TWINNING CONTRACT

Support to Statistics

Kosovo



MISSION REPORT

on

Industrial Production Index in Kosovo III Activity no 3.3.2c & 3.4.3

Mission carried out by Søren Kristensen and Ingeborg Vind, Statistics Denmark

12 - 16 January 2015

IPA 2012

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List of Abbreviations

KAS	Kosovo Agency for Statistics
KAU	Kind of activity unit
SBS	Structural Business Statistics
STS	Short Term Statistics
ToR	Terms of Reference
VAT	Value-added tax

1. General comments

This mission report was prepared within the Twinning Project "Support to Statistics". It was the third mission to be devoted to STS and Industrial Production Index within Component Business Statistics of the project.

The concrete objectives of the mission were:

- To assess the progress made on the actions listed in the second mission report and make recommendations for how to proceed with the industrial production index
- To introduce relevant staff to principles of sample design and estimation
- To update the development plan for the industrial production index

Originally, assistance on the transition to NACE rev. 2 for the industrial production index was an important part of the objective for the mission. As KAS had already published according to NACE rev. 2, further consultancy on this topic was not needed.

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 Kosovo, and which highly facilitated the work of the consultants.

This 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

On the first day of the mission, KAS recounted the progress of the work with the industrial production index since the previous mission. Data for 1^{st} quarter $2012 - 3^{rd}$ quarter 2014 have been published. The publication is of the industrial turnover index as well as of an index of number of persons employed. The index of industrial production has not yet been published, due to uncertainties about the price indices. The published indices are for the sectors B, C, D and E of NACE rev. 2, no further detail has been published as confidentiality is a problem for many 2-digit NACE classes. The publications are available at the website of KAS - Link to 3^{rd} quarter 2014 publication.

On the second day, the uncertainties about how to use the price indices for calculating deflated turnover were discussed and resolved. Alignment of the price indices with the aggregated turnover from the STS survey showed some mismatch in terms of which NACE 2 digit classes were empty/missing. This was probably caused by different approaches to the conversion of activity codes to NACE rev. 2, the main issue being the classification of printing and publishing of newspapers. It is important that all statistics produced by KAS classify the same companies to the same NACE codes – codes which should be found in the Business Register. The experts explained shortly about the Danish practice of a 'user group' for the Business Register, where experts of key statistics discuss and decide the classification of difficult cases. The NACE rev. 2 manual provides guidelines for classification.

The production process of KAS for the index was mapped (see annex 3). Publication is by the end of the quarter (t+approx.. 85 days), which is reasonable for a quarterly statistics – but far from the STS regulation deadline of t+40 for monthly indices. The main part of the 85 days is taken up by the data collection, which is the responsibility of the regional offices.

KAS staff showed the experts the Excel-based production system for the index that has been developed since the last mission. It is used for validation (including comparison with VAT data), imputation and index calculation. It is highly recommended that this system is documented.

On the third day, the experts gave a presentation on the principles of sampling and estimation. This included discussions on the current sample used for the index. The main points of the presentation were that keeping track of the population is important and that a new sample design should preferably be a probability design so as to ensure better estimation procedures. The current sample should cover 80 pct. of turnover, but the participants in this mission were unsure about the specific design used when creating it.

A short meeting was held with Bekim Canolli from the Methodology section to discuss the content of the coming mission on methodology. It was agreed that the topics should be data validation, imputation and sampling/estimation.

On the fourth day, the development plan for the industrial production index was discussed. See annex 4.

The last day was used for debriefing and report writing.

3. Conclusions and recommendations

The progress made on the Industrial Production Index since the first mission is impressive. The index of industrial turnover has been published according to NACE rev. 2 and a production routine has been established. KAS has decided to start by publishing at sector level, but has not yet published the industrial production index because of uncertainties about how to use the price indices. The decision to publish initially at sector level seems sensible as it allows the staff to get experience with the data and the production cycle. A full publication of series at two digit level would have been more demanding and could have delayed the process.

The development plan below lists recommendations on how to proceed in improving the index and the production process.

Publication

First steps

- Continue the regular and timely publication of quarterly indices on industrial turnover and employment for B, C, D and E
- Include the index of production (deflated turnover) in the published series

Later steps

• Consider the possibilities for more detailed series, especially within C (manufacturing). The STS regulation requires series at 2 digit level as well as Main Industrial Groupings (MIGs).

Production cycle

First steps

- Document the production proces (step-by-step guide)
- Implement deflation (price indices) at 2-digit NACE level in the system, before turnover is aggregated to sectors

Later steps

- Consider introducing value-added based weights in creation the industrial *production* index, to reflect different contribution from different activities (and meet STS requirement)
- Consider possibilities for improving timeliness (shortening production time), as this will be necessary before a change to production of monthly statistics
- Introduce a statistical software (choice of software should be at KAS level)

Sampling and estimation

- Analyse population through VAT data
 - To check the current sample

- To inform the design of new sample (strata)
- Draw a new sample based on appropriate and documented design
 - Stratified, random sample (probability sampling)
 - All the large enterprises in 'take-all' stratum
 - A 'cut-off' to leave out the very small enterprises
 - Implement estimation procedure (apply weights) to sample data before calculation of indices

The Methodology mission in February will address sampling and estimation in more detail, as well as validation and imputation. This mission will be relevant not only for staff in the Methodology section, but also for staff in Business statistics.

Annex 1. Terms of Reference

Terms of Reference:

Component 3: Business Statistics Activity 3.3.2c/3.4.3: Implementation of NACE Rev.2 – Short-term Survey. Industrial Production Index in Kosovo III – Review of sample design

Scheduling:	
ToR –ready date:	19 December 2014
Start / end of activity:	12-16 January 2015
Reporting time:	23 January 2015

Mandatory result of the component:

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Mandatory Result	Intervention logic	Benchmarks	Sources of information	Assumptions
Mandatory Result 3.3 & 3.4	Preparing short- term statistic according to NACE Rev. 2 Implementation of NACE Rev.2 – Short-term survey	• A number of STS time series revised according to NACE Rev. 2 by 8 th project quarter	 Twinning Quarterly reports Mission reports 	 Sufficient absorption capacity Access to administrative and survey data Low turn-over of staff involved in implementation Staff works on project related tasks in between missions

Subject / purpose of activity 3.3.2c/3.4.3:

Further consultancy regarding the Industrial Production Index. Briefings on EU requirements for the survey on Industrial Production Index according to Council Regulation (EC) No 1158/2005 amending CR 1165/98 19 May 1998 concerning short-term statistics. Reveiw of methodology concerning survey on short term statistics and support to conversion of survey to NACE Rev.2 classification.

Expected output of activity 3.3.2c/3.4.3:

Mission report – describing the status of the work and the work done since last mission with the Industrial Production Index in Kosovo. The Mission report should also propose actions to be taken at KAS to improve the index. Further the mission report should describe the status of conversion of STS surveys to NACE Rev.2 classification

KAS resources:

Mr. Ismajl Sahiti, Head of Division, ismail.sahiti@rks-gov.net (Component Leader)

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

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KAS Twinning team:

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Member state resources:

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Twinning ressources: Mr Per Knudsen, RTA, <u>pkn@dst.dk</u> Ms Nora Zogaj, RTA Assistent, <u>nzogaj@yahoo.com</u>

Description of the background for the activity

The latest mission stated that KAS should focus first on the issues relating to publication of the first version of Industrial Production Index. Publications on Industry Statistics have been made since the latest mission (in Albanian) http://esk.rks-gov.net/publikimet/cat_view/113-industria

This mission will follow up on the recommendations given by the latest mission, and review progress made. The objective of the mission will also be to assist in the transition to NACE rev. 2 for the industrial production index. Furthermore consultations will focus on how to organise a regular production of a quarterly index. Finally, the mission will consult on sample design for the Industrial Production Index.

An updated development plan for the Industrial Production Index will be prepared in order for KAS to fulfil the requirements of the EU-legislation

Activities to be undertaken in preparation for the mission:

List of documents

All mission reports from Component 3 Business Statistics can be found at www.dst.dk/kosovo

The expected activities are:

- Review of progress made
- Assistance to transition to NACE rev.2
- Consulting on sample design
- Updated development plan

Expected output:

- Mission report according to template
- Detailed plan for KAS to follow to achieve the goal: A number of STS time series revised according to NACE Rev. 2 by 8th project quarter for the Industrial Production Index

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Annex 1	. Program,	- June	10-13 2014
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Day	Place	Time	Event
1	KAS	09:00	Introductory remarks to this part of component 3
		09:15	KAS: Work done since last mission on Industrial Production
			Index, including presentation of published data
		10:30	Coffee break
		11:00	Workshop on evaluation of published data and on data collected for periods not yet published
		12:00	Lunch break
		13:15	Workshop continued
		14:30	Coffee break
		15:00	Workshop on the production cycle in KAS for Industrial Production Index
		16:00	Preliminary conclusions. Program for day 2-4 to be agreed upon
2	KAS	09:00-	Regular production cycle continued/
		16:00	Transition to NACE rev. 2 – workshop
2		00.00	
3	KAS	09:00- 16:00	Sample design and estimation – presentation by experts Sample design and estimation – workshop on recommendations for implementation in Industrial Production Index in KAS
4	KAS	09:00- 16:00	Sample design and estimation – workshop continued/ Workshop on updated development plan
5		09:00 – 11:30	Debriefing with BC Project Leader, Experts, Component Leader and RTA
			Report writing

Annex 2. Persons met

KAS:

Mr. Ismajl Sahiti, Head of Division

Mr. Hysni Elshani, Head of sector

Ms. Valdete Navakazi, Senior Officer for STS

Mr. Bekim Bojku, Senior Officer for energy statistics.

<u>RTA Team:</u> Per Knudsen, RTA Nora Zogaj, RTA Assistant

Agim Aliu, Interpreter

Annex 3. Production process/timeline

Activity	Responsible	Time (t+?) Dates refer to reference period 4th quarter 2014
Notification to companies	Regional office	T+15 (Jan 15)
Deadline for reporting	Regional office	T+45 (Feb 15)
Deadline for reminders, date when most of data is collected	Regional office	T+55 (Feb 25)
Basic validation and data entry into database	Central office	T+60
Data validation/control, imputation for non-response - VAT not always available, may delay process	Central office	T+75
Production of index	Central office	T+80
Preparation of publication	Central office	
Publication	Central office	T+85 (Mar 27)