

**State Statistics Service of Ukraine**

APPROVED by

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improvements to methodology  
and reporting documentation  
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**STANDARD REPORT ON QUALITY  
OF THE STATE STATISTICAL OBSERVATION  
"AVAILABILITY AND SUPPLY OF GRAIN AND OIL CROPS TO  
ENTERPRISES ENGAGED IN THEIR STORAGE AND PROCESSING"  
1-2.03.07.12**

e-mail: L.Ovcharenko@ukrstat.gov.ua  
phone: (044) 287 23 22  
head: I. V. Shlyapina

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## ***1. Introduction***

Standard report on quality of the state statistical observation over availability and supply of grain and oil crops to enterprises engaged in their storage and processing (hereinafter, the report) has been drafted to inform users about the main criteria and quality indicators of its results. The report contains general information, which does not depend on the results for the concrete period of the state statistical observation over availability and supply of grain and oil crops to enterprises engaged in their storage and processing but defined by current methodology, procedures to process data, etc.

The quality report is oriented towards a wide circle of users of statistical information and is a starting point to prepare more detailed reports on data quality and observation's results.

The quality components mentioned in the report such as relevancy, accuracy, timeliness and punctuality, accessibility and intelligibility, consistency and comparability meet the principles for production of statistical outputs, which are defined by section III of the Principles of activity of the state statistics bodies approved by SSSU decree 216 of June 14, 2010.

The objective to conduct the state statistical observation over availability and supply of grain and oil crops to enterprises engaged in their storage and processing is to obtain good quality statistical information about the availability, supply and processing of grain and oil crops by these enterprises, value of their purchase.

This statistical observation was designed to address the following tasks:

- impartial reflection of basic trends of changes to availability, supply, processing of grain and oil crops at enterprises engaged in their storage and processing;
- ensure completeness, reliability and comprehensiveness of information about availability, supply, processing, costs of purchasing grain and oil crops;
- implementation of system approach to organizing statistical operations: from development of methodology and statistical tools and till ensuring data collection, processing, analysis and dissemination;
- fill in the Register of Statistical Units;
- ensure data comparability to make international comparisons;
- information supply to public authorities and management to their decision-making as to development of grain market;
- supply of information materials to users of statistical information.

The state statistical observation over availability and supply of grain and oil crops to enterprises engaged in their storage and processing, according to the Manual of statistics sections, belongs to section 2.03 Economic Activity and by the theme of statistical production 2.03.07 Agriculture, Forestry and Fishery.

The state statistical observation over availability and supply of grain and oil crops to enterprise engaged in their storage and processing makes use of form 1-grain (monthly, semi-annual) "Availability and supply of grain and oil crops" on the basis of Instruction on how to fill them in approved by SSSU decree 296 of August 27, 2008 (registered with the Ministry of Justice of Ukraine on September 22, 2008, by N877/15568).

The normative and legal basis to undertake the state statistical observation over availability and supply of grain and oil crops to enterprises engaged in their storage and processing are Ukraine's laws on the state statistics, on grain and grain market in Ukraine, decree of the President of Ukraine on May 19, 2003, N 415 on additional measures to stabilize grain market, regulation of Ukraine's Cabinet of Ministers on July 24, 2003, N1150, on drawbacks in the work of selected bodies of executive power on ensuring food safety and measures to stabilize the market for basic food products, as well as annual plans of the state statistical observations.

The main statistical publications that disseminate data from the state statistical observation over availability and supply of grain and oil crops to enterprises engaged in their storage and processing are as follows:

- statistical bulletins "Availability and supply of grain and oil crops to enterprises engaged in their storage and processing", Statistical bulletin N1;
- statistical abstracts "Statistical yearbook of Ukraine", "Agriculture of Ukraine";
- press-release "Situation in agriculture of Ukraine";
- report "On social and economic situation in Ukraine".

At the requests of users, the state statistics bodies provide them with available statistical information based on the results from form N1-grain (monthly, semi-annual), in aggregate format on paper, tape and electronic media, through communications tools, and by direct extract according to procedure and conditions set by the SSSU.

## **2.     *Quality components of the state statistical observation***

### **2.1.   *Relevancy***

*Relevancy is a degree with which the results of the state statistical observations satisfy the current and potential needs of users.*

The main statistical indicators of the state statistical observation over availability and supply of grain and oil crops to enterprises engaged in their storage and processing are the indicators that characterizing availability (stocks) of grain and oil crops at enterprises on the 1st day of each month; supply and processing of grain and oil crops, cost of purchasing those crops by abovementioned enterprises on a cumulative total from the beginning of the year.

The unit of the state statistical observation (statistical unit) is a local unit by type of economic activity.

Respondent (reporting (recording) unit) of this state statistical observation is legal persons, separate units of legal persons who have own processing capacities or lease them, and store and process grain and oil crops: purchased, obtained as raw material for processing or produced by those enterprises.

While conducting the state statistical observation over availability and supply of grain and oil crops to enterprises engaged in their storage and processing, the national Classifier of Objects of Administrative and Territorial Division of Ukraine (KOATU) is employed. According to geographical coverage and the KOATU, the development of the observation is made by district, city and region.

The time series of statistical indicators from the state statistical observation over availability and supply of grain and oil crops to enterprises engaged in their storage and processing are observed since 2002.

## **2.2. Accuracy**

*Accuracy is a degree of calculation's approximation to true values.*

The observation is carried out according to the Methodological regulations on organizing the state statistical observations over supply of agricultural products to processing enterprises approved by SSSU decree N7 of January 17, 2011 (with changes) and posted on the SSSU official web site ([www.ukrstat.gov.ua](http://www.ukrstat.gov.ua)) in section "Methodology and classifications/Methodological regulations on statistics/Agriculture and environment statistics".

The formation of the units' population for the state statistical observation over availability and supply of grain and oil crops to enterprises engaged in their storage and processing is made in line with the Regulation on the Register of Statistical Units (RSU) and formation of sampling frame for units' population of statistical observations over enterprises' activity approved by SSSU decree N481 of December 16, 2009, the Procedure to make use of data from the Register of Statistical Units approved by SSSU decree N28 of February 10, 2011, the Explanations on how to conduct the work on formation and updating units' populations and lists of reporting (recording) units (respondents) of the state statistical observations approved by N18.1-11/5 of October 25, 2013.

Criteria used to form the population of reporting units:

	<b>Criteria to form the total population</b>	<b>Classifications</b>	<b>Attributes of formation criteria</b>
1.	Institutional sector of economy	KISE	S.11 Non-financial corporation
2.	Type of statistical unit	Manual on types of statistical units	Local unit by type of economic activity
3.	Organizational and legal form of business	SKOF	Regardless of organizational and legal form of business
4.	Types of economic activity	KVED	Main or secondary type of activity by KVED-2010 refers to codes 10.41;10.61; 10.62; 10.91; 10.92; 11.01; 11.05; 11.06 of section C; 46.21 of section G; 52.10 of section H
5.	Territorial units	KOATU	In line with administrative and territorial division
6.	Size of enterprise	Manual on status of statistical unit	Regardless of size
7.	Attribute of economic activity	x	Active

After the objects have been selected from the Register of statistical units, information is compared and updated using the list of respondents and form N1-grain (monthly, semi-annual) "Availability and supply of grain and oil crops to enterprises engaged in their storage and processing" and form N1П-НПП (annual) "Report on production of industrial products (goods, services) by type" for the previous year.

The formation of units' population for the state statistical observation over availability and supply of grain and oil crops to enterprises engaged in their storage and processing is made by the state statistics bodies at central level every year.

The formed units' population for the state statistical observation over availability and supply of grain and oil crops to enterprises engaged in their storage and processing is sent out to regional statistics bodies in electronic format to organize collection of information.

The survey is carried out using form N1-grain (monthly, semi-annual) "Availability and supply of grain and oil crops to enterprises engaged in their storage and processing" approved by SSSU decree N181 of June 14, 2013: by form N1-grain (monthly) 10 times per year, apart from as of January 1 and July 1 when the survey is conducted with help of form N1-grain (semi-annual).

Forms N1-grain (monthly, semiannual) are compiled by legal persons, separate units of legal persons; they are submitted on paper to the state statistics body at the

place where respondent carries out its activity and according to timing set on the forms. If respondent submits the mentioned forms of the state statistical observation in electronic format, its submission to the state statistics bodies is made in accordance with the established procedure.

At the regional level of processing, the state statistics bodies make primary analysis of data, logical and arithmetical controls (input and output sets) and transmit the verified information to a higher level of processing.

The state statistics bodies compile the results of the state statistical observation at the national level: aggregated information for the whole country and by region.

While conducting the state statistical observation using forms N1-grain (monthly, semiannual), imputation methods are not used, and seasonal adjustments are not made.

Based on the results of the analysis of units' population for the state statistical observation over availability and supply of grain and oil crops to enterprises engaged in their storage and processing, it was determined that 5% of enterprises did not report by form N 1-grain (semiannual) for 2014 and the first half year of 2015 of which the two-thirds are enterprises located in the zone where anti-terrorist operation is conducted. This has no significant impact upon accuracy of the main indicators of this state statistical observation.

### **2.3. *Timeliness and punctuality***

*Timeliness is a period of time between event or phenomenon describing statistical data and publication of these statistical data.*

*Punctuality is a period of time between the actual date of data publication and the planned date that is determined in the official calendar for publications.*

Based on the results of the state statistical observation over availability and supply of grain and oil crops to enterprises engaged in their storage and processing, statistical information is produced and released in accordance with the plan for the state statistical observations. For users' convenience, "Catalogue of official statistical publications" is posted on the SSSU official web site ([www.ukrstat.gov.ua](http://www.ukrstat.gov.ua)) which has a list and dates for preparation of statistical editions, as well as tentative calendar for information release on the SSSU web site, which specifies the dates for posting the main results of the survey.

The release of statistical information is made according to the planned dates. If the dates should be rescheduled, the relevant message is posted for users on the SSSU web site.

Type of publication and its name	Planned dates for dissemination	Actual dates for dissemination
Press-release "Situation in agriculture of Ukraine"	14.02 14.03 15.04 16.05 16.06 15.07 15.08 15.09 15.10 14.11 15.12	14.02 14.03 15.04 16.05 16.06 15.07 15.08 15.09 15.10 14.11 15.12
Statistical bulletin "Availability and supply of grain and oil crops to enterprises engaged in their storage and processing as of on _____ 1, 20 ____"	14.02 (semi-annual form) 14.02 17.03 15.04 16.05 16.06 25.07 (semi-annual form) 15.08 16.09 15.10 14.11 16.12	14.02 14.02 17.03 15.04 16.05 16.06 25.07 15.08 16.09 15.10 14.11 16.12

The collection, processing and analysis of primary and aggregated information is made according to the following dates:

	Collection of primary data at territorial level	Processing primary data at territorial level	Processing primary data at the national level	Analysis of aggregated data	First release of statistical information
form N1-grain (monthly)	till the 4th day after reference period	till the 8th day after reference period	during the 8th day after reference period	The first and second ten-day period monthly, apart from January and July	On the 15th day after reference period
form N1-grain (semi-annual)	till the 4th day after reference period	till 18.01 and till 10.07 after reference period	till 21.01 and till 10.07 after reference period	The third ten-day period of January – the first ten-day period of February; the second and third ten-day period of July	The second ten-day period of February; the third ten-day period of July



Users' requests as to provision of information in most cases are satisfied during 5 days that meets the requirements of Ukraine's law on access to public information.

#### **2.4. Accessibility and intelligibility**

*Accessibility is a characteristic of simplicity and easiness with which user can obtain statistical data; it is defined by physical conditions upon the availability of which users can get access to statistical data.*

*Intelligibility is a characteristic of simplicity and easiness of statistical data understanding by user; it is measured through information environment where statistical data are presented and are accompanied by relevant metadata.*

The results of the state statistical observation over availability and supply of grain and oil crops to enterprises engaged in their storage and processing are provided to users at their requests and posted in statistical bulletin on the SSSU official web site in section "Publications/Economic activity/Agriculture, forestry and fishery".

A brief description of the contents of statistical bulletin is given in the "Catalogue of official statistical publications" which is posted on the SSSU web site ([www.ukrstat.gov.ua](http://www.ukrstat.gov.ua)) in section "Publications".

Microdata based on the observation's results in the form of selected files are not prepared currently. At the same time, available statistical information can be obtained at the request or by making the extracts according to the procedure set by the SSSU.

The calendar for information release (for a year and monthly) is posted on the main page of the SSSU official web site.

Methodological regulations on organizing the state statistical observations over supply of agricultural products to processing enterprises are posted on the SSSU official web site in section "Methodology and classifications/Methodological regulations on statistics/Agriculture and environment statistics" and "Statistical observations /Metadescriptions of the state statistical observations/Economic statistics/2.03.07 Agriculture, forestry and fishery/Availability and supply of grain and oil crops to enterprises engaged in their storage and processing (1-2.03.07.12)".

The contacts to obtain additional information about the results of this statistical observation, according to methodological support, as well as references as to conditions of its results dissemination are as follows:

address: 3, Shota Rustaveli st., city of Kyiv, 01601

phone: (044) 287 23 22

e-mail: [L.Ovcharenko@ukrstat.gov.ua](mailto:L.Ovcharenko@ukrstat.gov.ua) [office@ukrstat.gov.ua](mailto:office@ukrstat.gov.ua)

Contact information to make information request:

phone: 287 06 72, fax: 235 37 39

e-mail: [el.zapyt@ukrstat.gov.ua](mailto:el.zapyt@ukrstat.gov.ua)

## **2.5. Consistency and comparability**

*Consistency of two or more statistical data implies to what extent the state statistical observations where they were produced made use of the same metadata - classifications, definitions and population being explored as well as harmonized methods.*

*Comparability is a specific case of consistency when statistical data refer to the same data objects and the purpose of their union is to make comparisons in time or by region or other spheres of activity.*

The properties of data comparability are the result of action of a number of factors, the main ones of which can be united into two groups: the concepts of survey and methodology for measurement.

The concept of the state statistical observation over availability and supply of grain and oil crops to enterprises engaged in their storage and processing includes such elements as a system for indicators (their contents, definitions), observation's units, total population, reference period and periodicity of the survey, geographical coverage, etc.

The group of methodology includes the methods for data collection and processing.

Consistency and comparability of data from the state statistical observation over availability and supply of grain and oil crops to enterprises engaged in their storage and processing are ensured by the common population of units (including criteria to form units' populations); identical list of indicators, their definitions and procedure for compilation; employment of the common national classifications when producing information.

The state statistical observation over availability and supply of grain and oil crops to enterprises engaged in their storage and processing is undertaken in all regions of Ukraine and followed the list of the defined indicators. In view of the above, indicators for a certain period can be compared to data from previous surveys. The relevant indicators are also comparable at regional level.

## **2.6. Assessment of users' needs and expectations**

A list of users of information about availability and supply of grain and oil crops to enterprises engaged in their storage and processing is formed on the basis of letters-requests to obtain statistical data as well as proposals to improve the tools to conduct the state statistical observation.

The main users of information about availability and supply of grain and oil crops to enterprises engaged in their storage and processing and which is based on the

survey's results are public and local authorities, research institutions, educational institutions, enterprises and establishments of non-financial services.

In July 2014, the SSSU carried out the questionnaire survey of users of statistical information in order to explore the compliance with the needs of users of information about the supply of plant products to processing enterprises, particularly statistical data contained in statistical bulletin "Availability and supply of grain and oil crops to enterprises engaged in their storage and processing (hereinafter, the questionnaire survey) as well as definition of assessment of the mentioned statistical information quality.

The results of the questionnaire survey reveals that above 90% of the questioned users of statistical information are satisfied with list of indicators and details level of statistical data contained in statistical bulletin "Availability and supply of grain and oil crops to enterprises engaged in their storage and processing". Statistical information about the abovementioned issues is used by 90% of users continuously or periodically. The main purpose of these data employment is to prepare analytical materials (this is mentioned by 77% of users), monitor the performance of national and regional development program and scientific research (by 29%), develop the concepts, strategies, programs, normative acts, other documents (28%), study the competitiveness of grain crops market (4% of users).

96% of users positively assessed information support provided by the SSSU staff-members to users of statistical information.

95-100% of users positively assessed the quality of statistical information depending on criteria. Thus, the most important criterion mentioned by users is Relevancy (the average score is 2,23), the second one among all criteria is Accuracy/Reliability (2,24), the third one is Timeliness and Punctuality (2,44), the forth one is Consistency /Reconciliation and Comparability (2,73) and the last one is Accessibility and Intelligibility/Clarity (2,94).

In order to improve the quality of statistical information, in 2015 the SSSU based on the results obtained from the questionnaire survey launched the publication of additional statistical data by region about the following:

- availability, supply and average cost of purchasing basic types of grain crops by class - in semi-annual statistical bulletins *"Availability and supply of grain and oil crops to enterprises engaged in their storage and processing "*;
- wheat by type and class - in statistical abstract *"Agriculture"*.

More detailed assessments of quality of statistical information by users about availability and supply of grain and oil crops to enterprises engaged in their storage and processing are given in the message for users, which is posted of the SSSU web site in section "Questionnaire survey".

## ***2.7. Effectiveness, costs and burden per respondents***

The SSSU makes annual assessment of reporting burden per respondents based on Technique to measure reporting burden per respondents approved by SSSU decree 149 of May 14, 2013. In 2015, in Ukraine reporting burden per respondents as compared to 2014 decreased by form N1-grain (monthly) by 2,2% and by form N1-grain (semi-annual) by 1,5% due to reduction in the number of respondents.

Based on the results obtained from the questionnaire survey on reporting burden per respondents, the average time spent to fill in form N1-grain (monthly) is 1 hour, 23 minutes and it takes almost 2 hours to complete form N1-grain (semi-annual). The majority of the questioned respondents (84% by form N 1-grain (monthly) and 77% by form N1-grain (semi-annual) did not experience any difficulties in understanding instruction (explanations) and the contents of indicators, compiling information and completing the form. Respondents' satisfaction index by form N1-grain (monthly) is 92, by form N1-grain (semi-annual) is 89 (the average value of the indicator for the state statistical observations is 87).

To simplify the procedure to submit the forms of the state statistical observations by respondents, the submission of an electronic report is envisaged. The percentage of those who reported in electronic format by these forms are 34% for form N1-grain (monthly) and 42% for form N1-grain (semi-annual).

## ***2.8. Confidentiality, transparency and protection***

*Depersonalization of data suppliers, confidentiality of information they provide and its usage only for statistical purposes must be guaranteed. The state statistics bodies have to disseminate statistical data impartially, professionally and in transparent way.*

The protection of statistical information confidentiality is one of the main principles to conduct the state statistical observations by from N1-grain (monthly, semi-annual) "Availability and supply of grain and oil crops to enterprises engaged in their storage and processing".

The necessity to observe the principle of statistical information confidentiality is specified by provisions of Ukraine's law on the state statistics and international standards.

To support the guarantees set by the national and international legislation for respondents, the following measures are implemented to insure statistical information confidentiality when conducting this state statistical observation:

- primary data obtained by the state statistics bodies from respondents while undertaking the state statistical observation are used only for statistical purposes;

- statistical information obtained through the observation is provided to user in aggregated depersonalized way;
- in some cases, if there is a risk of confidential (primary) data disclosure, statistical information obtained through the observation is not disseminated.

When conducting the state statistical observation over availability and supply of grain and oil crops to enterprises engaged in their storage and processing, the storage and protection of primary statistical information that is obtained as the filled in forms is ensured.

Ukraine's law on the state statistics also specified the necessity to ensure accessibility, publicity and openness of statistical information, transparency of statistical methodology and statistical methods, thus meeting international standards in the area of statistics. In order to ensure the fulfillment of these regulations in the practice of this state statistical observation, it is envisaged to create a system for metadata: methodic and methodological documentations related to organization, conduct, data collection, processing information and its quality.

### ***3. Concluding part***

The important condition for further development of the state statistical observation by forms N1-grain (monthly, semiannual) "Availability and supply of grain and oil crops to enterprises engaged in their storage and processing" is to ensure the balance between the satisfaction of information needs for users of statistical information that envisages the implementation of modern information technologies and optimization of the statistical production process as well as improvements to cost effectiveness and decrease in burden per respondents which are implemented through the following:

- improve the software to submit reports in electronic format;
- define the methods for internal assessment and independent external assessment of effectiveness;
- establish continuous feedback with users of statistical information, respondents of the state statistical observation over availability and supply of grain and oil crops to enterprises engaged in their storage and processing.

The main directions to develop the conduct of the state statistical observation over availability and supply of grain and oil crops to enterprises engaged in their storage and processing are as follows (within the limits to optimize statistical reporting):

- cancel in 2016 form N1-grain (semi-annual) and introduction improved form N1-grain (monthly) from the report for January 2016 which contains information about basic types of grain and oil crops and information about soft wheat, rye, barley, maize by their classes and types;

- improve the system of indicators by reducing irrelevant indicators (availability and supply of grain and oil crops under general storage conditions, their supply by category of farming units), introduction of a new indicator on general capacity of simultaneous storage of grain and oil crops; make the list for grain and oil crops meet the Nomenclature for agricultural products.

The mentioned measures will lead to decreasing reporting burden per respondents and the same time allow to provide more complete monthly information to the main users of the state statistical observation over availability and supply of grain and oil crops to enterprises engaged in their storage and processing.