# TWINNING CONTRACT

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

# Ukraine

**MISSION REPORT**

**on**

**Conversion of Economic Activities in the Statistical Register of Enterprises**

**Component 1.3.2**

The Mission was performed by Mr Yuriy Ostapchuk, Ms Alla Varnidis, Mr Anton Tovchenko – the SSS of Ukraine
by Mr Anatoliy Kokurin

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# Contents

# 1. General comments

This Mission Report was drawn under the Twinning Project "Development of New Statistical methodologies and Indicators in Selected Areas of Statistics in line with EU Statistical Standards". This has been the second Mission focused on the Statistical Register of enterprises under Project Component 1.3. The Mission was aimed at outlining a strategic plan for further implementation of the Project in this statistical area.

The Mission also dealt with Component 5 "Monitoring Response Burden".

Priority goal of the study visit was familiarization with the practice of maintaining and using of the Danish business register.

The study visit got an insight into the following issues:
- main statistical divisions and interrelations between them in the Statistical Business Register;
- keeping the business register and its using for survey samples generation;
- use of administrative registers and administrative data for filling and updating of the business register indicators
- organization of works and conduct of procedures for conversion of economic activities in the Danish statistical business register;
- getting familiar with the new public web-portal for business activity coding in Denmark
- using on-line forms and establishing feedback with respondents under implementation of the respondent burden minimization program.

The consultants would like to express their thanks to all officials and individuals met for the kind support and valuable information which they received during the stay in Ukraine, and which highly facilitated the work of the consultant.

Conclusions and observations stated in this report are those of the consultant of the Consultant and do not necessarily correspond to the views of EU, SSSU or Statistics Denmark.

# 2. Assessment and results

The SSSU delegation was familiarized with the Danish statistical office's infrastructure. It should be noted that administrative registers provide 95% of the whole statistical information of the Statistics Denmark.

**Statistical Business Register of Denmark**

The Statistical Business Register of Denmark was on a general scale introduced to SSSU representatives. There have been demonstrated correlations between administrative and statistical register units. The Danish Statistical Business Register contains 636 thousand enterprises, of which 300 thousand are active, and 696 thousand local units. It should be noted that less than 5% enterprises have more than one economic activity. The statistical register has a high update level (about 64000 new enterprises annually). About 165 parent populations for the purpose of statistical surveys are generated from the statistical register during a year. The Statistical Business Register is updated on-line from the administrative register. The main software to keep the register is Oracle. Relations between register units and main tables were demonstrated. The Register is maintained with double historicism (there is a real activity

beginning date and a registration date) with an opportunity to obtain as of a date of interest slice. The delegation looked at organization process for generating parent populations. A statistical division for which a parent population is being generated has to specify a goal of a generated request (for sample survey, for electronic questionnaire or for updating a sample survey population). It usually takes three days to generate a request. There is also a feedback from the Register users. The Register receives information on changed electronic and/or actual address, changed economic activity (or economic activity errors), and on liquidation and start up of kind of activity units. It is very important that statistical divisions would provide information to the Statistical Register and would not maintain their own "shadow registers". The more changes the Registers get, the better the quality. The hosting institution also demonstrated the Danish statistical register model and the data collection process as a single process line.

### Cooperation with administrative registers

Attention was paid to the use of administrative registers in the Statistical Business Register of Denmark. A model of common identification numbers of the administrative and statistical registers was shown. The Danish experts shared information about the process of information delivery to administrative registers. An electronic fiscal register was established in Denmark in 2008. The Statistical Business register is updated on a monthly basis from the electronic fiscal register, i.e. one data resource is used for statistical divisions, which has enabled the new statistics production.

### Re-coding of economic activities, conversion matrices, web-portal for coding.

A process of economic activities conversion in the Statistical Business Register of Denmark was presented. All economic activities of business entities had been re-coded by the end of 2007. In 2008, back-casting of economic activity kinds of business entities included to the Statistical Register was made back to 2000. Conversion matrices and weight coefficients on turnover, number of employees and a number of enterprises were also estimated for 2007 and recalculated back to 2000. The probability model based on conversion matrices by the number of enterprises was used for back-casting of the Statistical Business Register. The delegation discussed the report on the conversion quality of the Statistical Business Register.

SSSU representatives were familiarized with the new public web-portal for coding companies' activity in Denmark. The Danish experts demonstrated the basic functions of this web-portal and the quality of enterprises' self-coding through the web-portal (8 of 10 enterprises successfully manage their self-coding).

### Monitoring response burden

Establishing feedback with respondents during implementation of the respondent burden minimization program was introduced under Component 5 "Monitoring Response Burden". An on-line questionnaire to find out the respondent's time spent on filling out the statistical form was discussed. The delegation was also presented figures on a number of respondents who filled out the questionnaire and provided their comments. Most responses and comments come from the questionnaire to monthly and annual forms. There were 47333 responses received over the year, 63% of whom admitted that it took them almost no effort to fill out the form. The Ukrainian delegation was shown an algorithm for calculating the satisfaction index, which estimates the complexity of the statistical form filling out. Thus, it was claimed that statistical forms were most easily filled out for job study statistics whereas library survey statistics filling out process turned out to be most difficult. However, it should

be noted that respondents found it the hardest and most lengthy process to log in and get access to the administrative web-portal virk.dk that contains statistical forms and questionnaires.

The administrative web-portal virk.dk as a means to contact the respondent was discussed separately. Electronic addresses are the main tools of the portal. This is the way the questionnaires and web-forms e-mailing system is organized. The delegation had a glimpse of web-forms and on-line clarifications as to forms filling out. Service information that is sent to respondents after the web-form filling out was demonstrated.

One of the main activities of the monitoring response burden is the administrative burden calculation. A model of administrative value estimation was demonstrated. Such indicators as form periodicity, number of respondents who filled out the forms and average wages and salaries were taken as a basis for the model. Multiplication of all these indicators will give us another one that will show the value of administrative burden upon respondents. On the whole the Denmark Statistics succeeded to reduce administrative value by 50% from 207 in 1996 to 103 million Danish krones in 2010.

*Conclusions and recommendations*

Some specific issues were raised during the mission, which are referred to the next mission:
1. What to do with enterprises which do not belong to the general list?
2. How to re-code new enterprises?
3. What to do with enterprises whose new and old codes do not correspond to the transition table?
4. What shall be done when general values for 2005 KVED Ukraine do not correspond to those of 2010 KVED in the course of back-casting?

Some recommendations were also provided:

Prior to drafting conversion tables it is important to make sure that all units have two economic activity codes, those for 2005 KVED and 2010 KVED.

When it comes to identification for statistics which method should be selected for back-casting, economic statistics would rather use turnover indicator whereas for data pertaining to the number of employees, the number of employees indicator should be used.

The Ukrainian delegation received a recommendation to follow the Action plan in terms of back-casting.

**Annex 1. Terms of reference**

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**Terms of Reference**
**For Short-Term Mission to Statistics Denmark**
**# UA10/ENP-PCA/FI/26**

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Study Tour on Statistical Business Register and Burden on Respondents

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**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 action is implemented under Component 1.3. "Statistical Business Register".

The purpose of this Component is to introduce Classification of economic activities based on NACE rev.2 in statistical business register.

This action will contribute to achieving the abovementioned objective and reference indicators specified in the contract.

The prior purpose of the mission is to get familiarized with the practice of maintenance and usage of statistical business register of Denmark. Additionally, in the course of the study tour it is planned to get familiarized with the following issues:

- Maintaining the statistical business register and using it to generate the survey samplings;
- Designing the statistical units and interlinks between them in statistical business register;
- Using the information of statistical business register to determine the reporting burden on respondents and to optimize/minimize such burden;
- Making back-casting calculations of indicators by economic activities due to introduction of NACE rev.2: procedure, organizational issues, methodology.

**Expected results**

On the results of the missions it is envisaged to produce methodological and organization document related to back-casting calculations, to commence activity on how to use statistical business register to determine the burden on respondents.

**Actions**

The tentative schedule of the mission is the following:

1-t day        10:00 - 17:00

14 May         Overall introduction of statistical business register of Denmark. Register
Monday         maintenance and its usage to generate the survey samplings. Administrative
               information and its usage to maintain statistical business register of Denmark.
               Statistical units, designing links between the register units.

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| 2-d day<br>15 May<br>Tuesday | 10:00 - 17:00 | Usage of information of statistical business register of Denmark to determine the burden on respondents. |

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| 3-d day<br>16 May<br>Wednesday | 10:00 - 17:00 | Discussing the procedure, organization and methodology of back-casting calculations in Denmark. |

**Consultant and Partner**

The Mission will be conducted jointly with:
Mr. Peter Ottosen, Statistics Denmark
Mr. Vibeke Skov Moller, Statistics Denmark

The partner from the Country-Beneficiary will be:

Alla Varnidis – Deputy Director of Statistical Methodology Department - Head of Statistical Classifications Unit – Head of Component
Anton Tovchenko – Head of Unit for Mathematical Methods of Statistical Data Processing and Analysis
Yurij Ostapchuk – Director of Statistical Methodology Department
Anatoliy Kokorin – Head of Main Regional Statistics Administration

**Timing**

The mission shall be conducted during 3 days from 14 till 16 May 2012 in Statistics Denmark (Copenhagen).

**Report**

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