation of some of the environmental factors.

In the field of foreign trade statistics considerable attention was paid to work on coordination and joint activities with other institutions - the NRA and CA. The National Statistical Institute and the Bulgarian National Bank continued the process of consistency of data on exports and imports of goods.

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 in order 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.

In the field of macroeconomic statistics considerable attention was paid to the activity on coordination and cooperation with other institutions. The National Statistical Institute and the Bulgarian National Bank continued the process of data consistency for annual and quarterly financial national accounts with Notification tables for debt and deficit of General Government sector.

### **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, held in February and May in Luxembourg, in September in Vienna, Austria, in November in Luxembourg.

In 2016, six framework positions were prepared on comitology items on the agenda of meetings of the ESSC which under CM Decree № 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 CEA where the positions of the Republic of Bulgaria are considered in relation with the obligations deriving from membership in the European Union.

In 2016, the Council of the European Union was chaired by Netherlands and Slovakia (Dutch and Slovak Presidency). A total of six meetings of the Working Group “Statistics” to the Council were held, of which two during the Dutch Presidency and four during the Slovak Presidency. The NSI was involved in the decision-making in the field of statistics by sending instructions to the sectoral diplomat at the Permanent Representation of the Republic of Bulgaria to the European Union (PRRBEU) in Brussels, Belgium, as well as through the secondment of its representatives in meetings of this preparatory body of the EU Council.

During the Slovak Presidency (July-December 2016) two new dossiers were opened. On these dossiers were prepared framework positions, as follows:

- Proposal for a Regulation of the European Parliament and of the Council establishing a common framework for European statistics relating to persons and households, based on data at individual level collected by samples.
- Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EU) No 99/2013 on the European statistical programme 2013-17, by extending it to 2018-2020.

The President of the NSI participated in the 102 Conference of the Directors-General of the National Statistical Institutes in Europe which was held on 26 to 27 September 2016 in Vienna, Austria. The topic of the conference on 26 September 2016 was “Organization of the

work of the modern National Statistical Institute in 21st century”. The meeting was attended by representatives of candidate countries. Participation was limited to the Director General or Chairman and one accompanying representative per Member State. The Session on 27 September 2016 was entitled “Statistics on income, consumption and wealth”.

- During the reporting period a total of 56 NSI’s experts participated in 87 meetings of working and target groups of Eurostat developing strategic documents, legal acts and new methodologies in specific statistical domains.
- A total of 13 experts participated in 10 international seminars.
- A total of 18 experts participated in 30 international meetings on projects.

A total of 23 NSI’s experts were trained according to European Statistical Training Programme. The Programme for 2016 offered a total of 55 training courses, of which 21 were attended by the NSI’s employees. All training courses completed successfully.

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

In connection with the ongoing preparation of the Bulgarian presidency of the Council of the European union (the first half of 2018) the following **two working visits** were conducted to Member states in order to get acquainted with their experience in organizing Presidency, leading the meetings of the Working group “Statistics” to Council of the EU and negotiations:

- In late June 2016 one of the Deputy Presidents of the NSI visited the Central Statistical Bureau of Latvia in Riga.
- In late November 2016 the President of the NSI visited the Italian National Institute of Statistics in Rome.

In addition to these working visits in late May 2016 two NSI’s experts conducted a short internship at the PRRBEU, where they were closely acquainted with the way of working within the working groups of the Council, COREPER and the Council of the EU.

In December 2016 the top management of the NSI took part in the introductory meeting of the Presidency Trio (Estonia - Bulgaria - Austria) as well as in training on Presidency in Tallinn, Estonia.

### **Enhanced regional cooperation**

Within the fifth meeting of the Bulgarian-Georgian intergovernmental commission on trade-economic and scientific-technical cooperation an Agreement on cooperation in the field of statistics was signed between the National Statistical Institute of the Republic of Bulgaria and the National Statistics Office of Georgia, replacing the Agreement on cooperation in the field of statistics between the governments of Bulgaria and Georgia from 1997.

On 27 June 2016 the President of the National Statistical Institute of the Republic of Bulgaria and the Chairman of the State Statistical Committee of the Republic of Azerbaijan signed in Sofia **the second Action Plan** for the period 2016-2018 within the existing Agreement on bilateral cooperation in the field of statistics. The aim of the planned activities is the continuation of cooperation in other fields not included in 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”.

In pursuance of these agreements the National Statistical Institute **for the first time organized training** of young specialists from the State Statistical Committee of the Republic of Azerbaijan on “Introduction to the theory and organization of statistical surveys”. “Methodological and Training Center” Directorate and Centre for Statistical Studies to the University of National and World Economy were organizers of the training. The training was held from 5 to 14 December 2016 at the Training and Qualification Center of the NSI in the village of Slivek.

In March 2016 the NSI’s representatives participated in the seminar on “Modernisation of

the European Statistical System” held in Bucharest, Romania. The seminar was attended by all stakeholders involved in the process of modernization of the official statistics at European and national level. The aim of Eurostat, which organized this seminar is to improve communication and coordination and exploring potential synergies.

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

The President of the National Statistical Institute took part in the forty-seventh regular session of the United Nations Statistical Commission, which was held from 8 to 11 March 2016 at UN Headquarters in New York. A number of issues of global importance for the development of statistics worldwide were discussed within the forum.

In late April 2016 in Paris, France the 13th meeting of the Committee on statistics and statistical policy of the Organization for Economic Cooperation and Development was organized. The meeting was attended by one of the Deputy Presidents of the National Statistical Institute.

Within the same period (from 27 to 29 April 2016) in Paris, France, one of the Deputy Presidents of NSI participated in the 64th plenary session of the Conference of European Statisticians.

In June 2016 the President of the NSI participated in Joint UNECE/Eurostat Workshop on Implementing the Common Statistical Production Architecture (Common Statistical Production Architecture - CSPA), held in Geneva, Switzerland.

The NSI’s representatives took part in the meeting of the Organization of the Black Sea Economic Cooperation, organized by the Federal State Statistics Service of the Russian Federation. The meeting was held from 22 to 23 June 2016 in Moscow, Russia.

### **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 2016, the NSI successfully completed the implementation of 9 projects and continued implementation of the 17 European 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 11 new projects, which are intended to be implemented in the period 2016-2019. The projects are included in the Annual Programme of Eurostat for 2016 and are in pursuance of Regulation (EU) № 99/2013 of the European Parliament and of the Council on the European Statistical Programme for the period 2013-2017.

Within the implementation of ESS **Vision 2020** the NSI worked on two very important projects:

- The work on ESSnet project on **Big Data** related to techniques for collection and processing of Big Data sources and dissemination of the obtained results started. The main objective of the project is to extract information from the Internet about the characteristics of enterprises through a combination of different techniques (web scraping, text mining and machine learning), as thus the Statistical Business Register will be updated and “enriched”. The challenge is to evaluate the quality (accuracy) of the results at micro- and macro level. The NSI worked on the implementation of three tasks: access to Big Data sources, processing of data from the Internet, testing the “new” methods and techniques according to new data sources. The first two of tasks were implemented. The main result was developed software for searching the URL

addresses of enterprises and a list of these addresses for about 10 000 enterprises. The work on the project continues with development and testing of techniques for extracting information from the websites of these 10 000 enterprises about carrying out e-commerce and/or their presence in social networks. The final seminar for the dissemination of project results is envisaged to be organized in 2017 in Sofia. The NSI will host the seminar and will participate actively in its organization and implementation. The participation of the NSI as a partner country in this project is a significant achievement in the context of the preparation of the European Statistical System to integrate “Big Data” sources in the process of production of official statistics and in accordance with the achievement of strategic goals of “Vision 2020”.

- The work on key ESS project “**DIGICOM (Digital communication, User analytics and Innovative products)**” started as the duration of the project will be up to end of 2019. The project was developed in order to implement the priorities of the ESS “Vision 2020” - identifying users’ needs, dissemination and communication of European statistics. The NSI participated in management and monitoring of a total of four work packages of the project: Analysis of users; Innovative products and tools; (Linked) open data; Communication and branding. **The main objectives** of the project are to create new innovative products for dissemination, tools and services for statistical purposes within the European Statistical System. The main areas of work will be analysis of users; establishment of platforms for social networks for users of statistical information; creating new key digital products; easy access to data, (linked) open data, advanced visualization tools, innovative interaction with users and dissemination; development of communication and marketing strategy and identifying ESS policy concerning “branding” of European statistics.

In 2016 the NSI successfully continued work on the two-year **twinning project** “Support to the State Statistical Committee in Modernisation of the National Statistics System of the Republic of Azerbaijan in line with European standards”. Bulgaria participates in the implementation of the project in all five components by ten experts in the field of quality management, geographic information systems, statistics on income and living conditions, statistics on disabled people and tourism statistics. Within the project the NSI’s experts participated in 13 expert missions. The NSI has been actively involved in project management through its Resident Twinning Advisor and Junior Project Manager. Six activities in project management were conducted, including initial meeting, four meetings of the Committee of monitoring and study visit in Bulgaria.

During the year **five study visits** were carried out with the participation of 19 experts from the State Statistical Committee of the Republic of Azerbaijan. One of the visits was related to exchange of experience and best practices in the management of twinning projects. The visit was attended by management team of the project by German and Bulgarian side and all Bulgarian short-term experts. The team from the beneficiary institution was chaired by Mr. Tahir Budagov, the Chairman of the State Statistical Committee of the Republic of Azerbaijan. He stressed the importance of the project for development of Azerbaijani statistics in line with European standards. During the visit an Action Plan for the period 2016 – 2018 was signed, within the framework of existing Agreement on bilateral cooperation in the field of statistics between the State Statistical Committee of the Republic of Azerbaijan and the National Statistical Institute.

During the other four study visits Azerbaijani statisticians were acquainted with the experience and practices in the different statistical fields: statistics on income and living conditions, tourism statistics, statistics on disabled people and quality management systems in statistics. The project is a proof of the good cooperation between the partners and the continuity outlined in the transfer of knowledge and experience with a view to implementation of European standards in the production of statistics in the Republic of

Azerbaijan.

During the year two expert missions funded by **the instrument of the European Commission for implementation of the acquis – TAIEX** were conducted:

- In the field of environment statistics, held in the State Statistics Committee of Ukraine. The main objective of the mission was to provide expert assistance on waste management, management of integrated register of sources of pollution, production of statistics on resources and waste, quality, use of classifications for the production of waste statistics.
- In the field of of the Tourism Satellite Accounts, held in Palestinian Central Bureau of Statistics. The aim of the mission was to present the European legislation on tourism statistics and national accounts, as well as the methodology used for calculation and dissemination of data on Tourism Satellite Account.

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

In 2016 the NSI started work on project entitled “Building of statistical base and Information system for monitoring of European and national strategies and regional policy”, implemented with the financial support of Operational program “Good Governance”, co-financed by the European Union through the European Social Fund. The project is implemented by the NSI under the second priority axis - Effective and professional governance in partnership with civil society and business. The Information System aims to develop a statistical framework and procedures for collection and dissemination of information in order to optimize the processes of data exchange and accessibility and publicity of information for regular monitoring and evaluation of the implementation of national strategies of horizontal scope, European strategies and monitoring of resulting indicators in operational programmes for the programming period 2014 - 2020 year.

#### **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. Within 2016 two meetings were held according to the annual Plan-programme approved by the President of the NSI. In 2016 the SEC cooperated actively in the process of development of a **Generic Statistical Business Process Model** in the NSI (in accordance with GSBPM ver. 5.0). Other important tasks were as follows: discussion and adoption of the vision, activities and opportunities for development of “General Methodology and Analysis of Statistical Surveys” Department; definition of possible cognitive tasks and methodological case studies to be solved jointly by the members of the SEC and leading statistical experts in NSI.

### **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**

In order to reduce the respondents’ burden electronic forms to collect information for statistical surveys were introduced.

Data on foreign trade statistics are one of the important components in the compilation of Balance of payments and national accounts of Bulgaria. In order to provide a complete coverage of exports and imports to/from third countries and to ensure the provision of reliable and timely data, the NSI continued to obtain and input customs declarations received from the Customs Agency only on paper under “emergency procedure”.

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 developed e-services in order to connect the outputs to the Portal for open data. It enabled automatic update with each publication of such data sets in the Information System "Infostat". In 2016, in the field of business statistics and demographic statistics the NSI developed 35 outputs of annual statistics from the Information System "Infostat" in machine-readable format.

The NSI prepares a draft proposal under the Operational Programme "Good governance" under the project entitled "Implementation of a central automated information system "Single entry point" for enter annual financial reports and statistics in machine-readable format and integration with the NRA, NSI and Registry Agency (Commercial register)", which was declared as a priority project in the roadmap for e-Government.

#### **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**

The reconstruction of server rooms of the NSI was implemented in order to abide by contemporary standards of building data centers and compliance of requirements for interoperability and information security. Duplicate electrical supply systems and air conditioning were provided. Systems for access control, CCTV, fire alarm, fire fighting and alarm system were established. An option for remote monitoring of all systems was ensured. Thus working conditions of information and communication systems of the NSI were introduced in mode 365/24/7.

#### **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**

During the year, supporting communications infrastructure of the NSI was replaced. All main communication devices were duplicated. Duplicated connectivity to the Internet and to the territorial divisions was provided. The NSI applied on a project to align the information assets in accordance with the requirements of Eurostat and migration to hybrid private cloud. An upgrade of server infrastructure is envisaged in order to enable the building of new information systems and to work with large volumes of data.

The PCs, which do not meet the requirements of the new operating systems were replaced. Measures were taken for accelerated upgrade of operating systems, which are not currently in maintenance and conceal risks to information security.

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

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

##### **Demographic statistics**

In 2016 the main priority in the field of demographic statistics was conducting 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.

A procedure for preparation of data according to Art. 6 of Regulation № 862/2007 of the European Parliament and of the Council on “Statistics on residence permits and residents of third countries” was developed.

In 2016 the NSI started 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 participated in data provision since 2004. In order to disseminate data and to promote the survey the NSI prepared bilingual publication, available to users in early 2016.

In 2016, a survey was conducted in order to study the applicability of the definition of “ordinarily resident population”. The survey results for all Member States will be available by the end of 2019.

In 2016, the NSI started work on project “Poverty mapping”, implemented jointly by the NSI’s experts and the World Bank’s experts. The project is part of the programmes of the Government and the World Bank and its results will be presented in 2017.

##### **Labour market**

The conduction of Labour Force Survey ad hoc module on young people on the labour market has begun in 2016 in the field of labour market statistics. The preparation for upcoming Labour Force Survey 2017 ad hoc module on self-employment has also started in 2016. 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 form the future framework regulation for the integration of European social statistics.

In the field of statistical information on wages and labour costs provided by enterprises, the NSI completed the work and published the results from the four-yearly “Structure earnings survey” (in accordance with the requirements of the Regulation (EC) No 530/1999 and Commission Regulation (EC) No 1738/2005). The work continued on regular annual and short-term surveys on the employment and labour costs by moving from direct to indirect method of seasonal adjustment in order to improve the data quality of the labour costs index.

##### **Education and Lifelong Learning**

The regular exhaustive statistical surveys on educational institutions in Bulgaria carried out in 2016 in accordance with the requirements of the national and European legislation under Commission Regulation (EU) № 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, OECD and UNESCO for financial and non-financial indicators in the field of education statistics.

The new Classification of Fields of Education and Training (FOET 2105) was developed and adopted during the year. A code table was also prepared to implement the transition between old and new fields of education in tertiary and secondary vocational education.

Two additional sample surveys in households and enterprises based on European regulations were carried out in 2016 – Adult education survey and Survey on continuing vocational training of employees.

### **Culture**

In 2016, 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) № 1338/2008 of the European Parliament and of the Council on statistics on public health and health and safety at work, in 2016 the NSI conducted statistical surveys providing information in the area of resource statistics of the Health system and deaths by causes.

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.

The work under a contract between the European Commission and NSI on the project “Health expenditures by disease” successfully completed in 2016. The NSI participated in the project as part of a consortium led by the Social Security Institute of Luxembourg. A Methodological guideline was developed as a result of the project for evaluation of health expenditures by disease, which is a continuation of work on the System of Health Accounts prepared pursuant to Regulation (EU) № 359/2015 of the European Commission.

Pursuant to Regulation (EU) № 328/2011 of the European Commission in the field of statistics on deaths by cause, data on deaths and stillbirths by cause for 2014 were sent to Eurostat at the level of the fourth character of the International Classification of Diseases, Tenth revision.

Data from "European Health Interview Survey" were published pursuant to Regulation (EU) № 141/2013 of the European Commission.

**National health data and e-health directorate at the National center of public health and analyses (NCPHA)** fulfilled all the tasks included in the NSP for 2016. 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, pneumophthiatric 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 2016, in accordance with the European requirements to ensure comparability of data from household budgets surveys (2015) in all member states, and following the

recommendations of the European Commission, the NSI developed and sent to Eurostat an array with individual data from the household budget survey conducted in 2015.

During the year, 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.

Training on "Communication and presentation techniques for preparing and conducting an interview" was organized and conducted in 2016 for part of interviewers in the NSI.

Poverty indicators at national level and by specific groups were calculated according to adopted methodology by the Council of Ministers for calculating the official poverty line in Bulgaria based on the Household Budget Survey data. The poverty line for the country for 2017 was established on the base of these indicators.

The NSI conducted regular panel survey "Statistics on Income and Living Conditions" (EU-SILC 2016) in implementation of Regulation (EC) № 1177/2003 of the European Parliament and of the Council. The module "Access to services" was included to the survey in 2016 under Commission Regulation (EU) No 245/2015. The module collects information on "social services" used by individuals, and in particular child care, participation in formal education, lifelong learning, health care and home care. The focus is on unmet needs regarding childcare, barriers to access to other services such as education / training or home care and interaction of these phenomena with access to the labor market, income and social integration, measured in the main survey.

During the year, the NSI finalized and submitted to Eurostat the main data files from the "Statistics on Income and Living Conditions 2015", the accompanying indicators for poverty and social exclusion and longitudinal component 2012-2015.

In 2016, the NSI continued to work under a Grant agreement with the European Commission entitled "Action plan for EU-SILC improvements". In accordance with the objectives of the project, following activities were completed during the year:

- Implementation of electronic devices for data collection - CAPI interview.
- Using data from administrative registers for loading in the program for electronic interview.
- Tracing of households from the fourth and fifth wave and their inclusion respectively in the fifth and sixth wave of survey.
- Calculation of total net income (HY020) by using information about the current household income, calculation of basic indicators of poverty with the new variable, analysis and comparisons of the results for using the current income for preliminary estimate of poverty.
- Analysis of the sample design in terms of the standard error for indicators calculated with a five year component.

### **Social protection**

In 2016, the production of statistical data for 2014 under the Core system and the Module on pension beneficiaries completed in accordance with Regulation (EC) № 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) № 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.

### **Crime and justice**

In 2016, the NSI continued activities related to conducting the regular statistical survey on the crimes, accused and persons convicted (including convicted juveniles).

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

The NSI, in close cooperation with the Central commission for prevention of juvenile delinquency, conducted regular annual survey on the activities of the Local commissions for prevention of juvenile delinquency. A representative of the NSI participated in training seminars organized during the year for secretaries of local commissions on issues related to the filing and processing of data collected through electronic form.

In 2016, 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.

The regular survey of crime trends and operations of criminal justice systems by United Nations Office on Drugs and Crime and Eurostat carried out by jointly developed and updated questionnaire for the period 2010 – 2015. The NSI participated jointly with the responsible ministries and institutions in the country in the process of collecting and validating the requested data and metadata.

In 2016, the NSI continued the cooperation with a number of international institutions by providing national data and metadata to the European Commission for monitoring corruption at European level for the period 2011 - 2014; crimes related to drugs; participated in a study of the European Institute for Gender Equality entitled "Terminology and indicators for data collection on rape, murder of women and violence against women by an intimate partner"; participated in Eurostat activities related to adaptation and implementation of the international classification of crimes for statistical purposes in the practice of countries.

A NSI representative participated in the first global meeting of national coordinators of the joint questionnaire UN-CTS of the European Commission (Eurostat) and the UN, and the first meeting of the Technical Expert Group on the implementation of the International classification of crimes for statistical purposes, organized by the UN Office on Drugs and Crime.

A NSI representative participated in the activities of the interinstitutional working group "Prevention of violence and abuse of children" to the National Council for Child Protection.

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

### **Annual economic accounts**

The main tasks in the field of national economic accounts were related to the development and implementation of European Commission's recommendations for data on Gross Domestic

Product (GDP) and Gross National Income (GNI). 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 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 NSI implemented methodological improvements in the estimates of GDP and GNI in terms of the last reserve set by the European Commission - the consumption of fixed capital was assessed by using the method of permanent inventory for data on institutional sectors "General Government" and non-profit organizations serving households as non-market producers.

The work on development and improvement of financial national accounts continued in 2016. Data for 2015 were developed and provided in 2016 in pursuance of Eurostat's programme on data provision in the field of national accounts.

The work under a grant agreement with the European Commission entitled "Supporting Quality Measures for Statistics used in the context of the Macroeconomic Imbalance Procedure (MIP)" completed in 2016.

In 2106, the work continued under a 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”.

### **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, and on employment and hours worked.

### **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 – 2015 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 2015. The work continued on the coordination of forthcoming joint actions for the implementation of the table 29 for pension rights according to the ESA 2010.

Revised data according to ESA 2010 were developed and submitted in compliance with the Eurostat’s programme 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) № 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. In 2016, the NSI developed and submitted to Eurostat a Report with description of sources and methods for GDP - GNI data compilation together with the corresponding tables representing the process of data calculation and validation of the results.

The NSI developed data on weighted average VAT rate for 2015. 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) № 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) № 114/2010 as regards minimum standards for the quality of HICP weightings.

Pursuant to the requirements of Commission Regulation (EU) No 2015/2010 and Commission Regulation (EU) No 792/2016, the base year for the HICP had changed from the beginning of 2016 and all indices were calculated and published at the base of 2015. The time series were recalculated using the new base year and were published on the NSI website. The NSI began regular transmission of HICP to Eurostat in accordance with the detailed European classification of individual consumption by purpose (ECOICOP).

The quarterly statistical surveys of housing prices provided the necessary information to calculate the housing price indices and the owner occupied housing indices. Online information system “Prices of dwellings” implemented since the beginning of 2016 in order to collect and process quarterly information from companies and institutions engaged in sales of residential properties to households. In 2016, 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 development of methodology for design and calculation of quarterly Housing Sales Indicators – HIS, and on improvement of the pilot system for regular production of HIS.

The NSI completed the activities planned under EC’s projects in connection with the modernisation of consumer price collection and compilation. The pilot survey on automated registration of detailed prices on the Internet (web-scraping) for selected products continued in 2016. The NSI implemented the detailed classification ECOICOP for HICP administered prices (HICP-AP). The institute also started the work 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, including the weights of purchases over the Internet.

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) №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) № 193/2011.

The National Statistical Institute has achieved the goals laid down in the European work plan for calculating PPPs in 2016, which is annually approved by the Eurostat PPP Standing Working Group.

In 2016, the NSI conducted the planned five price surveys of goods and services in accordance with coherent European consumer basket: E16-1 "All for home and garden", E16-2 "Transport, restaurants and hotels" and "Health services in health care establishments". Two special price surveys were carried out: “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**

All regular surveys from the National Statistical Programme for 2016 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, were carried out with high quality, in time and in accordance with the requirements of national and European legislation. The NSI completed all tasks resulting from contracts, agreements and requests for provision of statistical information from these surveys.

The online entry of annual reports continued successfully during the year by using the Information System "Business statistics", which included all kinds of consolidated annual reports. The NSI employees provided methodological assistance to respondents during the reporting campaign.

Terms of reference for an update of IS "Business statistics" for reporting 2016 was developed in connection with the new law on accounting in force since the beginning of 2016 and in accordance with the requirements of regulations in the various statistical areas.

An expert from NSI participated in a special work meeting at Eurostat related to the development of module tools for measuring globalization, which will be included as a mandatory three-year survey in the new Framework Regulation Integrating Business Statistics (FRIBS).

Expert level opinions were prepared in 2016 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.

The work in the field of national PRODCOM survey continued on improving the quality of primary statistical information by increasing the requirements and control on companies with export-oriented production. The focus was aimed at flexibility through the possibility to enter a Combined nomenclature code, table of connection between PRODCOM and CN and parallel control for completeness and coherence of the data from foreign trade survey. Analysis of the results showed that a more quality, reliable, relevant, timely and internationally comparable statistical information was ensured.

The main priority in the field of monthly PRODCOM survey in 2016 continued to be the provision of timely, relevant and quality statistical information to meet the information needs.

In this regard, the NSI continued to work on updating the subsystem “Output and sales of main industrial products on the domestic market” included in Information System “Short-term Business Statistics”. The measures contained update of the terms of reference towards raising the input control and the comparative analysis of primary data (extended logical control, control and output tables) as well as optimizing the monthly sample of enterprises, which provide a sufficiently high representativeness at industrial products level.

NSI experts participated in organized workshops on "Short-term business statistics" related to the monthly survey "Output and sales of main industrial products on the domestic market". The seminars were related to methodological issues for improving data quality. Special attention was paid to problems, guidelines and recommendations to improve the coverage and quality of primary data of enterprises.

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

Main priority in the work in 2016 was to carry out the monthly and quarterly statistical surveys covering sectors “Industry”, “Construction”, “Trade” and other services, which provide necessary information for the calculation of all indicators in implementation of the European Commission Regulations. 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.

As a result of the expansion of the sample of companies to survey the producer prices on non-domestic market, it became possible (since January 2016) to publish the indicator "producer price indices on non-domestic market", which met the increasing demand of this information. Regarding the producer price indices (total, on domestic market and on non-domestic market), as of 2016 the NSI began to calculate and submit to Eurostat an additional specific group "consumer products excluding food and beverages". The time series from January 2005 was calculated and submitted at the time of first submission.

The work on extending the scope of the indicator “Producer prices indices in services” continued according to the Regulation (EC) № 1158/2005 of the European Parliament and of the Council. “Architectural and engineering activities; technical testing and analysis (NACE.BG-2008 - 71) was implemented in 2016 in the Producer price survey. The NSI started regular submission of quarterly indices for this section to Eurostat and their publishing under “Services” on the Internet site of the NSI. Pilot survey on producer prices in “Legal and accounting activities, management consultancy activities (NACE.BG-2008 – 69+70.2)” started in the first quarter of 2016. The survey was included in online IS "Short-term business statistics". Data from this survey will be published for the first time in early 2017.

During the year, the NSI regularly and timely introduced monthly and quarterly short-term indicators in the Information System "Infostat".

Work under a grant agreement between the European Commission / Eurostat and NSI began in August to develop a methodological basis for a new monthly indicator - Index of Services production. The project aims to establish a process of monthly calculation of the indicator "indices of services production" for all activities that will be included as a requirement for Short-term business statistics in the Framework Regulation Integrating Business Statistics. Planned activities to achieve the objectives of the project are as follows:

- Continuation of the work begun under the grant agreement in 2014 on comparison, analysis and evaluation of administrative data from VAT declarations by months and activities with the available information obtained from the existing monthly statistical

survey in order to calculate regularly the monthly turnover indices in services by using both statistical data and data from VAT declarations

- Continuation of the work on review, analysis and assessment of the existing methodological information on the production of appropriate deflators to calculate the production indices for each activity in the services sector in accordance with the requirements of the Framework Regulation Integrating Business Statistics.
- Establishment of a process of monthly calculation of production indices in services for NACE.BG-2008 section G, and from section H to section N (excluding section K and activity M701, M72 and M75).

## **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) № 1099/2008, Commission Regulation (EU) № 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) № 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 for households and industry continued in accordance with the Directive 2008/92/EC for improvement of the transparency of natural gas and electricity prices charged to industrial end users and households.

As regards the initiative of Eurostat, the NSI participated in the voluntary data reporting on energy consumption in households by type of use for 2014.

The NSI provided more detail information on development of the physical energy flow accounts included in Annex VI of Regulation № (EU) 691/2011 on European environmental economic accounts. The data were reported to Eurostat on a voluntary basis.

During 2016, NSI's experts took part in consultations on:

- Proposal for a Regulation of the European Parliament and the Council on European statistics on prices of electricity and natural gas and repealing Directive 2008/92 / EC on the Community procedure to improve the transparency of prices of electricity and natural gas to industrial end users
- Proposal to amend Regulation № 1099/2008 and the related changes in the five-year and seven-month questionnaires on energy statistics, namely: the inclusion of new indicators and new energy products, updating the existing methodologies, harmonizing the definitions and instructions between annual and monthly questionnaires and other.
- The form and content of the questionnaire for combined production of electricity and heat.
- The form and content of the new questionnaire for reporting District heating and cooling systems.

During the year, NSI personnel participated in meetings of the Working Group "Energy Statistics" to Eurostat, which develops strategic, and program documents, draft legislation and methodologies in the field of energy statistics.

## **Transport Statistics**

The work on regular annual and short-term surveys included in NSP 2016 in the field of transport continued in 2016.

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) № 1365/2006 of the European Parliament and of the Council; Commission Regulation (EC) № 1304/2007; Commission Regulation (EC) № 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 2016, **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 2016, 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**

The NSI activities related to the conduction of regular statistical surveys in the field of tourism continued in 2016. The NSI timely fulfilled the tasks on provision of 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) № 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.

### **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.

A new web service was developed in the first half of 2016 to obtain data on subscription from Bulstat register. This provided maintenance of data for legal units from Bulstat to Statistical business register of the NSI.

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.

The NSI continued to work under the following grant agreements with Eurostat – “Steps towards implementing the definition of statistical units for business statistics: Delineation of statistical units” and “Implementation of interoperable business registers”. The work on the project “Statistics for family businesses” began within the EU programme for the Competitiveness of Enterprises and Small and Medium-sized Enterprises, 2014 – 2020.

### **Statistics of foreign trade**

The main objective in the field of foreign trade statistics was the improvement of activities related to monthly production and dissemination of information on movement of foreign trade commodity flows. The main activities under the priority directions related to the implementation of this objective were as follows: provision of timely and reliable statistics and improvement of data quality; better use of administrative data sources; 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.

Through participation in target groups and working groups, the NSI’s experts contributed to the overall innovation activity in the field of foreign trade statistics at European level. 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.

In 2016, NSI experts worked on the implementation of part of the activities under project “Micro data linking of Structural Business Statistics and other business statistics”.

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 2016, **The National Revenue Agency**, in accordance with the Law on Statistics of Intra-community trade in goods, continued smooth implementation of the national system Intrastat for collection of data on intracommunity trade in goods that are not subject to customs declaration. According to the "exemption thresholds" for the emergence of an obligation under the system "Intrastat" set by the NSI, a total of 9.8 thousand traders registered under the VAT Act had the obligation in 2016 to declare commercial transactions, 6.9 thousand only by one of the streams "Arrivals" or "Dispatches" and 2.9 thousand were obliged on both streams simultaneously. The total number of Intrastat operators for the separate streams was 6.9 thousand for "Arrivals" and 5.8 thousand for "Dispatches".

In 2016, the NRA collected 141 thousand Intrastat declarations and performed input and subsequent quality control of the data declared by the two streams for 6.1 million commercial transactions.

The simplified customs declarations formed in other countries under the Single Authorisation for simplified procedures and received in the "Customs" Agency, were also used by the NSI in the compilation and reporting of exports and imports of goods.

In 2016, the NSI participated in preparation of the Eurostat survey on the administrative burden on the Intrastat operators: current status and potential alternatives to Intrastat. The survey was conducted to collect qualitative and quantitative information about the current administrative burden felt by enterprises in the reporting of trade in goods within the EU (Intrastat) and required by applicable law, and the future potential burden arising from the alternatives for redesign of the "Intrastat" system. The NSI published a direct link to the survey in order to facilitate Intrastat operators wishing to participate in it.

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.

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

In 2016 the **Agrostatistics Department** at the Agriculture and Regional Policy General Directorate at the Ministry of Agriculture and Food as the Body of statistics

The activity of the Ministry of Agriculture and Food on the National Statistical Programme for 2016 is performed by **Agrostatistics Department** at the Agriculture and Regional Policy General Directorate, which is **Body of statistics** in accordance with Art. 3, paragraph 2 of the Law on Statistics.

For the first time in 2016 "Agrostatistics" department:

- Carried out survey on production of rose and lavender oil in Bulgaria in 2015.
- Signed agreements on cooperation and data exchange with BFSA, EAVW and SFA.
- Carried out online survey on users' satisfaction of MAF's statistical information products and services in 2015 according to the requirements from the Peer Review.

- Published information in an open format on the Portal for open data: land cover and land use, key indicators of crop and livestock production, processing of fruits and vegetables, status of poultry and egg production, production of milk and dairy products, meat production, status of bee-keeping and production of bee honey, and Farm Accountancy Data Network.

In 2016, the "Agrostatistics" department carried out 20 statistical surveys in the field of statistics on crop products, livestock, processing of fruits and vegetables, land use and farm income.

The MAF optimized the samples and introduced modern tools for collection of information in order to reduce the burden on respondents.

In 2016 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. Within these surveys, the MAF collected information for the use of seeds, size of the area of permanent crops not fruiting, conducted agricultural activities as well as the directions of realization of production, and others. The survey on yield forecast for the main crops was carried out (early estimates for wheat and barley production 2016). In addition, surveys on processing of fruits and vegetables and structure of vineyards were carried out.

Within the period from June to August, the MAF 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 MAF carried out a statistical survey on livestock number in Bulgaria as of 01.11.2016. The survey collected information on the number of bovine animals, pigs, sheep and goats, by species and by animal categories as well as on the production and realization of the products - milk and animals for slaughter. The surveys on the status of poultry and bee-keeping in Bulgaria in 2015 were also conducted.

The MAF collected monthly and annual information on the activities of slaughterhouses, milk processing enterprises and hatcheries. Within the surveys on the activity of slaughterhouses for red and white meat in 2015, information on the meat production from specific animal species and categories was collected in accordance with the EU legislation. The surveys on the activities of milk processing enterprises provided information on processed milk, and production and sales (in kind and in value) of dairy products in 2015.

The MAF started activities on the sample Farm structure survey (FSS 2016) in 2016 according to the Regulation (EC) No 1166/2008 of the European Parliament and of the Council and under Grant Agreement with Eurostat. Following a discussion with the users of data, the statistical questionnaire was updated, approved by the Minister of Agriculture and Food and adopted by the President of NSI. Currently an initial analysis and control of the data has performed before their entry into a computer module. The MAF announced public procurement for building-up of an Information system for entry, control and processing of data from the Farm structure survey. The procedure for procurement is at the stage of selection of a contractor and construction of the system forthcoming after conclusion of the contract.

In 2016 within the Farm Accountancy Data Network, the statistical form was updated in accordance with the requirements of Regulation (EU) № 2015/220 of the Commission and the necessary information on agricultural farms for 2015 and agricultural farms not applying accountancy for 2016 was collected. The MAF announced public procurement for building-up of an Integrated information farm accountancy system for data entry, control, validation and analysis of the results at national and regional level.

The implementation of the project "Pilot surveys on linking Integrated Administration and

Control System and other administrative registers and statistical data” successfully completed under Grant Agreement with the European Commission / Eurostat. The project provided connection to the information systems of BFSA and EAVW.

The second survey on users’ satisfaction of the statistical data provided by MAF in 2016 will held until the end of the year.

The renovation of the MAF’s website continued in 2016, as metadata and methodological notes to the surveys in the field of agricultural statistics conducted by the Agrostistics Department were supplemented and updated. Release calendar presenting the results of the statistical surveys in 2016 carried out by the Ministry of Agriculture and Food by themes and by dates was updated on the MAF’s website.

The results of the surveys conducted by the Agrostistics Department are published regularly in specialized bulletins on the MAF’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).

Experts from MAF regularly participated in meetings of the working groups of Eurostat and Directors’ group on agricultural statistics.

In 2016, the NSI produced annual data (preliminary and final for 2015) and quarterly data for 2016 (including for the flash estimates of GDP) for production account of national non-financial accounts for economic activity “Agriculture, forestry and fisheries” at current and constant prices.

According to Regulation (EC) № 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, preliminary data for 2015 and final data for 2014 at current and constant prices. The NSI also developed and transmitted to Eurostat data on regional economic accounts for agriculture (at NUTS1 and NUTS2), as well as statistics on unit values in agriculture and “bridge tables” to the national accounts for 2014.

The NSI developed and transmitted to Eurostat an inventory for calculation of satellite accounts for agriculture, including statistics on the volume of labour invested in agriculture.

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 2016 and annual data for 2015 and 2016 (estimation), data on prices and indices of agricultural production, and data on agricultural input.

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 as well as data on economic accounts for forestry for 2014.

The NSI calculated data on material flow accounts for agriculture, forestry and fishery for 2015 in accordance with the Regulation (EU) № 691/2011 on European environmental economic accounts.

Tables with data and texts for press releases were prepared for publishing on the Internet site of the NSI and IS “Infostat” in accordance with the Calendar presenting the results of the statistical surveys carried out according to the NSP for 2016. Data tables for publication in the printed/electronic editions of the NSI were prepared according to the schedule of the Editorial plan for 2016.

The NSI held a seminar entitled "Changes in the statistical tools and methods of conducting surveys in the field of agriculture and forestry statistics in 2016 and their impact on respondents’ burden and quality of statistics", in which experts from the Head Office and RSOs (28 "Statistical surveys" departments) participated.

In 2016, NSI experts participated in:

- activities on coordination, production, dissemination and exchange of statistical information on agriculture, forestry and fishery within the NSS of Bulgaria (National Council on Farm Accountancy Data Network, WG on farm structure, WG for calculation Farm Standard Output for 2013, WG 7 "Agriculture" and WG 8 "Fishery");
- implementation of the NSI obligations under General precondition 7 "Statistical Systems" of the Partnership Agreement;
- Grant Agreement with Eurostat entitled "Implementing SDMX technical and statistical standards in the National Statistical Institute of Bulgaria";
- work of the Monitoring Committees of "Rural Development Programme" and "Maritime and Fisheries Programme" 2014 - 2020;
- meetings of working groups at Eurostat in the field of agrimonetary statistics.

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

#### **Business Trends**

In 2016, the NSI with the financial assistance of the European Commission continued to conduct the monthly surveys on business trends according to "The Joint Harmonised EU Programme of Business and Consumer surveys". The objective of this Programme is to provide timely information on economic analysis and short-term forecasting as a key complement to official statistics. Business surveys show how managers assess the present and future economic situation in the country. This information is highly relevant because the data are announced in the same month they were collected. 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. Users of these data are public institutions, the Bulgarian National Bank, the European Commission, the European Central Bank and other.

The quarterly 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.

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

The vision of the ESS is that "European statistics becomes more important for the development, implementation, monitoring and evaluation of EU policies. In this way, the European statistics makes a substantial contribution to the building of information capacity required to sustain the EU strategic objectives and the underlying policies and supporting instruments".

The preconditions for the European structural and investment funds were introduced for the first time in the new programming period 2014 - 2020. The conditions are mandatory under Regulation № 1303/2013 in order to ensure the preconditions for access to funding and their non-fulfilment is subject to conditions for funding.

#### **Environmental Statistics and Accounts**

In 2016, the work on all statistical surveys included in the National Statistical Programme

continued.

In 2016, data on modules “Taxes and fees related to the environment by economic activities” and “Air emissions accounts” were developed and reported to Eurostat according to the requirements of Regulation (EU) № 691/2011 of the European Parliament and of the Council on European environmental economic accounts. The reporting on third module of regulation – “Economy-wide material flow accounts” is in the process of finalization until the end of the current year.

The survey “Sources of emissions” was carried out in accordance with the methodology of the NSI and the MEW harmonized with CORINAIR methodology developed by the European Union. Based on the survey, a uniform information base is building-up aiming at evaluation of atmospheric emissions and improvement of methodologies according to the requirements and recommendations of international authorities.

The survey on waste from activity provided information on the quantity of generated non-hazardous waste in the country and means for their disposal and recovery. The NSI conducted this survey in accordance with Regulation (EC) № 2150/2002 of the European Parliament and of the Council on waste statistics. The regulation requires representative national data by economic activities. Data from the National automated system for environmental monitoring of the EEA supplement the data provided by the NSI.

The survey “Wastes from agriculture, forestry and fisheries” provided information on generation, disposal and recovery of waste from companies in “Agriculture, forestry and fishery” sector.

The survey on municipal waste (arising from households and construction) provided data on the quantities of waste generated by households and small business. The NSI maintains a register of landfills for municipal waste, which contains data on population served by landfills, on the area, on collected, treated and finally disposed waste. Information on revenue and expenditure for household waste was provided.

The NSI provided data on the size of expenditure on acquisition of the tangible fixed assets with ecological use, expenditure on their maintenance, sources of financing and allocation of funds by main directions - air, wastewater, waste and other. The usage of these funds is an effective economic mechanism to reduce the negative impact of socio-economic processes on the environment.

During the year, the NSI collected information on the availability and movement of the tangible fixed assets with ecological use in book value.

Scope, development and results of the survey on water consumption were directly linked to the requirements of the Water Framework Directive. The survey provided information about the annual balance of water resources: water abstraction, water use and wastewater.

The survey on water supply and sewage network provided detailed information about the whole process of water use by the water supply companies: water abstraction, water use, wastewater treatment and discharge. The survey is in line with the new requirements in the field of European water statistics.

Data collection continued with “Reference of municipal administrations on the status and expenditure on water and sewerage infrastructure” included in the Annual Report of the municipalities.

The survey on Environmental taxes and fees provided information needed for reporting on module “Environmental taxes by economic activities” under Regulation (EU) № 691/2011 of the European Parliament and of the Council.

The NSI conducted survey “Production of packaged goods and packaging” in the implementation of European Parliament and Council Directive 94/62/EC on packaging and

packaging waste. The NSI assesses the packaging by combination of data from the annual sample survey, exhaustive data on main producers of packaging and packaged goods and data on recycled and burned packages received by the Executive Environment Agency.

The Underground reserves survey provided information on movement of reserves and resources of non-renewable mineral resources in the country. The survey was exhaustive and conducted with an electronic questionnaire. The purpose of survey was to compile accounts for the underground reserves as part of the environmental accounts. The survey covered economic entities - holders of concessions for extraction, and companies that have reported receipts from extraction activity.

The survey on environmental goods and services provided information on value indicators by economic variables and by environmental directions for environmental goods and services sector.

According to the reporting requirements of Eurostat, in 2016 the NSI timely completed and transmitted two questionnaires – OECD/ Eurostat Questionnaire on revenue and expenditure on environment and Eurostat Questionnaire on producers of environmental goods and services.

In 2016, the NSI collected information on the work done for control on pollution prevention of seawaters and the Danube River. **The National Center of Public Health and analyses** provided information on registered noise levels. The Ministry of Environment and Water provided information on protected natural scenery and zones of National Ecological Network. The MEW, the MAF and the Executive Forest Agency submitted information on sanctions and fines on normative documents related to environmental protection.

In 2016, the NSI successfully completed the work under Grant Agreement with Eurostat entitled “Improvement of the methods for compilation of EPE in order to comply with the requirements of new module on EPE in the regulation amending Regulation (EU) No 691/2011”.

The aim of the projects was to improve the methodology for assessing the expenditure on environmental protection and to prepare detailed standard tables in value units containing data on the expenditure on environmental protection by economic activities.

In 2016, the experts in the field of environment worked on the following EC projects - „Establishment of physical water flow accounts (volumes)" and "Food waste statistics". The work on these projects will continue in next year.

During the year, the NSI’s experts participated in the working groups of Eurostat, developing strategic and program documents, draft legislation and methodologies in the field of environmental statistics and accounts.

**“Monitoring and Assessments of Environment” Directorate** of Executive Environment Agency to the Ministry of Environment and Water as a Body of statistics carried out the tasks "Formation, utilization and disposal of hazardous waste by code at national level" and "Capacity of installations for utilization and detoxication of waste" according to the characteristics and deadline of statistical surveys in the National Statistical Programme for 2016.

### **Housing Fund Statistics**

In 2016, 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 2016, 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 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 2016.

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).

Activities in 2016 performed in accordance with the timetable for implementing the obligations of the NSI under Spatial Data Access Act and INSPIRE Directive (incl. on the main types of activities - preparation of spatial databases, creating metadata and providing services for them).

### **Science, Technologies and Innovations**

According to the requirements of the Commission Regulation (EU) № 995/2012 of Community statistics on science and technology, in 2016 the NSI proceeded to work on production and dissemination of statistics on R&D and innovations.

The NSI carried out the annual statistical surveys on R&D and Government budget appropriations or outlays on R&D. The produced data were provided to users with the required quality and within the requested deadlines. Questionnaire for the statistical survey on R & D in 2016 was updated according to the changes resulting from the latest edition of the methodological guide "Frascati" in 2015.

For the first time in 2016 and three months before deadline, the NSI transmitted to Eurostat data from the statistical survey on innovation activity in enterprises over the period 2012 – 2014. The NSI implemented a developed by Eurostat system for validation of data from the statistical survey on innovation activity in enterprises.

The NSI carried out necessary preparatory work for the statistical survey of innovation activity in enterprises over the period 2014 - 2016. The NSI developed new statistical tools and updated the terms of reference for the processing of survey data 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) № 2015/2003 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 NSI developed and implemented a method for rotation of units in the sample survey on ICT usage in enterprises in order to reduce the burden on respondents.

The NSI conducted a specialized training of the responsible persons in RSOs in connection to the survey on ICT usage in households and by individuals. The training presented goals, objectives and organization of the study in 2016, and discussed methods to improve data quality.

The annual data on ICT usage in households and in enterprises for 2016 were processed in accordance with the quality requirements and were published in December.

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

Development of information infrastructure and establishment of secure and reliable environment for information systems was the main priority in 2016.

The NSI completely redesigned and segmented LAN at the Head Office and installed modern active equipment.

The NSI continued to raise the backup level of information systems by using effective means for data storage and restoring. The institute automated the activity on monitoring the functioning of the technical infrastructure and provided reliable and effective operation of information systems and services provided.

The volume of statistical information accessible through IS "Infostat" was extended in 2016 which optimized user access to the services provided.

#### **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 NSI provided to users an opportunity for interactive references through a web-based application for access to multidimensional databases on foreign trade statistics.

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

In 2016, the NSI continued the process of gradual reengineering of existing software applications and transition to centralized systems with decentralized entry of statistical forms by using modern technology platforms such as .Net.

The NSI developed new applications as regards the surveys in the field of agriculture, environment, structural business statistics and demographic statistics.

The maintenance and update of IS “Business statistics” proceeded. The NSI developed scripts for defining the surveys included in the system for 2016 and rules for logical control (metadata update). The existing forms were updated and new PDF forms were created for entering data in different forms for annual surveys in 2016.

In 2016, the 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 platform in the NSI.

### **ICT Infrastructure**

The development of information and technology infrastructure was a key priority in 2016 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.

To this end, the NSI designed and built premises for the modern data center meeting all requirements for the storage and protection of data and information assets. The core communication infrastructure was completely revised and the active equipment complied with the new standards for performance, reliability and security.

The equipment successfully migrated in the new data center without serious interruption in the provision of information services to citizens and employees.

The NSI experts performed continuous monitoring of the performance of technical resources and information systems building the information structure of the NSI, and carried out maintenance of all components of the IT infrastructure.

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.

The NSI has prepared for certification in information security in accordance with the requirements of Standard ISO / IEC 27001: 2013.

### **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 to work on 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. The project also envisages development of national metadata structure for statistical processes by expanding Euro process metadata structure (EPMS) and its testing in three statistical domains.

One of the main tasks in 2016 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.

During the year, the NSI continued its participation in maintenance of the National Classification of Occupations and Positions 2011 (NCOP-2011) and update of the list of the names of positions and the corresponding tables.

During the year, the NSI proceeded activities on current maintenance of IS “Statistical Classifications”, electronic glossaries of statistical terms and standardization and harmonization of statistical terminology. The NSI prepared List of Standard statistical indicators for 2016.

The NSI implemented the following activities:

- Consulting the NSI’s experts on methodological issues if a need arises: classification of financial enterprises, moving non-financial enterprises in the household sector.
- Initiating a quality analysis of the household budget survey and the relationship micro-macro data (October).

The NSI continued to work on the project "E-commerce and the presence of companies in social networks". The institute developed software to identify the platforms and participants in electronic commerce. This project launched the using of "big data" approach in statistical surveys.

### **Other activities**

The NSI developed and provided statistical data on the crisis events occurred in 2015.

## **IV. RESOURCE ASSURANCE**

### **Personnel**

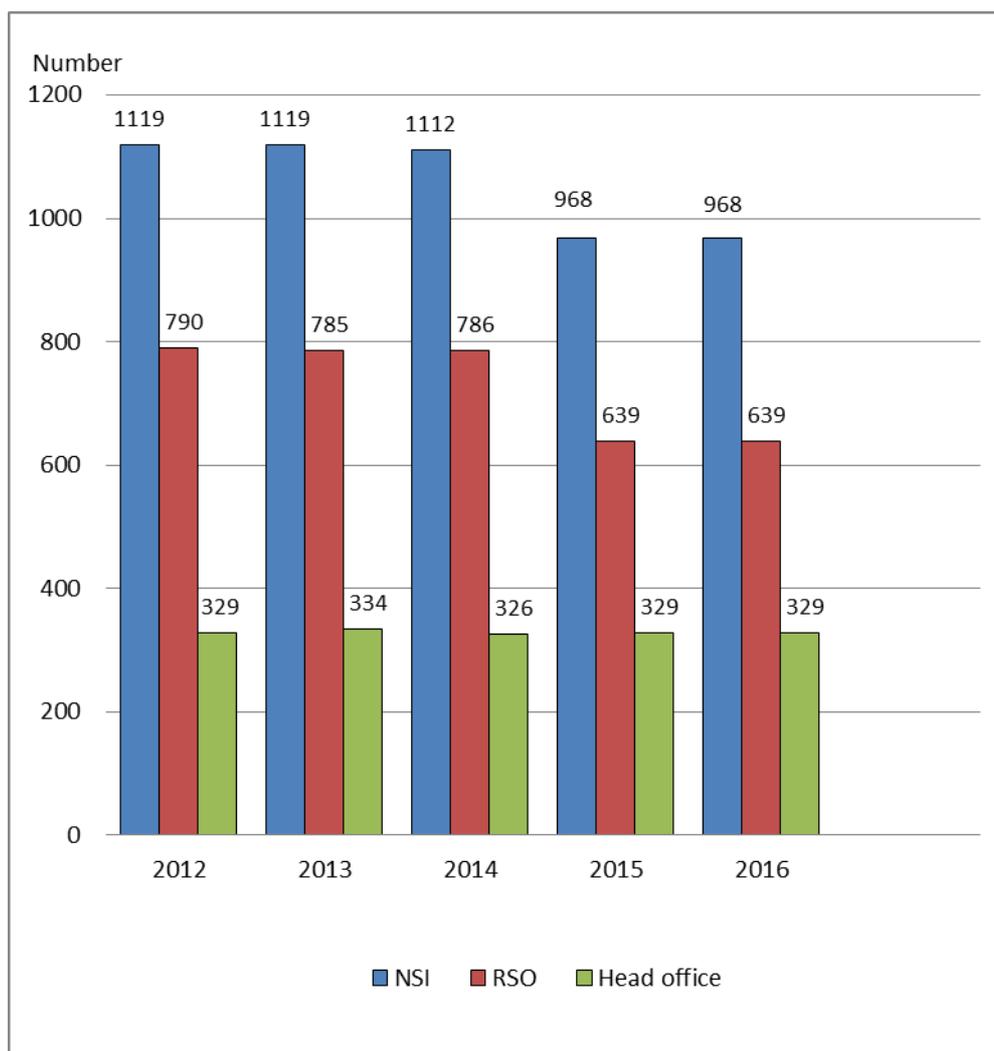
The National Statistical Institute is organized into a Head office and six Regional Statistical Offices. The Regional Statistical Offices perform the functions and tasks of the NSI for production and dissemination of statistical information at the regional level. The Regional Statistical Offices of the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

- The RSO - Severozapad
- The RSO - Sever
- The RSO - Severoiztok
- The RSO - Yugoiztok
- The RSO - Yug
- The RSO - Yugozapad.

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 2016 was 968, of which 329 on the pay roll at the Head office and 639 – 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: “Inspectorate”, “Internal Audit” Unit, “Methodological and Training Center” Directorate, “Security of Information and DM” Division and Expert on Public relations. Five directorates are in the Specialized administration and one directorate – in General administration.

**Figure 5. Staff positions in NSI within the period 2012 - 2016**



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 2012 – 2016, the number of employees decreased by 160 positions, or 13.5%.

#### **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 40 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 24 and in the RSOs – 16.

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

The situation of the National Statistical Institute's staff is presented in Tables 4 and 5, which summarize the structure of total NSI's staff, including for NSI's Head Office and for RSOs.

#### **4. Structure of the employees by age groups in NSI**

(Number)

Structures	Age groups					Total
	Up to 29	30 - 45	46 - 55	56 - 65	Over 65	
Head Office	40	116	69	73	1	299
RSO	36	192	208	190	0	626
NSI	76	308	277	263	1	925

#### **5. Structure of the employees by education in NSI**

(Number)

Structures	Education degree						Total
	Doctor	Master	Bachelor	Professional bachelor	Secondary education	Primary education	
Head Office	5	261	16	2	15	0	299
RSO	0	386	70	15	154	1	626
NSI	5	647	86	17	169	1	925

The data show a high level of education among NSI's employees as the share of employees with tertiary education is over 81%. The analysis shows that highlighted trend towards a predominance of specialties with economic orientation persists, and they are about 57% 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 6 shows the number of employees who are continuing their education at present to acquire a higher education degree.

## 6. 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 for 2016 is according to the adopted Law on State Budget of the Republic of Bulgaria for 2016 and adjustments made as of 31.10.2016 (Annex 1).

The planned revenues are implemented according to the specified plan as of 31.10.2016 - 86%.

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) - 80%.

## V. INTERNAL AUDIT AND ADMINISTRATIVE CONTROL

At the beginning of the year after research and collection of information, the NSI performed risk assessment of all structures of the NSI, including the Regional Statistical Offices – second-level spending units to the President of the NSI. The deadline to update the Strategic plan for the period January 2016 – January 2018 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 2016. The Plans complied with the requirement of Art. 83 (1) of the Council of Ministers Decree № 380/29.12.2015 on priority performing of audit assignments on the effectiveness of public expenditure in the NSI in two domains: system and procedures on public procurement and execution of public procurement contracts. The President of the NSI approved the plans within the required deadlines.

In February 2016, 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 at the Head Office of the NSI by Directorates and structures directly subordinated to the President of the NSI, as well as by RSOs as second-level spending units to the President of the NSI. For that purpose, the NSI elaborated and approved risk registers in accordance with the endorsed Strategy for risk management in the NSI.
- Participation as coordinator for the preparation of individual questionnaires and reports from the Head Office and RSOs on the status of the Financial management and control system (FMCS), and coordinator for preparation of the summary Questionnaire and Report on the status of FMCS of the NSI in 2015. Preparation of opinion on the compliance of information submitted in the report and questionnaire with findings from the conducted internal audits. Assisting the President of the NSI to send the documents to the Minister of Finance within the statutory deadline.

- The Internal Audit Unit provided two opinions at the request of the President of NSI – opinion on a final report by the Bulgarian National Audit Office registered in Opinion № 07-04-1470 / 11.02.2016, as well as evaluation of documents for conduction of Internal Audit on Quality Management Systems registered in Opinion № BO-10 / 12.07.2016.

In pursuance of the Annual plan on activity for 2016, the Internal Audit Unit implemented four audit assignments for giving confidence. The first one was related to assessment of the established internal control and order of reporting budget funds in RSO - Yugozapad for the period 01 April 2015 – 31 March 2016, and 18 recommendations were formulated. The second audit assignment was related to assessment of the established internal control and order of reporting income received and expenditure incurred in the Training Centre Slivek for the period 01 January 2015 – 31 March 2016, and 14 recommendations were formulated. The third audit assignment covered the process “Assessment of the established internal control and order of reporting budget funds in RSO - Yug for the period 01 October 2015 – 31 December 2015, and 16 recommendations were formulated. The fourth audit conducted in connection with Art. 83 (1) of the Council of Ministers Decree № 380/29.12.2015 and covered the process "Evaluation of the effectiveness of public expenditure, including system and procedures of awarding public procurements at the NSI for the period from 01 January 2016 until 30 September 2016". The work on the last audit engagement is currently continuing.

According to the approved Training plan, during the year internal auditors participated in the following trainings:

- Workshop entitled "Enhancing the effectiveness of the control and auditing of public sector organizations" including presentation of a draft of the new Public Procurement Act;
- Training on "Standards for Internal Audit in the public sector - the main highlights, practical application", "Preparation of audit report - basic requirements and practical guidelines for preparing quality audit report", "Preparation and use of documents related to the audit activity".

In July 2016, the NSI sent an application form for participation of the team of internal auditors in training entitled "The new Public Procurement Act and the Rules for the Implementation of Public Procurement Act, interpretation and application, examples and case studies", but so far, such a course has not been organized

In 2016, the Inspectorate orientated its main efforts to implementation of the following priorities:

- Ensure the functioning of departments of the NSI in accordance with laws and regulations, internal departmental regulations, rules and procedures.
- Implement an effective control within the NSI for achieving the strategic objectives laid down in the basic regulative documents for 2016.
- Research, analyze and evaluate the processes in the administrative sphere as part of the overall reform conducted within the NSI.

The Inspectorate worked with priority in several key areas in order to implement the objectives set in the year. Planning and carrying out the checks were consistent with the changes occurred in the course of the implemented reorganization of the NSI structures. At the same time, the Inspectorate paid serious attention to the effectiveness and continuity of control activities. The Inspectorate made significant efforts to improve the professional qualification of employees in order to ensure better quality control.

In connection with implementation of the objectives in 2016, the Inspectorate carried out seven administrative checks in departments of the Head Office and regional structures of the NSI, of which six - planned and one - unplanned. Significant efforts were made in operational

control and checks on the implementation of the prescriptions of external control authorities where the results were reported monthly. The Inspectorate addressed more than 20 recommendations to the heads of the inspected units, and later made follow-up control on their implementation. During the checks in one of the territorial units, the Inspectorate performed analysis and assessment of the effectiveness of the administration. The internal legislative framework used in the system of the NSI was updated and unified. In this way, a control environment was formed to implement the widest possible range of observed tasks and to increase efficiency, to improve the organization of work and to finalize certain elements of the reform performed in the NSI.

During the reporting period, NSI received a total of 14 signals and recommendations. The Inspectorate examined carefully all signals, conducted analysis of the problems and returned response to the senders within the statutory period.

During the period, the Inspectorate did not receive signals for conflict of interest of the personnel from specialized and general administration.

The NSI paid seriously attention to the preparation of officials from the Inspectorate in a view to optimize the process of carrying out checks and to improve the quality of control activities in the NSI. In order to enhance professionalism, in 2016 the inspectors took part in four qualification courses organized and conducted by the Institute for Public Administration, the management of the NSI and the General Inspectorate of the Council of Ministers.

During the period from 01 January 2016 to 24 October 2016, the Finance controller registered and inspected 1 885 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.

During the first half-year of 2016, the Finance controller participated in the Working group on updating and unifying secondary legal and administrative acts and documents in the NSI. The Working group prepared new Internal rules on implementation of ex-ante control and new Dual signature system in the NSI.

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.
- 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. The main guarantee for the effective activities of the Financial controller at the NSI Head Office in 2016 was: refusal to conclude duplicated contracts for supplies and services, non-admission of files with missing documents and performance of checks for full compliance with current legislation in accordance with the principles of legality, sound financial management and transparency.

## Annex 1. NSI Budget 2016

Indicators (in BGN)	Law on state budget of the Republic of Bulgaria for 2016	Specified plan for the year as 31.10.2016	Report as of 31.10.2016	Implementation of the plan/ report (%) as of 31.10.2016
1	2	3	4	5
<b>I. REVENUES - TOTAL</b>	<b>800000</b>	<b>800000</b>	<b>539043</b>	<b>67</b>
Own revenues	800000	800000	539043	67
Non-tax revenues	800000	800000	539043	67
Property revenues and incomes	800000	800000	681118	85
- Net revenues from sales of services, goods and production	700000	700000	649850	92
- Rental property revenues	100000	100000	31268	31
State fees			8	
Grants, donations and other gratuitous funds			600	
Grants, donations and other gratuitous funds from abroad			4162	
			4448	
			-151293	
<b>II. EXPENDITURES - TOTAL</b>	<b>18852100</b>	<b>18978923</b>	<b>14475129</b>	<b>76</b>
Total expenditure	18852100	18978923	14475129	
Current expenditure	16482100	16532923	13274738	80
Personnel	12966600	13007203	10812744	83
Salaries and remunerations to the personnel under the Labour Code and the Civil Service Act	9226600	9229520	7386085	80
Salaries and remunerations to the personnel under the Labour Code	1236000	1236000	1025076	82
Salaries and remunerations to the personnel under the Civil Service Act	7990600	7993520	6361009	79
Other salaries and payments to the personnel	1180000	1209000	1188478	98
Mandatory social security contributions from employers	2560000	2568683	2238181	87
Social insurance contributions from employers for the State Social Insurance (SSI)	1600000	1605480	1389593	86
Health insurance contributions from employers	700000	702170	593065	84
Contributions to additional compulsory insurance from employers	260000	261033	255523	97
Contributions to voluntary insurance				
Maintenance	3365500	3375720	2351946	69
Taxes paid, charges and administrative sanctions	125000	125000	86622	69
Expenditure for membership contributions and participation in non-profit organizations and activities	25000	25000	23426	93
Capital expenditure	2370000	2446000	1200391	49
Fundamental repair of tangible fixed assets	53000	208564	0	0

## Annex 1. NSI Budget 2016

(Continued and end)				
Acquisition of tangible fixed assets	942000	1010687	746143	73
Acquisition of intangible fixed assets	1375000	1226749	454248	37
<b>NATURAL INDICATORS</b>				
Staff positions - total	968	968	927	
Average annual full-time positions - total	968	968	923	
Staff positions	968	968	927	
<b>III. TRANSFERS</b>				
<b>III. A. TRANSFERS (SUBSIDIES, CONTRIBUTIONS) BETWEEN CENTRAL/STATE BUDGET AND OTHER BUDGETS</b>				
	<b>18352100</b>	<b>18442320</b>	<b>10645470</b>	<b>57</b>
Transfers (grants/contributions) from the central budget (Net) - Transfers (subsidies) from the central budget (+)	18352100	18442320	10645470	57
<b>III. B. TRANSFERS BETWEEN BUDGET ACCOUNTS AND EXTRABUDGETARY FUNDS/ACCOUNTS</b>				
	<b>-300000</b>	<b>-263397</b>	<b>-124126</b>	<b>47</b>
- Transfers received (+) - Transfers granted (-) - Transfer from MLSP under programmes of temporary employment (+/-)	-300000 36603	-300000 71937	-196063 196	65
<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 01/11/2016

