

# **STRATEGY**

**for developing Rosstat and the system of the state  
statistics of the Russian Federation until 2024**



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## I. General background

This Strategy determines goals, objectives and measures for the implementation of the state regulatory policy in the field of official statistics, the development of the Federal State Statistics Service (Rosstat) and the system of official statistics of the Russian Federation until 2024. It defines the main directions and measures for the improvement of the performance of Rosstat and the development of statistics in the Russian Federation.

The legal basis of this Strategy is the Constitution of the Russian Federation, the Federal Law of November 29, 2007 No. 282-Φ3 “On Official Statistical Accounting and the System of State Statistics in the Russian Federation”, other federal laws, the concept of the national data management system, other legal and regulatory acts in the field of official statistics.

This Strategy is aimed at reaching the following goals:

- ensuring the independence of state statistics;
- ensuring good quality (comprehensiveness, reliability, timeliness, consistency) and accessibility of official statistical information, as well as its usability for making managerial decisions at all levels of government and administration;
- decreasing the reporting burden on respondents;
- increasing trust in official statistical information;
- ensuring the accessibility of anonymized primary statistical data for research purposes and developing applications for working with open data (data-first);
- strengthening Russia's position in the global statistical community;
- strengthening the human resource capacity of the national statistical system.

This Strategy has been developed on the basis of a comprehensive analysis of the proposals of the government bodies and of the representatives of the expert and business communities on improving statistical activities, which was conducted in 2018, and with the account for main documents on developing a digital economy.

For the purposes of this Strategy, the terms and definitions used are those defined by Article 2 of the Federal Law No. 282-Φ3 of November 29, 2007 “On Official Statistical Accounting and the State Statistics System in the Russian Federation”, the Concept of the National Data Management System, and this Strategy.

More than 60 ministries and agencies are involved in producing official statistics in Russia. The purpose of their statistical work is the generation of official statistical information on the social, economic, demographic, environmental aspects of the country's development.

Rosstat produces a significant part of the official statistical information in the country and acts as a coordinator of the state statistics system.

By 2019, a system of official statistics has been established in Russia that meets the basic needs of the government and the society in official statistical data and corresponds with international standards.

At the same time, a widespread introduction of information technologies, the development of the digital economy, the emergence of new sources of information and the growing needs for timely and high-quality statistical information introduce new challenges for Rosstat and national statistics as a whole.

This Strategy defines the main measures for the qualitative improvement of the Rosstat's performance as well as the improvement of the statistical activities in the Russian Federation for the period until 2024 in general.

The central vector of development of the national statistical system for the next five years will be the digitalization of the entire process of statistical production. The key approach to this modernization will be the establishment of a digital analytical platform for providing statistical data (DAP), which will be developed on the basis of Rosstat in the framework of the implementation of the national program "Digital Economy of the Russian Federation". The DAP will become one of the core components of the National Data Management System.

The commissioning of the DAP will create the necessary technological conditions for the transition to a new model of production and dissemination of statistical information that will be based on using a unified information space, a single presentation of primary statistical data from the observation units and their repeated use for analytical purposes.

The complexity of the task of drastically reducing the reporting burden on respondents is caused by the growing demand for current and predictive statistical information and significantly increased user information needs.

The national statistical system in Russia has traditionally been focused on meeting the needs of the government, however, a large demand for high-quality and disaggregated statistical data is demonstrated by commercial, research and educational organizations, mass media, and individuals. To be able to meet this demand, Rosstat will have to restructure its approaches to data processing and dissemination.

Satisfying the new needs of the government and the society in statistical information in line with the communication policy of Rosstat will allow improving the image of the agency itself and the official statistics as a whole. This will be supported by a proactive position of Rosstat in the information space, better use of the analytical capacity of data, application of transparent and clear statistical methodologies. The credibility of Russian statistics in the global statistical community should help address these challenges.

The release of anonymized primary data of federal statistical observations and surveys in machine-readable formats should be a powerful impetus for conducting research and developing software (applications) for working with open data.

In order to improve the quality of statistical data and reduce data collection costs, the methodological work will focus on incorporating alternative data sources and the capacity for processing Big Data into the official statistical methodology.

Further development of the methodologies for collecting and processing statistical data and the introduction of integrated economic statistics will be undertaken in view of more closely following the international standards and taking due account of the peculiarities of the Russian economy.

The implementation of this Strategy assumes introducing amendments into the legal and regulatory framework of the organization of statistical activities in order to strengthen their coordination at all stages of statistical production.

## **II. Providing statistical data in digital form**

### **2.1 Current situation**

Currently, within the framework of the government program of the Russian Federation “Economic Development and Innovative Economics”, approved by the Decree of the Government of the Russian Federation dated April 15, 2014 No. 316, the electronic collection of statistical reports is being implemented. The average share of statistical reporting provided by respondents to the state statistical bodies in electronic form in 2018 exceeded 80 percent, and for small businesses - 54 percent.

The use of both electronic and traditional channels for providing statistical reports significantly reduces the reliability of primary statistical data, increases timeframes for collecting and processing statistical reports, and also results in significant additional spending of budget funds.

#### **2.1.1 Completeness of data collection by statistical entities**

To start any statistical observation, it is necessary to generate a list of observation units according to certain criteria.

The lack of an information resource containing lists of statistical observation units with sufficient sets of characteristics on each entity does not allow for survey frames to be compiled according to uniform rules and does not enable the conduct of a coordinated data collection by statistical agencies and departments. In addition, statistical departments, with the exception of Rosstat, are not authorized to carry out claims procedures with the respondents who have not submitted statistical reports and/or violated the deadlines; besides, claims procedures are not automated sufficiently.

#### **2.1.2 Reliability of statistical reports**

At present respondents may submit primary statistical data on paper and/or in electronic form.

The main reason for unreliable primary statistical data is manual filing of paper report forms by respondents that have no built-in error control. Statisticians detect errors in the primary statistical data only after they have entered them into computers. When statistical reports are submitted in electronic form, respondents get error messages during data entry process before sending out their statistical reports.

### **2.1.3 Processing statistical reports and generating official statistical data**

At present, in the Rosstat system, statistical reports of respondents are sent to the territorial bodies of Rosstat (in electronic or paper form) and are entered into the computer systems, where then data are aggregated and transferred to the Rosstat Main Interregional Center for Processing and Dissemination of Statistical Information (Rosstat GMTs).

At the second stage, Rosstat GMTs, on the basis of the statistical data received from Rosstat territorial statistical bodies, generate tables in accordance with economic descriptions of statistical works, and then send them to the Rosstat Headquarters where these tables are used to produce official statistical data.

A distributed two-level scheme for collecting, storing and processing data results in an increase in the statistical reports data processing time and a number of inaccuracies and errors.

## **2.2 Meeting challenges by submitting statistical reports in a digital form**

### **2.2.1 Reducing data collection time**

The submission of statistical reports by respondents in electronic form only will exclude the budget costs for preparing, collecting and processing paper forms; and as well will improve the quality of primary data through the introduction of arithmetic and logical controls into the process of data entering.

To ensure the digital collection of statistical data, it is necessary to amend current legislation by introducing obligations for respondents to submit data in digital form only (small businesses starting with reporting for 2020, other respondents starting with reporting for 2019). Current legislation already provides for the obligation to submit financial statements in digital form to the Federal Tax Service starting from the above-mentioned years.

To switch to receiving statistical reports in digital form only, it will be necessary to set uniform rules and develop technologies for all statistical organizations and departments:

- data submission formats for statistical reports and the language for the description of arithmetic and logical controls;
- formats of electronic data interchange messages with respondents;
- procedures for receiving and processing primary statistical data transferred by respondents in digital form;
- XML template generator for statistical reports;
- a Single Window service for receiving statistical reports in machine-readable format.

The future steps in digital data collection could be the introduction of a data streaming model for receiving from respondents primary data that are generated automatically in their accounting systems.

### **2.2.2 Ensuring completeness of statistical reports collection**

In accordance with the Decree of the Government of the Russian Federation of June 3, 2019 No. 1189-p “On approval of the Concept for the development and operation of the national data management system and an action plan for 2019–2021” and within the framework of DAP, it is planned to construct a Unified Registry of Statistical Observation Units (based on the statistical register of Rosstat), as well as a Unified Registry of Statistical Reporting Forms and Indicators.

Establishing data interchange among of the Unified Register of Statistical Observation Units, the Unified State Register of Legal Entities (EGRUL), the Unified State Register of Individual Entrepreneurs (EGRIP), and other government information systems containing administrative data on respondents will ensure the completeness of statistical reports collection. This will allow any changes made to the information systems mentioned above to be quickly reflected in the Unified Registry of Statistical Observation Units.

The use of the Unified Register of Statistical Observation Units in the process of statistical observations should become mandatory for all government bodies at the federal and regional levels.

To compile the lists of respondents who are required to submit statistical reports, a module will be formed in the Unified Register of Statistical Observation Units to automatically select statistical observation units according to specified criteria.

To ensure the completeness of statistical reports collection, it will be necessary, within the framework of the Unified Register of Statistical Observation Units, to enable automatic matching of observation units included in the lists and the reporting respondents across all statistical reporting forms.

It is also necessary to automate the procedure for levying penalties on respondents for non-submission or untimely submission of statistical or administrative data to respective organizations, or submission of false statistical and/or administrative data; it will require amendments to the current legislation of the Russian Federation.

### **2.2.3 Improving reliability of statistical reports**

In order to increase the reliability of statistical reports, it is necessary to prepare clear guidelines for filling in statistical report forms and to create and run a forum on the Rosstat website to discuss with interested parties the issues of filling in statistical report forms and other issues related to statistical observation.

At present, many respondents have already implemented automated accounting systems.

The development of algorithms for generating statistical reports solely on the basis of the primary data from business accounting and providing an open access to them will enable software developers to computerize compilation of primary statistical data and filling in statistical report forms.

The transition from the manual filling in paper or digital statistical report forms by respondents to an automated generation of primary statistical data on the basis of business accounting will not only increase the reliability of primary statistical data, but also reduce the costs of statistical reporting to respondents. Statistical reports received from respondents should be automatically checked for the completeness of primary data and edited.

#### **2.2.4 Reducing time for processing statistical reports and producing official statistics**

Currently, Rosstat is implementing a centralized scheme for data processing and storing at the federal level, which assumes that primary statistical data are submitted from respondents to the territorial bodies of Rosstat, and then transferred to a centralized data processing system (CDPS) where tables are generated for Russia as a whole and by needed groupings (e.g by the administrative regions of the Russian Federation).

After a complete transition to the digital collection of statistical reports has been achieved, Rosstat will implement a centralized one-stage scheme for collecting, processing and storing primary statistical data directly at the federal level, which will significantly reduce the time for the entire process of statistical production.

It will also allow continuing the optimization of the territorial structure of Rosstat, which began in 2011, including a reduction in the number of jobs in the territorial bodies.

### **2.3 Outcome (target indicators)**

Implementation of measures aimed at digital submission of statistical reports will significantly improve the completeness of reporting and the reliability of primary statistical data, and reduce the time for collecting statistical reports and processing primary statistical data. The targets are:

- reduce the timeframe for collecting statistical reports by 66% through digital data collection and switching to a data streaming model for collecting primary statistical data generated by respondents in their automated systems of business accounting;
- reduce the time for processing primary statistical data and producing official statistics by 33%.

As a result, the number of employees in the Rosstat territorial bodies should be reduced at least by 10 percent.



### **III. Reducing the reporting burden on respondents**

#### **3.1 Current situation**

The collection of statistical reports requires large costs from respondents for the preparation of primary statistics, filling in forms of federal statistical observation and agency forms, and sending them to the government bodies. According to expert estimates, annual costs for providing all kinds of reports to the authorities amount to about 1.5 trillion rubles.

Along with the forms of the federal statistical observation, respondents should submit reports required by ministries and agencies, as those are authorized to collect statistical data in their respective jurisdictions and should create data bases for their government agency information systems.

This results in duplication of indicators contained in the agency report forms and Rosstat statistical forms, and increases the reporting burden on respondents. In the Russian Federation, at the federal level, there are more than 800 valid regulatory acts that establish requirements for approximately one thousand reporting forms of various frequencies (from once a day to once every several years).

In addition, local authorities are authorized to collect statistical data on the economic and social spheres of the respective municipalities.

The main reason for having introduced additional forms from agencies, administrative regions and municipalities for reporting is the legislation prohibiting statistical organizations from providing primary data for purposes other than producing official statistics.

Another obstacle to reducing the respondent burden is the lack of access for official statistics producers to administrative data sources.

#### **3.2 Meeting the existing challenges**

##### **3.2.1 Elimination of data duplication**

Each year from May through July, Rosstat carries out a revision of the federal statistical observation forms for the next year. A special commission on revising statistical forms and amending the Federal Plan of Statistical Work (FPSW) is established. Each Rosstat department presents proposals on how to optimize statistical observations, eliminate duplication of statistical activities, and reduce reporting burden on respondents. The commission's meetings are attended by representatives of the research community, small and medium-sized businesses, government organizations, territorial bodies of Rosstat and specialized operators (organizations that provide services for the delivery of digital documents between the statistical office and respondents and consult in filling in statistical reports).

However, at present, there is no informational basis for eliminating the duplication of data collected by government executive bodies at the federal and administrative regional

levels and by local authorities from respondents. An inventory of all sources of primary statistics is needed.

An inventory is planned to be carried out in three stages: Rosstat forms of federal statistical observation (about 240 forms); forms of federal statistical observation of other producers of official statistics (about 300 forms); other reporting forms submitted to the government bodies of the federal and regional levels.

The degree of detail in the of reporting forms and indicators in the Unified Registry of Statistical Forms and Indicators should be sufficient to automatically detect duplication of indicators in various forms already at the stage of entering the descriptions of forms. Identified duplications should result in a rejection to register a form in the Unified Registry of Statistical Forms and Indicators.

A Unified Registry of Statistical Forms and Indicators will provide all users of the DAP with an access to a common information space containing metadata for statistical observation forms and indicators, and regulatory and reference information necessary for producing statistical information at all levels of government.

One of the main functions of the Unified Registry of Statistical Forms and Indicators will be support for the assessment of the reporting burden on respondents according to an approved methodology. Respondents should have the right not to provide statistical reports if a form or an indicator of statistical reporting are not registered in the Unified Registry of Statistical Forms and Indicators.

In order to minimize agency reporting and avoid duplication of indicators in the federal statistical forms and agency reporting forms, it is necessary to develop a regulatory framework for a regulated access of ministries and departments to a unified repository of aggregated and primary statistical data (DAP component).

### **3.2.2 Use of alternative data sources**

One of the promising ways to reduce the reporting burden on respondents is to maximize the use of alternative data sources for generating official statistical information (administrative data, big data).

By 2020, it will be necessary to ensure access for the official statistical data producers to the administrative data sources of the Federal Tax Service of Russia (FTS) and of government extra-budgetary funds in order to use these data for producing official statistical information. In addition, FTS and Rosstat should closely cooperate while introducing changes and amendments in tax return forms, business accounting forms, and statistical reporting forms with the purpose of meeting the needs of both agencies in administrative and primary statistical data.

In 2019-2020 it is planned to develop methodological, organizational, and technical approaches to using Big Data in official statistics.

Huge volumes of data are generated, for example, by the Global Navigation Satellite System (GLONASS), bank terminals, cash registers, all kinds of scanning devices, sensor networks, mobile telephony, satellites, social networks and the Internet.

The concept of using Big Data in official statistics will rely on international experience and recommendations and suggest the conduct of pilot projects on the use of Big Data in certain domains of statistics (trade, tourism, consumer prices, demography). In this respect critical importance is given to establishing mutually acceptable relations between statistical agencies and Big Data operators (mobile operators, Internet providers, banks, etc.).

Already in the mid-term, the use of Big Data will make it possible to reduce the number of forms for statistical and agency reporting

### **3.2.3 Statistical needs at the regional and municipal levels**

In order to meet the needs for statistical information, since 2019, regular interaction in the form of conducting meetings of working groups with the participation of statisticians and representatives of administrative regions and municipal authorities has been organized in order to review and systematize their needs for statistical information

In order to optimize the work in this format, it is necessary to develop an interactive mechanism, which will be convenient for members of working groups, to discuss ways to improve regional and municipal statistics with the maximum involvement of Rosstat territorial bodies. This will provide for better needs assessment when updating the Federal Plan of Statistical Works.

### **3.3 Outcome (target indicators)**

The implementation of these measures will allow the elimination of duplication of statistical data received from respondents and reduce the volume of agency and regional reporting, as well as reduce the statistical reporting burden on respondents by at least 50% by 2024.

## **IV. Better coordination of statistical activities**

### **4.1 Current situation**

The international statistical community has been developing modern approaches to the modernization of statistical production processes. At the global level, a *Generic Statistical Business Process Model (GSBPM)* has been developed and is being consistently implemented in many countries.

GSBPM are being implemented by Rosstat in seven stages.

1. Specifying needs in official statistical information (at present only needs assessment of the government bodies).

2. Designing statistical outputs; preparation/updating of the FPSW (descriptions of the official statistical information produced within each work, sources of information for each work, reporting forms and instructions for their filling in, the circle of organizations that submit the respective reporting forms).

3. Building statistical production (developing methodology, economic descriptions of statistical works, building data collection and data storage instruments, providing collection instruments to respondents (forms, XML-templates),

4. Collecting data to carry out each FPSW work (from the existing sources or from respondents using approved statistical reporting forms, following up non-responses.

5. Processing data and producing official statistics.

6. Disseminating official statistical data, publishing on the website of statistical organizations, uploading in to the Unified Interagency Information Statistical System (EMISS).

7. Quality assessment of official statistical data.

At present, coordination and control of the activities of the statistical organizations and departments on the production and dissemination of official statistical data embedded in GSBPM are carried out by Rosstat within the second phase (building (updating) of the FPSW) and partially within the sixth stage (distribution of official statistical information, control of uploading data and statistics in EMISS).

The first two stages of statistical production are the most important from the point of view of efficiency, quality and performance of the whole process.

However, the needs specification is done only through examining the requirements of the state authorities. There are no adequate tools either for evaluating the rationale of various proposed changes to the FPSW or assessing the size of federal budget expenditure on the implementation of FPSW and the efficiency of budget spending.

Within the framework of the FPSW the producers of the official statistical data produce and upload into EMISS over 6,000 indicators of official statistics which are derived through processing over 60,000 elements of primary data collected by using 548 reporting forms of the federal statistical observation.

Despite a large volume of primary statistical data collected from respondents within the FPSW, government bodies, outside the FPSW, require and collect a lot of ministry and/or agency specific statistical reports for generating data for their own government information systems. This is one of the reasons for the high reporting burden on respondents.

The methodologies of federal statistical observation in various statistical organizations and departments are not consistent. The collection and processing of primary statistical data and the dissemination of official statistical information are carried out by various producers of official statistics in an uncoordinated way by using many different tools for collecting and processing data. Use of many different software products and

inconsistent approaches to statistical processes at each stage of the statistical production adversely affects its effectiveness.

Outside the framework of the FPSR, there is no coordination of the statistical activities of government bodies and municipalities. This results in numerous duplications of the collected primary statistical data and an unreasonable increase in the reporting burden on respondents, and inefficient spending of federal and municipal budget funds on the production of statistical information.

#### **4.2 Meeting the existing challenges**

To overcome the interagency and interregional disunity of state statistics, it is necessary to ensure coordination of the statistical works in terms of applied methodology (including methodological oversight, audit of the composition and content of activities, quality assessment) as well as data collection, processing, and dissemination.

Coordination of the activities of subjects of official organizations and departments at all stages of production and dissemination of official statistical information will be ensured through the use of the Digital Analytical Platform that is under development.

In order to draw up and implement a Federal plan of statistical works (FPSR) targeted at optimizing budget expenditures and reducing the reporting burden on respondents, it is planned to establish, within the framework of a digital analytical platform, a Unified Registry of Statistical Observation Objects and a Unified Registry of Statistical Forms and Indicators and to develop methods for detecting statistical data duplication and assessing the reporting burden on respondents and its standardizing .

In order to optimize the scope of statistical works and to enhance openness of the FPSR updating procedures, it will be necessary, within the framework of DAP, to develop tools for the compilation and maintenance of the FPSR in an automatic mode. These tools will allow not only to assess the efficiency of the FPSR works in terms of the soundness of the methodology, cost, relevancy, and reporting burden, but also will motivate ministries and agencies to rationally use the available data sources and expand the range of generated and disseminated statistics produced on the basis of the collected data. The proposals for introducing new statistical works into the FPSR shall be assessed keeping in mind the origination of the requirement to include new work into the FPSW (decree of the President of the Russian Federation, resolution of the Government of the Russian Federation, etc.).

At the designing and planning stage in the statistical production, it is planned to ensure a mandatory approval by Rosstat of the statistical methodologies developed by other official producers of statistics and to use a single template-based XML data generator for statistical reporting forms that is being developed within the framework of the DAP. In addition, one of the components of the DAP will be a “single window” for receiving statistical reports with the possibility of creating a “personal account” for each respondent, where the list of the relevant statistical observations will be compiled while notices on the deadlines of statistical reporting will be sent by e-mail.

Unified requirements for all producers of official statistical information will be developed for their respective statistical reporting forms, instructions for filling them in, methodological materials and economic descriptions of data processing and compilation of statistics. The economic description of the statistical work will contain a formalized detailed description of the entire technological process of data processing and compilation of statistical information, including, if necessary, a description or coordinating of variables/indicators between various reporting forms. The preparation of economic descriptions of statistical works will ensure the comprehensiveness and consistency of the statistical characteristics of economic sectors.

Statistical tools intended for respondents (statistical reporting forms, instructions for filling them in, XML-templates of statistical reporting forms) must be tested with the participation of specialized operators (organizations providing services for guaranteed delivery of electronic documents between the state statistics office and the respondent and consult in filling in statistical reports).

At the phase of data collection, it is planned to transfer all producers of official statistical information to a “single window” technology for receiving statistical reports in digital form in a machine-readable format, followed by uploading primary data into a single repository of primary statistical data of the Digital Analytical Platform (DAP).

To implement the “single window” technology for digital collection of statistical reports, it is necessary to develop rules and procedures for accepting and processing primary statistical data, develop formats for the submitting statistical reports in digital form and formats of digital data interchange messages for data exchange with respondents.

It is planned to place all primary observation data received through a “single window” together with statistical data of various type (data of the statistical censuses and surveys, summary statistical data) in a single repository of primary statistical data of the DAP for their multiple use upon request of DAP users.

At the stage of processing the collected data and generating official statistics, it is planned to use a uniform technology within the DAP for processing primary statistical data and compilation of official statistical information.

At the stage of quality assessment, it is necessary to develop and implement quality standards in the field of statistics.

All these measures will require proper administrative coordination and control. For these purposes, in accordance with the recommendations of the United Nations (UN) on the organization of statistical activities, it is advisable to establish a national statistical council (with the status of an interagency commission or a subcommittee of a government commission). Such an organization, without duplicating the functions and tasks of the Public Council of Rosstat, will become the coordinating body for determining development vectors for the national statistics and resolving disagreements among producers and consumers of statistical information. In addition, the National Statistical Council will serve as a decision center in respect to the operation and use of the digital analytic platform that is under development. The working body of the national statistical

council should be a center of competence, endowed with the authority to prepare proposals to be reviewed by such council.

### **4.3 Outcome (target indicators)**

Implementation of the measures to strengthen coordination of statistical activities at all stages of the statistical production and coordination of statistical activities outside the framework of the FPSR will contribute to the elimination of duplication of variables/indicators in various forms of statistical reports and a decrease in the reporting burden on respondents, and will provide for the consistency of official statistical information produced by various statistical entities.

## **V. Meeting user needs and improving confidence in official statistics**

### **5.1. Meeting user needs**

#### **5.1.1 Current situation**

The most important goal of the activity of state statistics bodies is to provide society with comprehensive, reliable, scientifically sound and timely official statistical information. Rosstat follows the UN Fundamental Principles of Official Statistics: all users are provided with free, equal and free access to official statistical information and methodology.

Currently, the main channel for the dissemination of official statistical information is through publicly available information resources: the website of Rosstat (including the sites of the territorial bodies) and EMISS. The Rosstat website contains a large amount of statistical information, data of the censuses and large surveys, digital versions of all official publications. A significant volume of statistical information is produced by the territorial bodies of Rosstat by administrative regions and municipalities.

However, the volume and detail of published statistical information do not fully meet the fast-growing needs of users.

Rosstat regularly receives requests from federal and regional authorities, local authorities, representatives of research organizations, commercial organizations, and general public for providing statistical data, which are compiled in the framework of the FPSW, but for objective reasons are not published on the Rosstat website. Only within the framework of the provision of the public service “Providing Official Statistical Information to Citizens and Organizations”, does Rosstat annually send responses to tens of thousands of queries for statistical data. Over the past two years, the number of such queries has exceeded 60 thousand.

There are situations when official data producers do not provide detailed information in order not to disclose the identities of observation units (fewer than three units in a population, share of one unit more than the set limit). There is a problem of small area observations. In these cases, strictly following data confidentiality rules impedes full satisfaction of the information needs of the federal and regional authorities.

### 5.1.2 Meeting the existing challenges

The existing challenges should be met along several development lines of the official statistics system.

To increase the analytical capacity of official statistics, it is necessary to provide Rosstat with the authority to conduct analytical work and inform users about its results. A unified repository of primary statistical data will provide DAP users with access to arrays of primary statistical data and will become a sufficient information base for carrying out analytical work in the interests of users of official statistical data. At the same time, the analytical component of the DAP will provide the DAP users with flexible tools for tabulating data in response for both standard and non-standard queries.

In order to better satisfy the information needs of authorities in the administrative regions of the Russian Federation who need a wide range of statistical information for developing social and economic forecasts, budgeting, and solving current problems, legal aspects related to using confidential data will be worked out and the possibility of providing the government with the requested statistical information regardless of the number of respondents who had provided statistical reports will be considered. For example, the federal law on statistics in Germany states the possibility of providing statistical data to the federal and state governments for legislative and planning purposes.

In addition, it is necessary to expand the list of social indicators, the disclosure and publication of which should be supported by observation units. An appropriate analysis of the society's need for statistical data and their availability in the public domain is required. Based on the results of the analysis, suggestions for amending the legal and regulatory base will be formulated.

To meet the needs of scientific and research organizations in the most detailed data, Rosstat has been dealing with de-personalizing large surveys data for several years now. In the framework of building DAP, a methodological and regulatory framework should be established and tools should be created to enable all DAP users to have access to anonymized microdata not only on the population and households, but also about other observation units.

Data developers, public organizations, general public, and journalists working in a new area, data journalism, need information in the form of open data as a basis for creating convenient and useful applications and services.

Open data published in the form of a set of indicators are less useful and demanded than logically linked sequences (e.g. methodologically sound time series, ranked lists)/ Publishing information in the form of linked open data will enable processing millions of data sets. Using linked and linkable data sets computer can conduct automated analysis and generate new data sets (links) on the basis of the existing ones. This makes it possible to create a huge range of new information resources and software applications on the intersectoral and international information field.

Rosstat has huge arrays of diverse information. Their delivery to various categories of users in convenient formats is possible only through a modern and technologically



advanced Internet portal whose interface would be clear both to highly qualified analysts and ordinary visitors of the website and would allow to get to the searched data element in a minimum number of clicks. These solutions will be implemented already in 2019 when the new Rosstat Internet portal will be developed. Its technical tools will allow a user to find the needed data quickly, compare and analyze their relations, create customized analytical tables.

## **5.2. Increasing confidence in official statistics and improving the image of Rosstat**

### **5.2.1 Current situation**

For many years, the principal intended recipients of official statistical information have been professional users in federal and regional government offices and representatives of the research community. Accordingly, the presentation formats for official statistics in Rosstat have been built with the account for the expertise of these users who regularly use statistical data in their current work and/or participate themselves in developing statistical methodologies.

At present, makeup of Rosstat's reference groups has expanded significantly: statistical information is in demand by the general public, while a significant part of the audience is made up of non-professional users.

According to the Expert Council under the Government of the Russian Federation, in 2018 Rosstat took the sixth place out of 60 federal government bodies judging by the advancement of tools to support openness and the areas of openness. Rosstat demonstrated the best performance indicators in such area as "Work with reference groups", good performance in introducing the concept of openness, working with open data and public reporting.

However, in recent years a rather negative image of Rosstat has been formed in society: the responsibility for the existing problems of the country's social and economic development and the decline in living standards has been shifted to the state statistics bodies. At the same time, by the general public and the mass media, Rosstat is known as just the only agency that produces statistical information and hence is bound to be responsible for its quality; other producers of official statistics (for example, on health care, migration, crime rates, etc.) are practically out of view. A lack of understanding of the theory of statistics in most reference groups makes it difficult to correctly interpret statistical information.

### **5.2.2 Meeting the existing challenges**

Improving the image of Rosstat and promoting its activities without involving third-parties is possible with the maximum use of internal resources of Rosstat. The priority will be given to creating a single recognizable brand of Rosstat and promoting the agency as a source of relevant and reliable official statistical information that is needed for making important decisions at all levels of government. The reference groups of users of statistical data and communication platforms will be expanded, modern methods of presenting statistical information will be introduced.

It will be necessary to ensure maximum information transparency of Rosstat. Today it is not enough to produce and store statistical data. It is necessary to use all channels of communication with users to promote statistics and improve statistical literacy:

- expanding the formats for disseminating official statistical information, using modern tools for communicating with users;
- intensifying work on explaining the statistical methodology for professionals (targeted work with specialists) and for the media and the general public (simplified presentation in the format of "Understanding statistics", organization of public events: workshops, lectures, round tables, etc.) ;
- use of communication platforms for timely response to critical materials;
- intensifying work with the media to promote the activities of Rosstat and the statistical output.

Rosstat needs to participate more often in discipline-related school competitions and contests, to support the preparation and publication of a popular book on statistics, intended for schoolchildren and teachers among other readers, and participate in other events of the Russian Association of Statisticians aimed at developing statistical education and establishing statistical community in Russia.

One of the promising ways to attract public attention to the activities of Rosstat is the further development of the Fund for Historical and Statistical Materials (the former Rosstat Scientific Library, which was founded in 1918 on the basis of the part of the library funds of the Ministry of the Interior of the Russian Empire): cataloguing, processing, and digitizing of materials. After completion of these works, access to the Fund should be provided for all interested people and organizations.

### **5.2.3 Outcome (target indicators)**

The implementation of the proposed measures will allow an increased confidence in official statistics, get a positive user reaction (based on surveys) and achieve the following target indicators:

- the level of user satisfaction with official statistical data - 90 percent;
- Rosstat is constantly in the TOP-10 of the rating of the Expert Council in terms of developing tools for openness and areas of openness;
- the proportion of publicly available indicators in an open data format is 100 percent.

## **VI. Improving statistical methodology**

### **6.1 Current situation**

At present, Russian statistical system in general complies with international standards. The statistical methodology and practices are built in accordance with the recommendations of the international organizations, UN programs and funds,

recommendations and guidelines of the OECD and Eurostat. Comprehensive reviews of national statistics by international organizations and adherence to the Special Data Dissemination Standard (SDDS) adopted by the International Monetary Fund (IMF) confirm a high degree of harmonization with international standards.

The statistical methodology is updated on an ongoing basis as changes are made to the international statistical standards and the regulation of the Russian Federation, including all-Russian classifications, and in connection with the emergence of new phenomena and changes in the organizational and production structure of the economy.

The calculation of macroeconomic indicators in Russia is based on the decision of the Council of the Eurasian Economic Commission of February 12, 2016 No. 34 “On the program for developing integration in the field of statistics in the Eurasian Economic Union for 2016 - 2020”; the current version of the System of National Accounts 2008 (2008 SNA) is used. In accordance with the *Program for developing integration in the field of statistics*, a full set of accounts is compiled by institutional sectors annually, and key macroeconomic estimates at the national level are produced on the quarterly basis. However, the task of integrating all economic statistics on a conceptual basis of the SNA has not yet been solved. Another task is the compilation of accounts for the government sector of the economy, which can only be achieved if there is close interagency cooperation for determining the boundaries of this sector.

In Russia, the implementation of the elements of the System of Environmental-Economic Accounting (SEEA), approved by the UN Statistical Commission as an international standard in 2012, has begun. On an interagency basis, a comprehensive assessment of natural assets (environmental assets) is carried out in monetary and physical terms. Experimental work is underway to compile a SEEA environmental taxes account.

The summary SNA indicator, Gross Domestic Product (GDP), despite its importance as a measure of domestic production, does not reflect the level of well-being of the population groups. With a general increase in GDP per capita, social and economic inequality in the society may rise, which determines the need to build aggregated quality of life indicators (indices)

As regards methodology, some sectors of national statistics still do not comply with international standards in terms of the quality and timing of the adaptation of new approaches and the use of new technologies for collecting, processing, and presenting data. There is a serious lagging behind in the transition to new versions of international statistical classifications.

The problem of underestimating new phenomena and related structural shifts remains, which is fraught with a strategic gap in the awareness and systematic description of emerging global trends and their local effects. This primarily concerns the statistical observation of the functioning of enterprise groups.

Of particular importance for improving the methodology and organization of statistics is the development of sample methods of statistical observation, not only to

improve the reliability and quality of output data, but also to reduce the number of full-count surveys that are still dominant in Russian statistics and reduce the cost of data collection. In this regard, use of administrative data and work with Big Data are important.

Data verification procedures require sound methodology and good organization at all stages of data processing. When introducing new observations, it should be obligatory to make control measurements and comparisons with other data sources.

## **6.2 Meeting the existing challenges**

The key development vector of the statistical methodology is the implementation of integrated economic statistics, which allows integrating the concepts of industry statistics, labor, price and finance, and regional statistics on the basis of the common framework of the SNA. This will solve the problem of the comprehensive statistical accounting of all aspects of the functioning of the national economy using standardized descriptions of economic processes. To do this, it is necessary to achieve the following:

- development and approval of the standard concepts and definitions of the integrated economic statistics applicable in all domains of Russian economic statistics. The implementation of these tasks requires further development of the methodology of Russian national accounting with the objective of a full-scale use of international standards in view of the peculiarities of the Russian economy

- development of the methodology of national accounts compilation and integration of macroeconomic statistics in general:

- improvement of the production measurement methods (standardization and coding of the statistical production units in the Russian system, measuring activities of enterprise groups, implementation of mathematical models, improvement of regional macroeconomic estimates);

- optimization of the procedure for sending out statistical reporting forms to vertically integrated corporations;

- statistical observation over multi-territorial companies in the Russian Federation and enterprise groups;

- development of the methodology for the compilation of assets and liabilities balance sheets, gross fixed capital formation accounts, increasing the number of components for national wealth evaluation (as regards national resources);

- harmonization of government finance statistics and national accounts with in the international recommendations;

- improvement of the compilation of government sector accounts and household sector accounts;

- Development of the methodology and information resources for the compilation of the government sector accounts.

It is necessary to adjust the current methodology to new phenomena in the global and Russian economies, to develop a statistical methodology and techniques in priority areas of the statistical measurement, including:

- accounting for globalization processes in the production sphere and harmonization of national and international accounts;
- measuring value-added in the external trade, analysis of value-added chains within international transactions (international projects);
- introducing advanced methods of obtaining statistical estimates of economic processes within the digital economy;
- development of statistical methodology and methods for assessing information;
- development of methods for assessing well-being within the framework of the national accounts;
- balancing micro- and macroeconomic data on income and expenses of the household sector.

One of the most important tasks for the coming years will be the development and stage-by-stage implementation of the key environmental and economic accounts on an interagency basis in line with natural resources statistics and environmental statistics:

- development of a methodology for compiling most important accounts, taking into account the existing information base and information needs;
- introduction into the practices of official statistics of natural resources accounting in kind and in value and a system of indicators for measuring resource productivity.

As recommended by the international statistical community, along with advancing the SNA, the framework for comprehensive social statistics will be worked out, including its development and subsequent implementation in the Russian statistical practices:

- Social Accounts Matrixes (SAM) to carry out in-depth analyses of the household sector
- a system for measuring social expenditure on the basis of OECD standards (SOCX) for in-depth studies of national and regional policies of social protection of the population;
- Integrated quality of life indices including better life index, prosperity index, and quality of life index.

It is necessary to synchronize the revisions of international classifications and Russian classifications of technical, economic and social information, the All-Russian classification of types of economic activities (OKVED), and the all-Russian classification of products by types of economic activities (OKPD) and the introduction of their new versions in the statistical practices.

On 25 September, 2015, the United Nations General Assembly adopted Resolution 70/1B, “Transforming our World: the 2030 Agenda for Sustainable Development”. This document lays out the 17 Sustainable Development Goals (SDG) which aim to end

poverty, preserve the resources of the planet, and assure well-being for all. National statistical offices face a task to measure statistical indicators for monitoring the achievement of these goals. To solve it, it is necessary not only to produce official statistics for all indicators of the Sustainable Development Goals for the Russian Federation, but also to create a national system of SDG indicators that would reflect the peculiarities of the social, economic, and environmental development of our country and its regions.

The Research Institute of Statistics affiliated with Rosstat, whose activities are mainly focused on the scientific support of the current tasks of Rosstat, should be reoriented to investigating and solving future and fundamental problems of statistics and become, along with the Scientific and Methodological Council of Rosstat, a place for discussing the advanced statistical methodology and a center of attraction of statistical scientific thinking. In general, public presentations and open discussions of the methods for calculating official statistics, including indicators to be presented in the documents on strategic planning, should be the key to their good quality and relevance.

### **6.3 Expected outcome**

As a result of the implementation of the set of measures the Russian official statistical methodology should be scientifically validated, its compliance with the international standards and principles of official statistics and with the legislation of the Russian Federation should be achieved, and its openness and should be ensured. The following targets should be reached:

- Russia is one of the leading countries in terms of the extent of implementing 2008 SNA into statistical practices;
- In Russia all indicators of well-being published by OECD are calculated and published;
- stage-by-stage implementation into statistical practices of the key SEEA accounts till 2024;
- official statistics that are needed for the UN global data base on Sustainable Development Goals (SDG) are provided for the Russian Federation.

## **VII. Intensification of international cooperation**

### **7.1. Current situation**

The main goal of international cooperation is the integration of Rosstat into the global statistical community and strengthening of the agency's position as a leading center for global statistical expertise.

Rosstat is consistently building up international competencies through participation in the work of the global expert community, as well as through the implementation along with international organizations and foreign statistical offices of joint programs aimed at strengthening statistical capacity.

Rosstat specialists participate in the development of international standards for the methodology and practices of statistics in a number of areas. They have rich practical experience and are respected in the international statistical community. At present, Rosstat participates in more than ten global expert communities in such statistical domains as national accounts, demography, environment, sustainable development, and other.

Representatives of international organizations have repeatedly noted the relevance of the Russian expert potential in the field of statistics. Rosstat regularly receives requests for consulting assistance, but, as a rule, not directly, but through international organizations or consortia that provide financial assistance to countries developing their statistical systems. A full-scale assistance to other countries is hampered by the lack of necessary institutional mechanisms and appropriate infrastructure.

## **7.2 Meeting the challenges**

In 2019, an initiative will be launched in cooperation with the UN Development Program and one of the UN regional commissions to establish an international resource center in the field of statistics. The Resource Center should be a knowledge bank and an information base of online courses targeted at users and producers of statistics both in Russia and abroad; the Center will provide international consulting services, courses of full-time and distance learning. The creation of such a Center will not only strengthen the position of Russia as a statistical leader in the region, but will also improve the image of Russian statistics within the global statistical community.

Another important effort for strengthening external cooperation and improving the image of Rosstat on the international stage should be the holding of significant international events in Russia: the International Statistical Congress, the conference of the International Association of Official Statistics, and the UN World Data Forum. This initiative will also be an important step in promoting statistics in the country, encouraging and strengthening statistical expertise.

## **7.3 Outcome (target indicators)**

The implementation of these measures will increase the number of Russian specialists participating in the work of UN expert groups, the number of international projects with the involvement of Rosstat and important international statistical events held in the Russian Federation, and will support the establishment of an international statistical resource center by 2021.

# **VIII. New approaches to human resource management**

## **8.1 Current situation**

Despite the relatively high level of staffing in the Rosstat system (more than 95 percent) and low personnel turnover (less than 8 percent), there is a serious problem of staffing Rosstat with young specialists, their involvement and loyalty. The share of

employees under the age of 30 in the structure of Rosstat is less than a quarter of the total number of employees.

It should be noted that a high level of staffing is explained mainly by a decrease in the number of employees in the Rosstat territorial bodies, and the problem of staff aging is caused by low wages, lack of career motivation, and social insecurity of civil servants in Rosstat.

Both at the federal and regional levels, the difference in the salary levels between statistical organizations and the executive bodies of the financial and economic block is growing, which leads to an outflow of the most qualified and promising employees.

There is a significant reduction in education and training in the field of statistics, so the quality of statisticians graduating from universities has deteriorated.

Currently, the federal standards of higher education in teaching statistics in Russia are not being implemented into practice. Only at nine universities, is statistics being taught in the framework of the curriculum for teaching economics. As a result, in recent years there have been very few university graduates among newly hired staff with good knowledge of statistics.

Rosstat undertakes some efforts to train personnel; however a comprehensive system of training and retraining is missing.

Funds for the professional development of public civil servants within the framework of annual state order for personnel have been sufficiently reduced: in comparison with 2015, financing has decreased by a factor of three, and since 2012 – by a factor of seven.

In addition, there is a shortage of statisticians with profound knowledge of information technologies and foreign languages, which greatly impedes their work with modern software products and prevents interaction with the international statistical community.

## **8.2 Meeting the existing challenges**

It is necessary to develop, as soon as possible, a system of employee motivation by changing approaches to wages and salaries and reward systems and to ensure that reimbursement of employees in the state statistics bodies corresponds with that in the respective government organizations in the financial and economic spheres.

It is necessary to create an effective team of professionals and a personnel reserve, to ensure professional development of personnel within the framework of the state order on the basis of the identified actual need for specialists, and to establish cooperation with the leading universities of the country, public organizations, and the academia with the purpose to improve training in the sphere of statistics.

It is necessary to provide for timely adjustment and updating of the curricula of training programs, to carry out other activities for professional development (seminars, conferences, round tables, foreign internships, professional competitions, etc.) using the



most effective forms of training, re-training and advanced training of personnel, including those in the field of modern information and communication technologies.

The new Rosstat system for attracting and recruiting personnel will allow it to effectively attract the needed number of specialists of given qualification requirements in a timely manner. The system provides for the preparation of a staffing plan and the determination of sources of recruitment (internal, external reserve, graduates of educational institutions or the open labor market).

As for the situation of digitalization and data revolution there is a need in statisticians who are data specialists. Now statisticians should not only have good knowledge of the theory of statistics and mathematical methods and be macroeconomists to some extent, but know how to search for data and work with data, including huge arrays of data. Rosstat as the main employer of such specialists should make joint efforts with the academic circles to include this subject matter area into the higher education system. At the same time the work on implementing the federal state educational standard 3++ in the area of statistics in Russian universities will be continued.

A special attention should be paid to the young generation while preserving the institutional memory and transferring the professional experience to young employees by using personal coaching and mentorship programs and introducing rewards for mentors.

It is planned to conduct regular professional competitions and workshops in order to reveal leadership skills among young employees. Their involvement in the international activities of Rosstat will be supported by organizing specialized and individual English language courses.

Activities aimed at developing of the movement of young statisticians should be agreed upon with the youth committee of Rosstat or be initiated by this committee.

### **8.3 Outcome (target indicators)**

Implementation of the planned measures will allow:

- to increase the share of young specialists with positions in the leading job group up to 30%
- increasing the attractiveness and competitiveness of the public civil service in the Rosstat system;
- ensuring stability of tenure of personnel, rejuvenation strategy with preserving experienced mentors;
- establishing an appropriate reserve of personnel;
- ensuring the compliance of education level with the qualification requirements;
- bringing the educational standard in compliance with the professional standard “Statistician” and its further development.

## **IX. Optimization of the administrative processes in Rosstat**

### **9.1 Current situation**

Participants in the process of producing statistical information are the territorial bodies of Rosstat (about 88 percent of the total cost of production), the central office of Rosstat (about 10 percent of the total cost of production) and external contractors (about 2 percent of the total cost of production).

The central office of Rosstat includes 22 departments, of which 15 departments are directly involved in the production of statistical information, and 7 departments organize and support statistical production within the entire Rosstat system.

There are 67 territorial statistical bodies in the Rosstat system. The administrative staff in the territorial statistical bodies comprise around 17%.

In accordance with the concept of improving the efficiency of budget expenditures in 2019 - 2024, approved by the Resolution of the Government of the Russian Federation of January 31, 2019 No. 117-p, one of the key areas is the digitalization of the public administration system and the budget process, which is a prerequisite for optimizing the system of public administration, including centralization of supporting functions.

At present, Rosstat does not have the tools to assess the effectiveness of the use of budget funds for the production of statistical information and providing administrative support. The functions of supporting departments are not fully integrated even in the Rosstat headquarters, but there is also a need to integrate and centralize administrative functions of the territorial bodies in the Central Office of Rosstat.

The outcome of centralizing the functions of the administrative departments of the territorial bodies could be a better use of budget funds within a single financial department and a single government procurement department, the efficient use of federal property under the supervision of a centralized department for public property monitoring, and more efficient human resource management with a unified human resource department.

The integration of Rosstat territorial bodies into Rosstat interregional departments will improve governance within the Rosstat system, reduce costs and time of administrative processes, allow to distribute human resources more effectively, and also provide for greater flexibility in introducing administrative and human resource reforms.

At present, the issues of transferring certain powers of the central office of Rosstat to the regional level and the establishment on the basis of some territorial bodies of support interregional centers that exercise these powers have not been sufficiently investigated.

However, the administrative processes in the central office of Rosstat and in the territorial bodies are not standardized or regulated, there are significant differences in the organization of the same processes in different territorial bodies, and the structure of the territorial bodies is not standardized either.

Often, administrative processes are not optimized. The following types of losses can be detected in the Rosstat processes: unfinished work, extra steps and loops in the processes, duplication of administrative processes, errors in documents, repeated work with documents and repeated data entering, unnecessary work, time losses, inefficient work organization, inefficient work of information systems.

## **9.2 Meeting the existing challenges**

It is necessary to create a culture of continuous improvement in administrative processes by eliminating losses at all stages on the basis of lean production technologies.

To eliminate losses, it is necessary to have a feedback from all participants in the statistical production process and to collect their proposals for improving the processes and eliminating the identified losses; also it is needed to be able to evaluate proposals and undertake respective measures.

It is also necessary to conduct an independent analysis of all administrative processes of Rosstat and, on the basis of this analysis, prepare proposals for improving administrative processes both in the central office of Rosstat and in territorial bodies considering, among other things, the possibility of establishing interregional support centers in some territorial bodies, to which some of the powers of the central office of Rosstat will be delegated.

When preparing proposals regarding territorial bodies, both approaches to improving administrative processes should be considered (centralization of the functions of the supporting departments of territorial bodies and merging of the territorial bodies).

Proposals should include descriptions of the target system for planning, managing and supervising the production of statistical information, a typical structure of Rosstat territorial bodies and a scheme of their locations.

In the course of the analysis of administrative processes, it is necessary to fix the current state of all key processes and develop proposals for their improvement (including the development of standard processes for territorial bodies), which should ensure the achievement of the following objectives:

- reallocation of resources to priority areas of work;
- growth in labor productivity;
- alignment of the workload by functions and jobs;
- increasing the efficiency of Rosstat information systems operation.

To implement proposals for improving administrative processes, it will be necessary to create a special information subsystem that implements an integrated approach to planning, managing, analyzing and monitoring the entire flow of operations and data associated with this activity.

### **9.3 Outcome (target indicators)**

The implementation of these measures should reduce the risks of inefficient planning of Rosstat's activities, increase transparency and accountability, improve financial discipline, and optimize the number of federal employees and federal budget expenditures.

In 2019, a system for submitting useful proposals should be launched, an audit of the administrative processes of the central office of Rosstat and two territorial bodies should be carried out, and new processes should be introduced where the identified losses have been eliminated.

Before 2021, standard business processes should be extended to all territorial bodies.

In 2022, the reorganization of territorial bodies should be completed in accordance with the developed target model.

## **X. Implementation of the projects of a national value**

### **10.1 Russian Population Census 2020**

The All-Russia population census is the only source of official statistical data on the population size, demographic, socio-economic, and ethno-linguistic characteristics of people, the number and composition of households, housing conditions of the population and households in each settlement and municipality. No other source of population data can provide information of such wide coverage and such degree of detail at the same time.

The Population Census enumerates people permanently residing in the country and records them at their actual usual place of residence. Data are collected not only on individuals and their housing conditions but on households. Data are recorded as reported by respondents without requiring supporting documents which is considered to be the most reliable information.

The challenge for the 2020 All-Russia Population Census is the introduction of digital technologies into its preparation and conducting. To divide the territory of the country into enumeration areas, digital address lists with reference to a digital map will be used. Data collection will be done by filling in the census questionnaire online and/or in tablet computers of enumerators. Monitoring and supervision of enumerator performance will be done through remote access to the tablets from the federal center. Processing of primary data will start immediately after their collection as data will be checked at the point of data entry. Dissemination of the census data will also be done on the basis of a digital platform with geo-referencing to the respondents' places of residence.

The main innovation of the census will be an opportunity for respondents to fill in census questionnaires in the internet by themselves. Respondents will be able to choose the most convenient way of reporting.

It is planned to use administrative data on population to pre-fill census questionnaires and to verify the collected data. It will allow a reduction of the reporting burden on respondents and quality of data.

The second and maybe the main challenge of the 2020 Population Census will be to ensure a full coverage in the situation of an unprecedented growth of non-responders. This requires large outreach efforts: it is necessary not only to inform the population about the census, but also to convince people of its benefits to them.

Among the lines of development and innovations of the 2020 Population Census is the use of Big Data to improve the quality of census results.

The 2020 Population Census will provide the authorities, research and educational organizations, and all interested users with relevant official statistical information. Census data are necessary for monitoring the implementation of program documents on the social and demographic development of Russia, strategic documents on ensuring national security. The census data are also indispensable as a basis for effective state planning in the fields of education, national policy, population policy, budget planning, the labor market, social protection, housing and migration.

## **10.2 Micro-census of agriculture 2021**

In accordance with the Federal Law of July 21, 2005 No. 108-ФЗ “On the All-Russia Agricultural Census”, the first agricultural micro-census in Russia should be conducted in 2021 with coverage of at least 30 percent of the general population for the census.

New technologies will be used for collecting in the course of the 2021 micro-census of agriculture. For the first time, tablet computers will be used for interviewing all types of agricultural producers (with the exception of agricultural organizations). This will significantly improve the quality of information and speed up the process of collecting and processing data.

All agricultural producers will have opportunities to provide answers to the census questions using digital questionnaires through the web-based data collection system of Rosstat.

Another innovation during the micro-census will be the use of satellite monitoring of agricultural land.

Outreach activities should be more intensive in order to minimize possible refusals to participate in the census, deliberate wrong reporting, etc. The outreach activities should be undertaken from the center and at the regional level with due account taken for regional peculiarities.

The 2021 micro-census of agriculture will provide for:

- obtaining official statistical information on structural changes in agriculture to improve the quality of data by the categories of agricultural producers that are

surveyed on a sample basis between censuses or not surveyed at all (non-profit associations of citizens, households in urban areas);

- updating the general populations of agricultural producers for conducting sample surveys between censuses (agricultural censuses are the only source for updating the populations, in particular, on personal subsidiary plots and other private plots);
- improving the quality of the data of the current statistical observation in agriculture, which will later eliminate the need to recalculate time series.

### **10.3 Constructing input-output tables**

The input-output tables are an integrated system of macroeconomic indicators that reflect the structure of the economy in a detailed breakdown by kinds of economic activities and by products.

The basic Input-Output Tables provide the internal balancing of the SNA estimates and eliminate the statistical discrepancy between the gross domestic product produced and used, help estimate the non-observed economy, create an information basis for the compilation of annual supply and use tables of goods and services and satellite (auxiliary) accounts of the SNA (tourism, healthcare, education, etc.).

The tables are also a tool for analyzing and forecasting the inter-industry relations and structural proportions of the economy and carrying out development scenario calculations depending on changes in production factors and final demand.

In accordance with the Resolution of the Government of the Russian Federation of February 14, 2009, No. 201-r, starting from 2011, basic Input-Output Tables are constructed on a regular basis once every five years for years ending in 1 and 6.

In order to obtain the needed data for IOT construction, once in five years a federal statistical survey of production costs and sales costs (goods, works, and services) is conducted, because data on production and sales costs are not collected through current statistical observation in the needed detailed classification.

The purpose of this observation for 2021 is to obtain information on the costs of producing and selling products of large and medium-sized enterprises/organizations in the sector of non-financial corporations, budget, autonomous and state-owned institutions.

It is necessary:

- to carry out some research in order to compile a list of product groups in compliance with OKPD 2 for conducting federal statistical survey of production and sales costs (goods, works, services) for 2021
- to develop survey tools;
- to develop software for data collection and processing;
- to conduct a survey and process the results;
- to use the survey data for constructing basic Input-Output Tables for 2021

This survey will include the following innovations:

- reduction of the survey program due to exclusion of small businesses from the survey;
- development of specialized software that enable filling in the survey forms automatically on the basis of existing software products used in business and primary accounting.

All this will reduce the burden on business entities, decrease the labor intensity of filling in federal statistical reporting forms, and improve the quality and consistency of the generated statistical information underlying the construction of basic Input-Output Tables for 2021.

#### **10.4 Full-count survey of small and medium size businesses**

Full observation of the activities of small and medium-sized enterprises (hereinafter referred to as full-count survey) is carried out by Rosstat once every five years pursuant to paragraph 5 of the Federal Law of July 24, 2007, No. 209-ФЗ “On the Development of Small and Medium-Sized Enterprises in the Russian Federation”.

Between 2019 and 2022, the third round of a full-count survey for collecting data on 2020 shall be conducted.

The purpose of the full-count survey is to obtain comprehensive and detailed characteristics of the economic activity of small and medium-sized enterprises (hereinafter referred to as SMEs). These data will be used to improve the quality of forecasting and to develop measures for supporting better efficiency of the Russian economy and to implement the systemic approaches to the development of small and medium-sized businesses.

The challenges of the full-count survey are: to ensure 100% coverage of SMEs in the situation of their high mobility, low reporting discipline and economic literacy, to promote a positive attitude of SMEs to this large-scale event, to introduce digital technologies when communicating survey tools to respondents, and collecting and processing data.

The activities of the full-count survey comprise:

- to carry out research for drafting recommendations for scenarios and survey program (2019);
- to prepare methodological and organizational guidelines, to undertake survey preparation actions (to approve a work plan and statistical tools, to prepare economic descriptions and terms of reference, to hire additional staff at the regional level, to compile observation units lists, to deliver survey tools to respondents, to carry out outreach and advocacy work) (2020) ;
- to collect and process data, to release preliminary survey results (2021);
- to publish final survey data (2022).

The innovations of the full-count survey of small and medium-sized enterprises in 2020:

- Submission of reporting data by small and medium-sized enterprises in electronic form (paperless technology);
- using the capabilities of the public service portal of the Russian Federation;
- cooperation with mobile operators, specialized telecom operators, operators of legal information systems, and banks to inform respondents about the survey;
- application of data editing methods while using administrative data.

Conducting a full-count survey of small and medium-sized enterprises in 2020 should provide for:

- - presenting a good description of the activities of small and medium-sized enterprises in all sectors of the economy, including the municipal level, by actual kinds of economic activities and types of businesses;
- - providing data for calculating GDP and GRP estimates, indicators of national projects, performance indicators for local authorities and municipalities, etc .;
- - improving the quality of data for those indicators where sample methods do not allow to obtain representative estimates.

### **10.5 Organization of federal social and demographic surveys**

The progress achieved in the conducting of special social and demographic sample surveys on the basis of large-scale sample population surveys is not sufficient. At the current stage of the country's development there are needs for more comprehensive statistical data on the quality of life in all strata of the society, in more detailed and reliable statistical data on the most vulnerable groups of the population, and in timely and accessible data for users of information resources. The organization of socio-demographic survey over the next six years will be driven by the need to develop a statistical methodology and modernize the processes of collecting, processing and publishing statistical data.

The development of a statistical methodology should ensure a significant expansion of indicators and an increase in their reliability in the demographic, social and labor spheres at the federal and regional levels until those indicators shall meet the needs of society and the government at the present stage.

Modernization of collecting, processing and publishing statistical information will be aimed at introducing modern computerized platforms for collecting and processing data, increasing the openness and accessibility of statistical information for all users.

The planned measures aimed at the improvement of the statistical methodology, the expansion of specialized social and demographic surveys and improvement of the quality of survey data focus on several objectives. They are targeted at producing a wider range of



official social and demographic data reflecting relevant current socio-demographic issues; improving data quality for the population groups that are of key interest in view of the implementation of the national demographic projects by their targeted selection; and reaching consistency of official statistical data with information from alternative sources.

The measures are aimed at a reduction in the labor intensity of the population surveys thanks to computer assisted data collection (CAPI, CAWI), introduction of a wide range of client-oriented services for working with survey data and a monitoring system for assessing data quality (including releasing a public report on the statistical data quality), and the development analytical formats for the presentation of all statistical data.

### **Conclusion**

This Strategy defines the main directions and measures for quality improvement in Rosstat and for developing statistical activities in the country.

A key tool for digitalization of statistical production will be the Digital Analytical Platform for providing statistical data, which will be developed on the basis of Rosstat in the framework of the national program “Digital economy of the Russian Federation”. Financing in 2019 – 2021 will be provided through the government program “Economic development and innovative economy” (subprogram 8 “Improving the system of the state strategic management”).

At the same time, the transition to a streaming model for receiving primary statistical data and the incorporation of alternative sources of information, including Big Data, into official statistics are the most difficult tasks from the points of view of methodology and technology. The time frame for reaching these ambitious targets extends beyond 2024.

In 2020, in the framework of this Strategy a concept, a roadmap, and main methodological, organizational and technological approaches to the use of Big Data in official statistics will be developed. The development of algorithms for the compilation of statistical data based solely on primary accounting data is planned to be completed in 2021. Pilot projects for the use of Big Data in certain domains of statistics and pilot projects for the streaming collection of primary statistics will be carried out in 2022–2024 on the basis of public-private partnerships with the operators of Big Data and companies developing automated accounting systems.

The implementation of this Strategy will be carried out in accordance with the roadmap, which contains detailed descriptions of the actions aimed at digitalization of the entire process of statistical production and the development of national statistics.

## **Annex**

### **Terms, definitions and abbreviations used in the text of the Strategy for developing Rosstat and the system of official statistics in the Russian Federation until 2024**

***Administrative data*** are documented information received by federal state government authorities, other federal government bodies, regional governments and other public institutions of the constituent entities of the Russian Federation, local governments, and public organizations in relation with their implementation of administrative functions (issuing permits, registration, control and supervision, etc.), and other organizations which are authorized by law to implement these functions;

***Business (financial) reports*** - reports prepared by the economic entities in accordance with the Federal Law of December 6, 2011, N. 402-ФЗ “On business accounting”

***Agency reports*** – reports required by ministries and agencies in relation to their managerial functions (excluding administrative data b official statistical reporting)

***Vertically integrated company*** - an enterprise whose production structure combines several successive stages of production, as a rule, the extraction of raw materials and their subsequent processing

***Communication site*** - a form of interactive communication with the application of discussion technologies that provide space for getting information of interest, exchange of best practices, discussion of relevant issues, ideas, and strategies by groups of stakeholders;

***Microdata*** - primary statistical data after their initial check for errors, presented in a format convenient for machine processing

***Municipal reporting*** – reports collected by municipalities with the exclusion of administrative data

***Statistical observation units*** – legal entities and physical persons, including those registered as individual entrepreneurs, farmers holdings that provide information in the course of statistical observation

***Open data*** – information published in the internet in the form of systemized data in formats that allow their automatic processing without preliminary transformation for repeated free use.

***Users of official statistics*** - government bodies, local authorities, legal entities and physical persons that apply to the state statistics system or to producers of official statistical data for the needed statistical information and use of these information

***Users of the digital analytical platform*** – federal executive bodies of the Russian Federation, local authorities, designated persons within the entities participating in the digital analytical platform, other legal entities and physical persons after identification and authentication.

***Regional reporting*** - reports collected by the regional authorities with the exclusion of administrative data

***Statistical information*** – aggregated documented information on the quantitative side of the processes in the society generated by statistical bodies and official statistical information/

***Statistical reporting*** - information on the activities of economic entities as of reporting dates, presented in the forms of statistical observation, with the exception of reporting compiled by economic entities in accordance with Federal Law of December 6, 2011 No. 402-Φ3 “On Business Accounting”

***Statistical accounting*** - activities aimed at conducting statistical observations and processing collected data with the purpose to produce statistical information;

***Statistical observation*** – collecting and processing the collected data and administrative data and producing statistical information by statistical bodies;

***Statistical observation (reporting) form*** - a document designed to receive statistical data in the prescribed way containing questions from the observation program, fields for responses and details of the signing official responsible for the submission of statistical data; using these forms provide for the standardized data collection and automated processing of statistical data;

***Economic description of statistical work*** - a document that describes the tasks of collecting and processing data and producing official statistical information;

***XML – Extensible Markup Language*** is a markup language that defines a set of rules for encoding documents in a format that is both human-readable and machine-readable data;

***XML template of a reporting form*** is a reporting form in XML format