TWINNING CONTRACT

Development of new statistical methodologies and indicators in selected areas of statistics in line with EU statistical standards

Ukraine



MISSION REPORT

on

Dissemination Database

Component no 1.6.3

Study visit on electronic dissemination

Mission carried out by

Elena Puzanova, DSSU;

Semen Matkovskyj, DSSU/Main Statistics Division in L'viv Region; Tetyana Yavdoschina, Main Statistics Division in L'viv Region; Roman Tsybukh, Main Statistics Division in L'viv Region

28. feb. to 03. mar. 2012

Version: Final





Author's name, address, e-mail

Elena Puzanova DSSU 3, Shota Rustavely str. Kyiv-23, 01601 **Úkraine** Tel: (097)4835636

Email: e.puzanova @ukrstat.gov.ua

Semen Matkovskyj Main Statistics Division in L'viv Region 4, prospect V. Chornovola, Lviv, 79058, Ukraine Tel: (067)6750114 Email: som @lv.ukrstat.gov.ua

Tetyana Yavdoschina Main Statistics Division in L'viv Region 4, prospect V. Chornovola, Lviv, 79058, Ukraine

Tel: (096)4722905

Email: ytp@ukr.net, tpy@lv.ukrstat.gov.ua

Table of contents

1. General comments	4
2. Assessment and results	4
3. Conclusions and recommendations	
Annex 1. Terms of Reference	
Annex 2. Persons met	. 11

List of Abbreviations

ToR Terms of Reference

SSSU State Statistics Service of Ukraine

1. General comments

This mission report was prepared within the Twinning Project "Development of new statistical methodologies and indicators in selected areas of statistics in line with EU statistical standards". It was the first mission to be devoted to "Dissemination Databases" within Component 1.6.3 of the project.

The purpose of this visit was to study the experience Statistics Denmark as one of the leading statistical services in Europe in the use of the PC-Axis software family when creating databases, studying to work with new software tools for dissemination and visualization of statistical data for their further introduction in the organs of state statistics of Ukraine and improvement of statistical data processing and dissemination system.

The members of the mission would like to acknowledge and thank all officials and individuals met for the kind support and valuable information which they received during the stay in Denmark, and which highly facilitated the members work.

The views and observations stated in this report are those of the mission's members and do not necessarily correspond to the views of EU, SSSU or Statistics Denmark.

2. Assessment and results

The following issues have been addressed during the meetings, according to the action plan mentioned in the ToR (see Annex 1).

About Statistics Denmark

Charlotte Juul Hansen (Senior Adviser of International Consulting) in her presentation "Introduction to Statistics Denmark" focused on the history of Statistics Denmark, its modern organizational structure, sources of finance, international consulting, framed the basic principles of data collection and statistical information system as well as the statistics dissemination process.

Auxiliary materials: scheme of presentation, presentation.

Organizational issues, guidelines etc. concerning Metadata administration

Ms. Annegrette Wulf (Head of Division of Dissemination, Databank & Web) addressed the issue of "Metadata and Data Integration". She illustrated the history of the development of statistics dissemination process from the first publications to the introduction of modern databank technologies with the usage of the PX software products. There were outlined basic dissemination principles and the means of information access first of all with taking into account criteria important for the user. StatBank Denmark and the scheme of its integration with metadata sources as well as the use of metadata in the StatBank for presentation, description and information access have been introduced.

Auxiliary materials: scheme of presentation, presentation.

Practical examples: Metadata and data in the SQL-Datamodel, SumTools and SumTimes

Jacob Solander (Head of Section of Dissemination, Databank & Web) made real-time demonstrations of the use of the Denmark SoftWare - SumTools and SumTimes for updating metadata and data in Statbank. By using practical examples the principles of metadata selection for the description of tables by means of SumTimes were shown. The process of data connection and downloading of all the necessary information into the finished table template by means of SumTools was demonstrated.

PX-Publ in practice

Lars Knudsen (Chief Adviser, Communication Centre) demonstrated publications created by PX-Publ and instructed on the developed templates (models) for these publications. The process of publication creation by the use of Excel macros (Excel PX-Publ)

for the formatting of tables and graphs, Excel macro, which provides connection to the StatBank data through the main PC-Axis module and also Word (Word PX-Publ) macros which, in particular, provide data updating and publication conversion into pdf format were considered. The technology of development, assessing, harmonization and dissemination of publication was demonstrated.

PX-Publ from a technical point of view

Karsten Bjergkvist (Head of IT, PX-Publ developer) concentrated in more detail on the use of built-in functions that work through macros for automatic setting of tables format, writing style, graphic representation and information recovery. He also explained how to apply graphic data templates, the saving process of electronic publications and their publication on the site. The emphasis was put on structural pattern of publications and their connection with the Statbank database. He made clear what is needed for the implementation of PX-Publ from a technical point of view, presented the list of required program tools and informed by whom else PX-Publ is used.

Strategic issues (LTH)

Lars Thygesen (Director, Sales and Marketing) in the presentation "Strategy for data banks and archiving" dwelt on the model of statistics and society which rather successfully can integrate all information. The basis of this model form metadata and some of which are of very high quality. Schematically technological process of the formation of statistical registers was presented. These registers standardize information from different sources (in particular, administrative registers as a gold mine of statistics) by means of cleaning, checking for accuracy, standardization, focusing on the principle of one-time collection (if information is available it is not collected repeatedly but one use what is available), the use of these registers for the creation of Statbank Denmark, statistics dissemination. Also the attention was paid to data confidentiality policy.

Auxiliary materials: list and description of questions regarding provision of data confidentiality policy in Statistics Denmark, scheme of presentation, presentation.

Internal and External courses in relation to Dissemination Databases

Jacob Solander (Head of Section of Dissemination, Databank & Web) in the presentation "Internal and External Courses" reported on the organization of learning process on internal and external training courses, where the relevant information is available and the program of these courses at the Statistics Denmark site.

Auxiliary materials: scheme of presentation, presentation.

.Net and PX-products, testing products, list of issues

Lars Knudsen (Chief Adviser, Communication Centre) informed briefly about .Net, PX-products and testing products. Some questions concerning the introduction and use of .Net and PX-iGraph were discussed.

The use of Maps

Jens Hagedorn (Senior Head Clerk, IT-Developer, Xpress, Customer centre) and Troels Vestergaard (Head of Section, M.Sc Geography / Spatial Data, Statistics eXplorer, Customer centre) delivered presentation "Maps in Statistics Denmark" and recounted about the use of Xpress and Statistics eXplorer (full and simplified version) in Statistics Denmark. It was shown how these program tools work and with which kind of data, how one can use the results and provided some reference information considering obtaining a license to use them.

Auxiliary materials: presentation.

Future cooperation. Conclusions

Together with Lars Knudsen the training visit was summed up and recommendations for a wider use of the PC-Axis software family in the organs of state statistics of Ukraine and the creation of a common statistical information databank have been obtained. Also the

questions were discussed and formulated which are necessary to consider in the framework of the further accomplishment of Component 1.6 "Dissemination Database" within the Twinning project "Development of new statistical methodologies and indicators in selected areas of statistics in line with EU statistical standards". In particular, these are questions of introduction in the statistics of Ukraine of the program products PX-iGraph and Statistics eXplorer, creation in Ukraine the statistical data dissemination system following the principles of PX-Publ, organization of training of representatives of Ukraine's regions to share experience of the usage of PC-Axis.

3. Conclusions and recommendations

The program of the study visit was intense and quite informative.

In the framework of the visit the following questions were considered:

- getting acquainted with models that are employed for management of statistics dissemination by means of the PC-Axis family products;
- studying Statistics Denmark experience in the questions of quality, ethics and independence in the distribution of statistical data which are a key in the fundamental principles of official statistics;
- -the use in work of new PC-Axis family program products and statistics visualization tools and organization of work to present data by means of interactive maps;
- studying of the experience of work with the metadata database (standards micro and macro- models, integration with the PC-Axis products) and a data warehouse and building up the DotNet platform and maintenance of its connection with statistical databases by means of the PC-Axis software family and statistics visualization tools.

The following experiences have been gained:

- modern technical and program tools which are used by Statistics Denmark in the development and dissemination of statistical information;
- organization of efficient introduction of the PC-Axis software family products and other compatible with them interactive tools for user's work and also the role of metadata in simplification of data transmission;
- -technological process of the development and dissemination of statistical information in a web environment and also the creation of publications by using PX-Publ and presentation of interactive maps by means of Geo-tool: Xpress, Grid-Data, eXplorer;
- the existing metadata database of Denmark Statistics (structure and model, platform, administration, integration with a data warehouse and with PC-Axis products).

By the results of the visit the delegation of State Statistics Service of Ukraine obtained recommendations on the use of PC-axis software products in the organs of state statistics of Ukraine and on the creation of a common statistical information databank.

Furthermore, next questions needed to be considered in the framework of the further fulfillment of Component 1.6 "Dissemination Database" within the Twinning project "Development of new statistical methodologies and indicators in selected areas of statistics in line with EU statistical standards" have been framed:

- what are necessary for introduction in the Ukraine's statistics the software products PX-iGraph and Statistics eXplorer;
- about consultations concerning developing in Ukraine the system of dissemination of statistical data following the ideas of PX-Publ;
- also a question concerning the experience of introduction in the statistics of other countries the standards of production and dissemination of independent, reliable, high-quality statistical information through the use of PX-Web and data visualization was raised;
- as well as how in the framework of further accomplishment of Component 1.6 "Dissemination Database" of the Twinning project to search out financial aid opportunities for: 1) staff members training of Ukraine's regions aimed at introduction in Ukraine the system of

dissemination of statistical data following the principles and ideas of PX-Publ; 2) participation of Ukraine's representatives at the meeting of the PX-Axis software family users in Stockholm.

Thus, all these questions are obvious topics for the coming visit of Danish expert in Ukraine.

Actions needed for preparing the next mission.

Action	Deadline	Responsible person
Information on license and technological	June 2012	from Statistics Denmark
requirements for the implementation to		
Ukraine's statistics the software products PX-		
iGraph and Statistics eXplorer		
Providing the possibility for the presentation of	June 2012	from Statistics Denmark
PX-iGraph menu in Ukrainian language		
Proposals with regard to the creation in Ukraine	June 2012	from Statistics Denmark
the system of dissemination of statistical data		
following the principles of PX-Publ		
On the experience of implementation in the	June 2012	from Statistics Denmark
statistics of other countries the standards of		
production and distribution of independent,		
reliable, high-quality statistical information by		
means of the PX-Web and data visualization,		
taking CountryStat as an example		

Annex 1. Terms of Reference

Mission objective

The objective of this visit is to study the experience of one of the leading statistical services of Europe in the usage of the PC-Axis family products when creating databases, studying to work with new software tools for dissemination and visualization of statistical data for their further introduction in the organs of state statistics of Ukraine and the improvement of statistical data processing and dissemination system.

During the visit the delegation should be guided by the Constitution of Ukraine, the Law of Ukraine "On state statistics" and this Terms of Reference.

During working meetings to stress that Ukraine pays special attention to improving the state statistical activities, optimization of the system of statistical observations, usage of gained experience for the improvement of statistical data processing and dissemination system in the organs of state statistics of Ukraine.

Expected results

In the framework of the visit the following questions will be addressed:

- getting acquainted with models that are employed for management of statistics dissemination by means of the PC-Axis family products;
- studying Statistics Denmark experience in the questions of quality, ethics and independence in the distribution of statistical data which are a key in the fundamental principles of official statistics;
- -the use in work of new PC-Axis family program products and statistics visualization tools and organization of work to present data by means of interactive maps;
- studying of the experience of work with the metadata database (standards micro and macro- models, integration with the PC-Axis products) and a data warehouse and building up the DotNet platform and maintenance of its connection with statistical databases by means of PC-Axis software family and statistics visualization tools.

Taking into account the high rate of transformation of tools for statistics dissemination and visualization, it is planned to study:

- modern technical and program tools which are used by Statistics Denmark in the development and dissemination of statistical information;
- organization of efficient introduction of PC-Axis software family products and other compatible with them interactive tools for user's work and also the role of metadata in simplification of data transmission:
- -technological process of the development and dissemination of statistical information in a web environment and also the creation of publications by using PX-Publ and presentation of interactive maps by means of Geo-tool: Xpress, Grid-Data, eXplorer;
- the existing metadata database of Statistics Denmark (structure and model, platform, administration, integration with a data warehouse and with PC-Axis products).

Activities

Type of activity	Date/Time	Working days
Preparation to the activity	Till 28 February 2012, Kyiv, Copenhagen	3
Introduction (including the travel)	28 February – 3 March 2012, Copenhagen	5
Reporting	Till 16 March 2012, Kyiv, Copenhagen	4
Total		12

The tentative schedule of the mission shall be the following:

Study visit Agenda

Day 1: Wednesday 29. February 2012

10:00	AboutStatistics Denmark (CJH)
12:00	Lunch
13:00	Organizational issues, guidelines etc. concerning Metadata administration (AWU) Practical examples: Metadata and data in the SQL-Datamodel, SumTools and SumTimes (JCS)
16:00	End of day 1

Day 2 :Thursday 1. March 2012

9:30	PX-Publ in practice (DLA)
	PX-Publ from a technical point of view (KBK)
12:00	Business Lunch
13:00	Strategic issues (LTH) Internal and External courses in relation to Dissemination
	Databases (JCS)
16:00	End of day 2

Day 3: Friday 2. March 2012

9:30	.Net and PX-products, testing products, list of issues (LAK)
	The use of Maps
12:00	Lunch
13:00	Future cooperation
	Summing up
15:00	End of day 3

Tasks to be accomplished by Statistics Denmark to facilitating the mission

- Provide necessary auxiliary materials in the form of presentations and schemes of presentations.

Consultant and Partner

The mission shall be conducted jointly with:

- consultants from Statistics Denmark;
- partners the members of the mission from from Statistics Ukraine (the country-beneficiary):
 - O.O. Puzanova Director of IT Department, SSSU;
 - S. O. Matkovsky Advisor to the Head of SSSU/ Main Statistics Division in L'viv Region;
 - T. P. Yavdoschina Head of IT Technologies and Databases Unit, Main Statistics Division in L'viv region;
 - R. D. Tsybukh Specialist of IT Division, Main Statistics Division in L'viv region, Interpreter.

Timing

The mission will be conducted from 28 February till 3 March 2012 (including traveling days).

Report

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

11 of 11

Annex 2. Persons met

Statistics Denmark:

Lars Knudsen - Chief Adviser, Communication Centre
Charlotte Juul Hansen - Senior Adviser of International Consulting
Annegrette Wulf - Head of Division of Dissemination, Databank & Web
Jacob Solander - Head of Section of Dissemination, Databank & Web
Karsten Bjergkvist - Head of IT, PX-Publ developer
Lars Thygesen - Director, Sales and Marketing
Jens Hagedorn - Senior Head Clerk, IT-Developer, Xpress, Customer centre
Troels Vestergaard - Head of Section, M.Sc Geography / Spatial Data, Statistics
eXplorer, Customer centre

RTA Team:

Charlotte Juul Hansen - Senior Adviser of International Consulting