

TWINNING CONTRACT

Development of New Statistical Methodologies and Indicators in Selected Areas of Statistics in line with EU Statistical Standards

Ukraine



MISSION REPORT

on

Classifications in production statistics



Component 1.5, Action 1.5.3

Participants of the study visit:

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List of Abbreviations

ToR	Terms of Reference
SSSU	State Statistics Service of Ukraine
SL	Statistics Lithuania

1. General Comments

The study visit of SSSU to the Central Statistical Department of the Lithuanian Republic (hereinafter – Statistics Lithuania) took place under the Component “Classifications in Production Statistics” within Twinning Project No. UA10/ENP-PCA/FI/26 “Development of new statistical methodologies and indicators in selected areas of statistics in line with EU statistical standards”.

The main purpose of the visit was to study experience of the introduction and maintenance of PRODCOM in the production statistics, familiarization with the retrospective calculations practice.

2. Assessment and Results

In compliance with the Terms of Reference agreed upon by the Foreign Ministry of Ukraine Letter No. 630/17-142-2905 dated May 10, 2010, the following issues have been considered:

1. Familiarization with the organizational structure of Statistics Lithuania (A. Gibaite-Kudzhmiene, V. Kunigeliene). Statistics Lithuania is a governmental institution in the statistical industry and is subordinated to the Ministry of Finance of Lithuania. The organization structure and the Programme of Statistical Activities are approved by the Government of Lithuania upon submission of the Ministry of Finance. Statistics Lithuania approves statistical reporting documentation. The organization’s divisions are grouped by four statistical activities: macroeconomic statistics, business statistics, social and demographic statistics, information technologies. Statistics Lithuania also has 5 regional divisions that make collection and primary processing of statistical data (analysis, control, editing).

Short-term industry statistics and statistics of production based on PRODCOM are produced by the industry statistics division that employs 9 experts.

2. V. Kunigeliene presented Eurostat requirements on statistics quality indicators (general politics). Principle 4 of the European Statistics Code of Practice calls countries for constant perseverant work on the process of issuing statistical products and raising their quality.

3. Getting knowledge on PRODCOM application to products manufacture observations in Lithuania within the context of implementation of Eurostat methodological requirements and simultaneous meeting of the national user’s needs (Z.Gold, J. Maksimenkene). According to Eurostat strategy, the list is subject to yearly revision and PRODCOM survey is annual. Main indicators of the product manufacture survey are quantity of manufactured and sold products and value of sold products. The classifications division is responsible for development of the national version of PRODCOM in Lithuania.

European PRODCOM has an 8-digit code. The PRODCOM national version was supplemented with 2 digits, thus making a ten-digit code (10.14.11.00.10). The national version has 160 codes, including codes envisaged for products of the sectors which EUROSTAT does not include to PRODCOM (mining industry, oil refinery, etc.).

The Lithuanian reporting updates the national PRODCOM not annually since it is expensive. With changes being insignificant, the old nomenclature is used several years consecutively. Prior to transfer to Eurostat, data are re-calculated by PRODCOM codes of a relevant year. For re-calculation of information, conversion (two-way) keys are created, and one code is assigned to either side if the code is divisible.

For the national needs, PRODCOM-based survey is conducted every month. This is made possible because the Lithuanian nomenclature of manufactured products

is comparatively small (1600 items against 4900 in PRODCOM.). Therefore, annual data are received based on the 12-month information in late February after the end of the reporting period, i.e. at rather early dates if it comes to annual information.

Collecting statistical data based on PRODCOM covers all enterprises/local units (including individual businesses) that actually manufacture products listed in PRODCOM on condition that the manufacture takes places on the national territory. At least 90% of the manufactured output should be provided in this case.

Lithuania takes industrial enterprises (with an annual income over 200 thousand litas and more than 4 employees) for a sampling frame and companies with an income over 500 thousand litas where industry is a secondary activity. The income amount of the selected enterprises at the level (4 digits) NACE rev.2 has to exceed 90% of the total income of enterprises belonging to the same sector. With a lesser amount, the sample will include the largest of those not covered and others from this list if they prevail in manufacture of a particular product from PRODCOM list or the products are unique (the sole producer of this product type). The 1% rule is not valid when the country's products are not included if their value is less than 1% of the total value of European products. Milk and meat industry products manufacture is monitored by the Ministry of Agriculture. Generation of an aggregation takes into account the national level priority principle.

Direct overview of the statistical observation based on P-12 form "Company's Report on manufacture of Industrial Products and Services" was one of the two key issues of the meeting. The national version of the survey on products manufacture based on PRODCOM has the following indicators: total production, amount and value of the products sold total and sold on the internal market, amount of products made from raw materials (outsourcing) and value of services provided for products manufacture. P-12 form consists of two sections (the manual contains explanation to each of them individually).

P-12 form and the Manual on its filling out are placed on the website. Besides, the website contains the observation methodology in Lithuanian and a brief methodology in Lithuanian and English, which corresponds to the Lithuanian practice for all forms. There is also on-line access to the PRODCOM effective list and keys of conversion from PRODCOM to the Combined Nomenclature.

Five regional statistical offices directly deal with collection of companies' information, its entering, verification and adjustment. Half of the reports come in electronic form (only basic controls are functioning) and are uploaded into the database. A programmer designs primary information entering software. For a company there are all possible arithmetic and logical controls and data can be compared with the previous month's information. Mathematical packages SAS, ORACLE and SQL Navigator are used for data aggregation.

Annual information is made public in a separate issue appearing in late June. The information is placed in the database (including that covering 10 regions) and on the website, as well as it goes to Eurostat and the UN. It can also be made available to various users upon their requests (the work is done by experts of a Statistics Lithuania division responsible for publishing). Based on the observation conclusions, Statistics Lithuania prepares a quality report that is then placed on the website. To meet national needs, data on products manufacture by main items are published every month.

4. Familiarization with the organization of a short-term survey of industrial enterprises and the methodology for calculation of the index of industrial production in the Republic of Lithuania (N.Grebinskaja).

The monthly statistical observation based on P-11 form “Industrial enterprise activity monthly questionnaire” conducted by the industry statistics division of Statistics Lithuania is aimed at development of statistics in line with EU Regulation No.1165/1998 and No.1158/2005 on calculation of short-term indicators, namely, index of industrial products (including by Main Industrial Groups), new orders, internal and external orders, turnover, internal and external turnover and index of man-hours worked. Data on the number of employees and salary are generated from administrative sources, while price statistics division of Statistics Lithuania is responsible for indicators of industrial producer prices and producer prices at the internal and external markets.

P-11 form observation covers enterprises with the main kind of activity in industry (hereinafter – MKA). Since most Lithuanian enterprises are involved into one activity (or it significantly prevails over a secondary activity), this approach enables general meeting of Eurostat requirement on a survey unit, which is a kind of activity unit. MKA is determined by Statistics Lithuania and is used by all ministries and agencies.

The price statistics division holds annual activities on survey preparation that implies: revising a questionnaire/preparing a new one (if needed), revising methodological instructions, preparing and updating the methodology, other methodology-related activities, preparing a task to sampling experts, updating business entities and drafting their list. Of significance are preparing a sampling plan, preparing/revising programmers’ tasks, drafting letters to local offices responsible for data collection, entering and control, as well as consulting and expert training in the regions (if needed).

The observation uses a stratified random sample that is generated based on the list of active enterprises (approximately 7.5 thousand) prepared by the business register division. Each NACE group activity is broken down into three groups: 1-9, 10-49, 50 and more. Then enterprises with 50 and more employees are subject to a totally enumerated survey.

The population is updated during a year. Every quarter the business register division received information and keeps track of changes incorporated into the business register (start-up, liquidated companies) and data on the number of employees from administrative sources on enterprises not covered by the sample. This, specifically, permits prompt detection and inclusion of new respondents who have sharply raised their industrial output. To preserve the time series, replacement operations are also performed in the event of transfer/sale of capacities, etc. Besides, the division thoroughly follows up changes in the respondent’s MKA. Although stability predominates in this activity, in extraordinary cases, a company’s MKA may be changed in the middle of the year (with a relevant update in the business register).

General approaches to organization of an observation (data collection, processing, analysis, and publication) on the whole correspond to approaches used for other surveys (see item 3).

For calculation of the index of industrial products, Lithuania makes use of an indicator “Sold industrial production and services in current prices with no VAT and excises duty” from the monthly business survey, which is adjusted by the index of producer prices (deflation). It should be noted that, with products manufacture from raw materials (outsourcing), the index calculation takes account of the full product

value. Calculation is made by activities at NACE level (a level is determined proceeding from the country's shares in EU GVA countries) and higher and by main industrial groups (MIG). When applied, this method enables calculation of the index of industrial production within short periods of time. Statistics Lithuania comes up with Press release information on the index of industrial production and other variables on the 21st day (Eurostat's target date is the 45th day). The publication of production indices contains row data of industrial production indices with an adjustment for the calendar and seasonal factors.

5. Familiarization with the procedure of preparing and transfer of data to Eurostat following the example of products manufacture data based on PRODCOM list. In their work Lithuanian colleagues use a technical handbook provided by Eurostat. The document contains full description of requirements for the data transfer file (introduction, background information, structure, description of every column, examples). The procedure also provides for the use of relevant software: SAS 9.1, Excel i SQL Navigator 4.

6. The parties discussed examples of how European approaches to retrospective calculation of time series (Nomedas Bratckiovienė). To introduce NACE rev.2 in the statistical practice of Lithuania, Statistics Lithuania made re-calculation of time series by indicators. According to Eurostat requirements, time series in short-term statistics, specifically in terms of indices, had to be re-calculated as deeply as possible but not less than back to the basic year 2005. The first stage of re-calculation according to the new classification was double coding of business register units for 2005-2007, which allowed, with available microdata generated based on the main kind of economic activity (as stated above) for applying the micromethod to the specified years' data with further analysis of results obtained. Calculation covered three groups of coefficients (by a number of enterprises, a number of employees and turnover) and it was specified that coefficient matrices were not stable enough. Coefficients were calculated for different classifications (e.g. from a group (3 digits) to a class (4 digits) level) and vice versa). The 2008 data were collected in two classifications of rev.1 and rev.2.

Activities that followed included: testing methods of re-calculation of data time series (2 re-calculation models were applied: many activities into one and one into many), re-calculation of 2000-2004 time series, assessment of results (variance coefficient – to 2005-2008 data, absolute relative bias – 2000-2004) and preparation of the overall time series of data based on NACE rev.2. Retrospective calculations in industry by all indicators (those of the number of employees, turnover, orders) were performed at NACE rev.2 group level (3 digits). Data were calculated in the sole software by the sample methods division.

The 2005-2007 data series on products in case of complicated conversion (m : n) were re-coded by expertise (provided an opportunity for such estimation) or by the first code. During 2008, data on production were collected on 2007 and 2008 PRODCOM lists, which resulted in obtaining conversion coefficients and make an estimation and, wherever needed, revision of retrospective series received earlier. This approach to a two-stage re-calculation was applied with due regard to a relatively small nomenclature of products manufactured by the Lithuanian industry.

7. Obtaining the experience on coordination and interaction of Eurostat and Statistics Lithuania also proved useful.

3. Conclusions and Results

The study visit was organized at a high level. The planned activities facilitated the Ukrainian delegation's familiarization with issues scheduled for study by the Terms of Reference.

The knowledge and practical experience of the Lithuanian colleagues gained by the Ukrainian representatives will be used by the latter when developing a draft list of industrial products for the industry statistics (to be based on CPA 2008 and PRODCOM) and designing a survey on products manufacture based on PRODCOM, as well as in the course of re-calculation of time series in the industry statistics as a result of introduction of new classifications.



This project is funded by the European Union



Twinning Project

“Development of Ukrainian Statistical Methodologies in line with EU Standards”

Annex 1. Terms of Reference

Component 1.5: Classifications in production statistics

Activity 1.5.3 Study Tour on PRODCOM

Background information

Statistics Denmark in partnership with Statistics Finland, Statistics Lithuania, Central Statistical Bureau of Latvia, Statistical Office of Slovak Republic, INE Spain - National Statistical Institute of Spain and Statistics Sweden, implements in Ukraine "Development of New Statistical Methodologies and Indicators in Selected Areas of Statistics in Line with EU Statistical Standards" Twinning Project. The State Statistics Service of Ukraine (State Statistics of Ukraine) is the Beneficiary of this Project).

This mission is being implemented under Component 1.5: Classifications production statistics. The purpose of this component is to identify issues related to the introduction of European methods, based on the PRODCOM statistics of production and ways to address them and working out the methodological approaches to the retrospective restatement of statistics in industry.

This mission will contribute to achieving the above objectives and targets specified in the contract: drafting the list of products for industry production statistics, based on the CPA 2008 and PRODCOM methodology and recalculations of time series in production statistics.

The mission

The primary purpose of the mission is:

Introduction to the practice of PRODCOM in observations of production: principles of the national classification, order and timing of its review; surveyed statistical units, procedure development and review together, the questionnaire survey by PRODCOM (indicators tracked), presentation and publication of data on production, reports of quality approaches to meet national needs for information on products. Introduction of short-term statistics of industry.

Practical application of statistics in industry of Lithuania, European approaches to the calculation of retrospective time series.

Expected Results

Obtaining knowledge of methodological and organizational basis of the inspection, based on PRODCOM in European countries, particularly in the Republic of Lithuania, the methods and the calculation of retrospective data on indicators of industry statistics and study of Lithuania's experience of to organize and conduct short surveys in the statistics of industry.

Activities

Tentative schedule of the mission is:

29-31 May, Vilnius
Lithuanian Department of Statistics

The delegation of the State Statistics Service of Ukraine

L. Ovdenko - Director of the Department for Production Statistics,
I. Petrenko - Deputy Director of the Department for Production Statistics, Head of the Division for short-term industry statistics indicators,
N. Postolyuk - Head of the Division for Statistics of Mining Industry, Electricity and Water and Gas Supplies of the Department for Production Statistics .

Representatives of the Lithuanian Department of Statistics:

V. Kunigeliene - Head of Industry Statistics division,
N. Grebinskaja - Deputy Head Industry Statistics division,
Z. Gold - Chief Specialist, Industry Statistics division.

The visit

May 29, Monday

10.00 - 10.10 Welcome - A. Gibaite-Kudzhmiene, Deputy Director General, Department of Statistics Lithuania.

10.10 - 11.00 The current situation of industry statistics in Ukraine - the representatives of the State Statistics Service of Ukraine

11.00 - 11.15 Coffee break (coffee, tea)

11.15 - 12.00 Structure of the Department of Statistics.
Requirements for the indicators of quality of statistical data - general politics - V. Kunigeliene

12.00 - 13.30 Joint dinner

13.30 - 14.30 Overview of the main tasks and statistical reporting in the department of industry – N. Grebinskaja

14.30 -15.00 The classifiers used in industry statistics - Grebinskaja N., Z. Gold

15.00 -15.30 classifier PRODCOM - the main instrument for the examination of products. Retrospective conversion of products to PRODCOM list 2008 - Gold Z.

15.30 - 15.45 Coffee break (coffee, tea)

15.45 - 16.30 Methodological requirements of Eurostat and the national need for classifications of goods - Z. Gold

16.30 - 16.45 Questions, discussion

May 30, Tuesday

9.30 - 10.45 The statistical survey on the production of goods and services. The method, questionnaire, statistics, frequency - Z. Gold

10.45 - 11.00 Coffee break (coffee, tea)

11.00 - 12.00 Data collection, data preparation, quality control information. Aggregates. - V. Kunigeliene, N. Grebinskaja, Z. Gold

12.00 - 13.30 Lunch

13.30 - 14.30 The treatment of products from raw materials (outsourcing) - the main provisions, the general approach to accounting, the most frequent - Maksimenkiene J, V. Kunigeliene

13.30 - 15.30 publications, databases, work with users of information - Z. Gold

15.30 - 15.45 Coffee break (coffee, tea)

15.45 - 16.15 Preparation and submission of information to Eurostat - Z. Grigyanets

16.15 - 16.30 Annual Report to Eurostat survey on the quality of information for the production of goods PRODCOM - Z. Gold

16.15 - 16.45 Questions, discussion

May 31, Wednesday

9.30 - 10.00 Basic principles of short-term surveys. Meet national needs for information on the industry - V. Kunigeliene.

10.00-10.45 Short-term study in Lithuania - the questionnaire, the classification unit of the survey, data collection, data preparation, aggregates - N.Grebinskaja

10.45 - 11.00 Coffee break (coffee, tea)

11.00 - 12.00 Retrospective recounts of the time series in the industry during the transition to the new version of the classifier on the types of activities - basic principles-B. Kaminskiene

12.00 - 13.30 Lunch

13.30 - 14.00 Short-term study in Lithuania - the questionnaire, the classification unit of the survey, data collection, data preparation, aggregates - N.Grebinskaja

14.00 - 15.00 Methods of calculating the index of industry production and other indicators of short-term industry publications, data in the Eurostat database, work with users - N.Grebinskaja

15.00 - 15.15 Coffee break (coffee, tea)

15.15 - 16.00 Questions and discussions. Conclusion

Consultant and partner

The mission will be implemented jointly:

Violeta Kunigeliene (Statistical Service of the Republic of Lithuania)

Experts from the beneficiary country is:

Ovdenko LM - Director of the Department for Production Statistics;

Petrenko I. - Deputy Director of the Department for Production Statistics, Head of the Division for short-term industry statistics indicators;

Postolyuk N. - Head of the Division for Statistics of Mining Industry, Electricity and Water and Gas Supplies of the Department for Production Statistics

Time

The mission will be conducted within three days in the Republic of Lithuania.

Report

The summary report on the results of the mission should be submitted not later than two weeks after the mission is completed.

Annex 2. Persons Met

Statistics Lithuania

A.Gibaite-Kudzhmiene – First Deputy Director General

V.Kunigeliene – Head of the Industry Statistics Division

N.Grebinskaja – Deputy Head of the Industry Statistics Division

Z.Gold, J.Maksimenkene, Z.Griganets – experts of the same division

N.Bratchikoviene – chief specialist of the Methodology and Quality Division.