

TWINNING CONTRACT

Support to Statistics

Kosovo



MISSION REPORT

on

**Industrial Production Index in Kosovo I – Introduction of EU
Methodology and Requirements**

Component no 3.3.2a

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

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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 first mission to be devoted to STS and Industrial Production Index within Component Business Statistics of the project.

The concrete objectives of the mission were:

- Introduce the 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
- Assess the current stage of the statistical production process for the Industrial Production Index in KAS, with regard to national publication and to EU requirements
- Assist KAS in understanding, planning and carrying out in practice the necessary remaining steps of getting the Industrial Production Index ready for national publication
- Outline future steps to be taken to fully meet EU requirements for the Industrial Production Index

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 explained the current situation of the Industrial Production Index. Data has been collected for all quarters of 2012 and 2013. Data has also been validated and edited at micro-level by comparing STS survey data to administrative data (VAT from tax authorities) and to SBS survey data. The experts presented the EU requirements for the Industrial Production Index. The experts also outlined how the Industrial Production Index is produced in Denmark, step-by-step.

Most of the mission was organised as a hands-on workshop on

- further validation and quality control of STS data through comparison at aggregate level (2 digit NACE) with SBS and VAT data
- discussions on the treatment of non-response
- fixed price calculations, using the Producer Price Index
- index calculations

KAS staff were very active in discussions of data quality, error sources, differences in definitions between STS, SBS and VAT data, NACE classifications etc. The mission was focussed on the Industrial Production Index within the STS, but many of the issues and methods discussed are relevant also to other STS indices (construction, trade).

The main issues that need to be addressed before the Industrial Production Index will be ready for publication are

- Sample design (2012 vs. 2013) and population (coverage)
- Data quality/validation
- Imputations for non-response in sample

Regarding the sample design, there is a difference between the sample in 2012 and 2013. The 2012 sample is a cut-off sample of all enterprises above 50,000 € annual turnover (VAT-based). The 2013 sample is a stratified sample designed so that 80 pct. of turnover in each NACE class is covered. The exact stratification and design is not known as it was done by an IMF expert. There is a large overlap

between the two samples, especially for the large enterprises. Further analysis is required to ensure that results based on the two samples are comparable. Both samples need to be analysed in terms of their coverage in relation to the total population of manufacturing enterprises.

Regarding data quality and validation, much work has already been done to compare the STS survey data to VAT data and SBS survey data. Comparisons of aggregates between STS, SBS and VAT revealed some discrepancies that were caused by different NACE coding of the same units. For other discrepancies, the causes were not clear during the workshop but need to be further investigated. It is important to sort out the large discrepancies before publication.

Imputation for partial non-response has already been done based on VAT-data. However, imputations have not been carried out for the substantial part of the sample that has not responded at all. It is very important to make imputations for the full sample as there is no grossing up for the non-response. It is not possible to get more responses at this stage for 2012 and 2013, so imputations must be made based on VAT data and/or data from similar enterprises in the sample that have responded. The imputation method should be documented, consistent and rule-based.

To calculate the Industrial Production Index, two input are needed: Producer Price Index and shares in value-added based on SBS. The Producer Price Index is already available at 2 digit level of NACE 1. The shares in value-added are needed at 2 digit level of NACE 1 and will need to be provided by the SBS. The shares are needed as weights for creating aggregate indices.

The year 2012 will have to be chosen as the first base year for the Industrial Production Index as data prior to that is not available.

Once the above issues are addressed, it should be possible to publish the first version of the Industrial Production Index. KAS plans to publish the Industrial Production Index for the quarters of 2012 and 2013 by the end of April 2014. The first quarter of 2014 is planned for publication in June 2014.

In the longer run, some more fundamental issues have to be addressed to improve the quality and eventually meet the EU requirements.

- Optimise sample design and estimation
- Improve response rates/data collection
- Transition to NACE rev. 2
- Publish indices for the Main Industrial Groupings (MIGs)
- Use the Kind of Activity Unit (KAU) as the statistical unit (instead of enterprises)
- Introduce a regular quarterly production cycle of the Industrial Production Index
- Move from quarterly to monthly data collection and publication
- Meet the EU deadline of t+55 (eventually t+40)
- Introduce seasonal adjustment

As mentioned above, two different sample designs have been used in 2012 and 2013. It is important that a sample design is decided upon, that the method is vested in KAS and the procedures for updates of the sample are clear.

The response rate is low and it is important that measures are taken to improve this.

The first publication of the index will be according to NACE 1. The transition to NACE rev. 2 is planned for September 2014 for the Business Register. The transition of the Industrial Production Index will depend on the availability of the Producer Price Index and the SBS (for the value-added shares) according to NACE rev. 2 as well. The recoding and backcasting of the index will require some work.

It is an EU requirement that the Industrial Production Index is calculated for the MIGs. It is the recommendation of the experts that KAS calculate indices for the MIGs only after the transition to NACE rev. 2 has been completed.

The Business Register in KAS currently only has one type of unit, namely enterprises. The first version of the Industrial Production Index will be based on enterprises as the statistical unit, but it is an EU requirement that the index is based on kind of activity units (KAUs). Once the Business Register is developed to comprise local units, the KAU can be introduced as the statistical unit of the index.

Once the index for the quarters of 2012 and 2013 has been published, KAS should introduce a regular production cycle for publishing the index quarterly.

The EU requirement is for a monthly index, so once a regular production of the quarterly index has been achieved, it is necessary to move to a monthly frequency of data collection, validation, and publication.

The deadline for transmission of the monthly index is currently t+55 for small countries, which means that the index for January is due on March 25th. However, this is under revision and most likely a common deadline for all countries will be set at t+40.

EU requirements are currently for working day-adjusted series, but this is under revision and likely the future requirement will be to submit seasonally adjusted data as well. Seasonal adjustment requires time series of a certain length, so this is only possible after several years of monthly production of the index.

3. Conclusions and recommendations

KAS should focus on the issues relating to publication of the first version of Industrial Production Index in the period until the next mission. The remaining quality issues as described above should be addressed after the first version has been published.

The next mission is planned to take place in the second week of June for 3-4 days. The objective of the next mission will be to assess the quality of the first version of the Industrial Production Index focussing on the actions to be completed before the publication, as described below. The next mission will also assist in the compilation of the index for the first quarter of 2014 with a focus on how to organise a regular production of a quarterly index.

Action	Deadline	Responsible person
Resolve remaining data quality issues in 2012 and 2013 data	April 2014	KAS
Comparison of the 2012 and 2013 samples, regarding units and coverage	April 2014	KAS
Impute values for non-response units in the samples	April 2014	KAS
Provide value-added shares for NACE 2 digit groups from SBS	April 2014	KAS
Calculate a provisional version of the Industrial Production Index for 2012 and 2013	April 2014	KAS
Collect and validate data for 1 st quarter 2014	June 2014	KAS

Annex 1. Terms of Reference

EU Twinning Project KS12 IB ST 01 Support to Statistics

Terms of Reference:

Component 3: Business Statistics Activity 3.3.2a: Industrial Production Index in Kosovo I – Introduction of EU Methodology and Requirements

Scheduling:

ToR –ready date: 14 March 2014
Start / end of activity: 31 March – 4 April 2014
Reporting time: 11 April 2014

Mandatory result of the component:

Mandatory Result	Intervention logic	Benchmarks	Sources of information	Assumptions
Mandatory Result 3.3	Preparing short-term statistic according to NACE Rev. 2	<ul style="list-style-type: none"> A number of STS time series revised according to NACE Rev. 2 by 8th project quarter 	<ul style="list-style-type: none"> Twinning Quarterly reports Mission reports 	<ul style="list-style-type: none"> 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 3.3.2.a:

Introduction of 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

Expected output of activity 3.3.2.a:

Mission report – describing the status of the work with the Industrial Production Index in Kosovo. The Mission report should also propose action to be taken at KAS to improve the index. Suggestions for Terms of reference for other activities in Component 3.3.

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

Mr. MuhametKastrati, Manager of database, muhamet.kastrati@rks-gov.net

Ms. ValdeteNavakazi, Senior Officer for STS, valdete.navakazi@rks-gov.net

Ms. Luljeta Krasniqi, Senior Officer for SBS, luljeta.krasniqi@rks-gov.net
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Description of the background for the activity

The AGA report states that the European Short-term Business Statistics comprise monthly and quarterly economic indicators such as the index of industrial production, output prices, construction production, retail trade turnover etc. Short-term data on all service activities are also to be provided. The classification to be used as from 2009 is NACE Rev. 2.

KAS started with first quarterly pilot surveys only in 2010. The surveys cover variables for the sectors Industry and Construction according to NACE Rev.1. The data The sampling frame is the Statistical Business Register, which needs to be improved.

Further it is stated that as KAS started with STS statistics only in 2010, it is clear that there are remaining challenges which have to be solved before any output with sufficient quality can be produced. KAS will need further support to complete the pilot and to develop a full scale survey.

In the first Twinning mission on Business Statistics, “Overall Assessment of Business Statistics and Prioritization of Actions (3.1.1)” the two Danish experts Peter Ottosen and Søren Netterstrøm states: If possible, a priority should be given to provide support to KAS to make a publication on The Industrial Production and Construction indices.

It will be necessary to evaluate of the current data collection methodology and questionnaire with a view to EU-regulations.

Furthermore 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.

A long term development plan for the statistics will be prepared in order for KAS to fulfil the requirements of the EU-legislation. (See report for more background information)

Activities to be undertaken in preparation for the mission:

List of attached documents

- Adapted Global Assessment report (AGA)
- Program of official statistics 2013 -2017
- Strategic Development Plan 2009- 2013
- SBS methodology
- Mission Report on Overall Assessment of Business Statistics and Prioritization of Actions Component no 3.1.1

If any relevant background information is available KAS must supply this to the experts one week before the mission takes place

KAS must arrange necessary meetings with external stakeholders:

List of meetings with stakeholders external to KAS can be included in the program for mission

The expected activities are:

- Development of detailed plan for actions by the twinning program

Expected output:

- Mission report – according to template
- Detailed plan for further activities to be completed in component 3.3 by the twinning program

Program, - March/April 2014

Day	Place	Time	Event
1	KAS	09:00	Introductory remarks to this part of component 3
		09:15	KAS: Overview of the work with Industrial Production Index in Kosovo with focus on those parts of the system where improvements are asked for
		10:30	Coffee break
		11:00	MS: EU regulations on Industrial Production Index
		12:00	Lunch break
		13:15	MS: Industrial Production Index in Denmark – the organisation of the work and the data sources
		14:30	Coffee break
		15:00	Workshop: Comparison of data sources and methodologies in KAS and MS
		16:30	Preliminary conclusions. Program for day 2 and 3 to be agreed upon
2	KAS	09:00-16:00	Briefing and discussions to ensure that already collected data is adequate for EU requirements. Hands on training on compilation of Industrial Production Index” based on already available data.
3	KAS	09:00-16:00	Continued: Hands on training on compilation of Industrial Production Index” based on already available data.
4	KAS	09:00	Ad-hoc and hands-on meetings: Wrapping up
		10:30	Coffee break
		10:45	Workshop: Agreement on recommendations and time plan
		12:00	Lunch
		15:00	Debriefing with BC Project Leader: Recommendations, time plan and implied work program for BC
5	KAS	09:00	Report writing
		10:30	Coffee break
		10:00	Report writing
		12:00	Lunch break
		13:15	Debriefing: Experts, Component Leader and RTA

Annex 2. Persons met

KAS:

Mr. Ismajl Sahiti, Head of Division

Mr. Hysni Elshani, Head of sector

Ms. Valdete Navakazi, Senior Officer for STS

Ms. Luljeta Krasniqi, Senior Officer for SBS

Mr. Bekim Bojku, Senior Officer for energy statistics.

Mr. Muhamet Kastrati, Manager of database

RTA Team:

Per Knudsen, RTA

Nora Zogaj, RTA Assistant

Valdet Hadri, Interpreter