TWINNING CONTRACT

Support to Statistics

Kosovo



MISSION REPORT

on

Methodology Training in Business Statistics

Component No. 3.7.1

Mission carried out by
Peter Tibert Stoltze and Henrik Bülow-Hansen,
Statistics Denmark
16-20. February 2015

Henrik Bülow-Hansen Statistics Denmark Sejrøgade 11 DK-2100 Copenhagen Ø Denmark

Tel: +45 3917 3753 Email: hbh@dst.dk

Peter Tibert Stoltze Statistics Denmark Sejrøgade 11 DK-2100 Copenhagen Ø Denmark

Tel: +45 3917 3827 Email: psl@dst.dk

Table of contents

1. General comments	4
2. Assessment and results	
3. Conclusions and recommendations	
Annex 1. Terms of Reference	6
Annex 2. Persons met at KAS	

List of Abbreviations

DST	Statistics Denmark
KAS	Kosovo Agency for Statistics
NACE	Statistical Classification of Economic Activities
NSI	National Statistical Institute
SBR	Statistical Business Register
SBS	Structural Business Statistics
STS	Short Term Statistics
ToR	Terms of Reference

1. General comments

This mission report was prepared within the Twinning Project "Support to Statistics". It was the first mission to be devoted to Methodology Training in Business Statistics within Component 3 of the project. The mission was aimed at conducting a workshop on methodology issues and defining a strategic plan forming the base of the further implementation of the project in this area.

The concrete objectives of the mission were:

- An assessment of the current status of methodology work in Kosovo in order to identify topics for later cooperation
- To develop an implementation plan for further interventions in order to enhance methodological work in KAS.

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

The views and observations stated in this report are those of the consultants and do not necessarily correspond to the views of EU, KAS or Statistics Denmark.

2. Assessment and results

The mission comprised of four different activities:

- 1. February 16. included presentation and planning of the mission activities
- 2. February 17. (Kosovo Independence day) was used for planning a workshop
- 3. February 18. the workshop on methodology issues was conducted
- 4. February 19. meetings were held with primary methodological collaborators

<u>Re 1:</u>

A number of problems were discussed which could be addressed in the forthcoming workshop. Two main topics should be included: Survey sampling and statistical data editing and imputation. An underlying challenge is that choice of statistical software differs between KAS and DST. KAS is mainly using SPSS and Excel, while DST is mainly uses SAS. (Excel is also used at DST but not for survey sampling or statistical data editing in the production of statistics.) Therefore it was decided, that the workshop could include some demonstration of the statistical software R, which is free software¹ very much suitable for the abovementioned statistical operations. An example of the method used for allocation of the sample in SBS using a STSI (stratified simple random sampling) design was presented by KAS.

<u>Re 3:</u>

The workshop was conducted following these lines and had two sessions

- Survey sampling and estimation
- Statistical data editing and imputation including patterns of missingness

In the session on survey sampling, different aspects were demonstrated using R and Excel. All files prepared for and used in the workshop have been made available for KAS. It was not

¹ R is available at http://www.r-project.org.

possible for the workshop to get real data to demonstrate different methods in editing and imputation.

Re 4:

Meetings were held with the Methodology Division and with the Business Statistics Division.

Two persons work in the Methodology Division. Apart from methodology, they have tasks within dissemination and metadata. As regards statistical methodology, they work exclusively with Social Statistics. It was originally the intention that the division should serve the whole KAS. However, due to the limited resources it has only been possible to handle statistical methodology in Social Statistics. Sampling and estimation in Business Statistics are handled by staff from the SBR, which to a certain extent makes sense since the sampling frames for both SBS and STS are based on the SBR. However, a more rational solution might be that the sampling experts in the Methodology Division were involved in the sampling and estimation in Business Statistics also.

The conclusion after the two meetings was a request for the following topics to be included in a future methodology mission:

- Weighting for non-response
- Calculation of sampling errors (to be reported to Eurostat)
- Use of R in relation to sampling and estimation

As for the timing, the samples for both SBS and STS are prepared during the spring (April 2015). It is deemed not feasible to set up a mission to support this, at least as regards staff from DST.

The estimation stage (the process of "grossing up") for both SBS and STS will start in September or early October 2015. A mission primarily targeted to support this could be planned. Other methodological fields (e.g. editing and imputation or seasonal adjustment) or an introduction to the statistical software R, could be included in the mission as well.

3. Conclusions and recommendations

The methodological work in KAS might be enhanced by gathering the methodology resources in the Methodology Division, which in turn should serve all divisions in KAS in matters related to statistical methodology. At first the work on survey sampling and estimation should be concentrated here in order to increase the capability in this area. At a later stage also editing and imputation as well as seasonal adjustment should be dealt with. The Methodology Division should be responsible for methodology work in KAS and serve as consultants for the divisions producing statistics.

The free software R should be investigated in relation to the statistical operations covered during the mission. A lot of so-called "packages" (additional functionality) targeted at the tasks performed for producing official statistics are available for free².

² A non-exhaustive list of packages relevant for official statistics is available at http://cran.r-project.org/web/views/OfficialStatistics.html.

A follow-up methodology mission as outlined above should be conducted during autumn 2015.

Annex 1. Terms of Reference

Component 3: Business Statistics

Activity 3.7.1: Methodology Training in Business Statistics

Scheduling:

ToR –ready date: 2 February 2015 Start / end of activity: 16-20 February 2015 Reporting time: 27 February 2015

Mandatory result of the component:

Mandatory Result	Intervention logic	Benchmarks	Sources of information	Assumptions
Mandatory Result 3.4	Improved understanding of methodological issues	Staff from Business Statistics trained in various methodological issues relevant to their daily jobs	Quarterly reports from the Twinning Project Mission reports KAS website	 Senior management committed to training activities Sufficient absorption capacity Low turn-over of staff involved in implementation Staff works on project related tasks in between missions A detailed Terms of Reference is developed in a timely manner detailing tasks (input), expected output, participants of the activity and agenda

Subject / purpose of activity: 3.7.1 activity

Assesment of the organization and state of the methodology work at KAS and specification of training needs within this field. This first mission will also start improving methodology knowledge and use within Business Statistics. Items to be covered could be: Sampling, imputation, validation, and other issues with relevance for KAS.

Expected output of activity 3.7.1:

Mission report – describing the overall state of play regarding Methodology work within Business Statistics at KAS. The mission report should also include road map and implementation plan for further interventions designed to improve methodology work. Suggestions for Terms of reference for other activities in Component 3.

KAS resources:

Mr. Ismajl Sahiti, Head of Division, ismail.sahiti@rks-gov.net

Mr. Bekim Canolli, Head of Methodology Division and Quality Manager; bekim.canolli@rks-gov.net

Ms. Servete Muriqi, Senior Officer in Methodology, servete.muriqi@rks-gov.net

Mr. Hysni Elshani, Head of sector, hysni.elshani@rks-gov.net

Ms. Valdete Navakazi, High officer for STS, valdete.navakazi@rks-gov.net

Ms. Luljeta Krasniqi, High officer for SBS, luljeta.krasniqi@rks-gov.net

Mr. Muhamet Kastrati, Database Manager of SBR, muhamet.kastrati@rks-gov.net

Mr. Bekim Bojku, High officer for energy statistics, bekim.bojku@rks-gov.net

Ms. Nazmije Belegu, High officer for transport statistics, <u>naskal@hotmail.com</u>

Ms. Sulltane Gashi, Senior officer for tourism statistics, sulltanegashi@hotmail.com

Ms. Violeta Syla, New staff, violeta.syla@rks-gov.net

Ms. Saranda Berisha, New staff, saranda.h.berisha@rks-gov.net

KAS Twinning team:

Project Leader Mr. Ilir T. Berisha, Director of Economic Statistics and National Accounts, Ilir.T.Berisha@rks-gov.net

RTA Counterpart Ms. Teuta Zyberi, International Relations Officer, teuta.zyberi@rks-gov.net

Member state resources:

Mr. Peter Tibert Stoltze, Head of Methodology, Statistics Denmark, <u>psl@dst.dk</u> Mr. Henrik Bülow-Hansen, Expert Methodology, Statistics Denmark, <u>hbh@dst.dk</u>

Twinning ressources:

Mr. Per Knudsen, RTA, pkn@dst.dk

Ms. Nora Zogaj, RTA Assistent, nzogaj@yahoo.com

Description of the background for the activity

In the first mission on overall assessment of Business Statistics in January 2014 (Ottosen and Netterstrøm) the consultants found that KAS has a relatively good foundation for business statistics.

Related to methodology work at KAS they found that it would be necessary to evaluate the current data collection methodology and questionnaire with a view to EU-regulations.

Furthermore, they say, it is important to develop sample updates, additional validation, data processing (indices), analysis and publication where Twinning experts should provide practical support to KAS. Especially methodology concerning non-response, the shift from NACE rev.1 to rev. 2 and the productions of indices is in demand.

It will be the recommendation that adjustments in the current methodology and collection will take into account the available resources and prioritize changes that compromise long term development and coherence.

Within the Twinning Project special focus is on development of SBS as these statistics are very important for the further development of National Accounts. The experts working with SBS at KAS

found that administrative data should be used in the future to check the consistency of the data collected and to complement the surveyed enterprises data.

It is recommended that an IT tool for data editing should be developed and should include validation and checking rules.

The whole process of data collection and processing has to be revised in order to reduce the time needed to produce SBS data. The development of SBS should focus on exhaustiveness and statistical methodology as well as mapping gaps between the current situation and EU-legislation in order to produce a long term development plan that will bring KAS to full compliance with EU-regulations.

Activities to be undertaken in preparation for the mission:

- Adapted Global Assessment report (AGA)
- Program of official statistics 2013-2017
- Strategic Development Plan 2009-2013
- Annual Plan 2015
- Report. 3.1.1 Overall Assessment of Business Statistics and Prioritization of Actions (Ottosen & Netterstrøm)
- All previous mission reports from component 3 of the Twinning Project can be found at www.dst.dk/kosovo

The expected activities are:

- Overall assessment of methodology work within Business Statistics at KAS
- Consultations with management at National Accounts and Business Statistics at KAS
- First training on selected items of methodology
- Development of detailed planed for actions on methodology work by the twinning program for the rest of the two years project implementation

Expected output:

- Mission report according to template
- Detailed plan for further activities to be completed on Methodology in component 3 by the Twinning Project program

Annex 2. Persons met at KAS

Methodology Division:

Mr. Bekim Canolli, Head of Methodology Division and Quality Manager

Ms. Servete Muriqi, Senior Officer in Methodology

Business Statistics:

Mr. Hysni Elshani, Head of sector

Ms. Valdete Navakazi, High officer for STS

Ms. Luljeta Krasniqi, High officer for SBS

Mr. Muhamet Kastrati, Database Manager of SBR

KAS Twinning team:

Project Leader Mr. Ilir T. Berisha, Director of Economic Statistics and National Accounts,

Mr. Ismajl Sahiti, Head of Division

RTA Team:

Per Knudsen, RTA Nora Zogaj, RTA Assistant Interpreter