

TWINNING CONTRACT

Support to the Statistics

Kosovo



MISSION REPORT

on

3.2.1.4: Improving Quality of SBS

Component no 3 Business Statistics

Mission carried out by Virginia Balea, Statistics Denmark

26 to 30 January 2015

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IPA 2012

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List of Abbreviations

| | |
|------------|---|
| KAS | Kosovo Agency for Statistics |
| ToR | Terms of Reference |
| NACE rev.2 | Nomenclature statistique des activités économiques dans la Communauté européenne, revision 2 |
| SBS | Structural Business Survey |
| STS | Short term statistics |
| SUTs | Supply and Use Tables |

Executive Summary

The aim of the mission was to further analyse the data collected within Structural Business Statistics (SBS) questionnaire and to review this data in order to be used for Supply and Use Tables for coming versions of the National Accounts.

During the previous meeting a set of checks has been applied to main indicators. The main indicators (number of enterprises, turnover, employment) will be disseminated in the first quarter of 2015 for the reference year 2013 under both NACE classifications.

Through SBS questionnaire a set of variables have been collected for the National Accounts purposes, namely the breakdown of incomes and expenditures, stocks and intermediate consumption. A high rate of item non-response was registered for the breakdown of intermediate consumption and of stocks by products and services.

The aim of the mission was to analyse the consistency of the variables and to propose a set of imputation rules for the missing values.

As already mentioned in the previous reports the main obstacle for further development of the structural business statistics is the limited human resources. The analysis of the SBS data has been done by one person and the process is done manually.

1. General comments

This mission report was prepared within the Twinning Project „Support to Statistics“. The mission was to work on improving SBS data. Quality data from SBS are important for National Accounts Division who is planning to use Supply and Use Tables for coming versions of the National Accounts. This mission was a continuation of activity 3.2.1.2.

The concrete objective of the mission was:

- Further analyse the SBS data and apply some imputation methods for the missing values

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

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 expert has given recommendations on the work progress within the duration of the Twinning project taking into account their perception of the capability of absorption within KAS. Primarily due to a small number of staff, the expert recommends a strong coordination of development of the business statistics.

The tasks to be prioritized should be the ones giving the largest benefit. The questionnaire for the SBS was redesigned in order to meet the requirements of the SBS regulations and it was used for collecting the data for reference year 2013. The first priority processing of SBS data.

Based on the redesigned questionnaire, data collected should answer SBS regulation requirements and should provide the basis for the computation of National Accounts.

Reaching a response rate of 51% for the exhaustive part of the SBS sample and less than 50% for the sampled part requested the usage of additional sources of data to be used in order to impute unit and item non-responses. Administrative/fiscal data has been used in order to impute the missing data for main variables. Concerning the breakdown of variables by activity and by categories of goods and services some algorithms were proposed to be used. The algorithms are based on the existing information (collected variables). Due to large non-response rate it has to be mentioned that the quality of the result cannot be in all cases satisfactory. Due to the fact that no historical data or from other sources are available the usage of this information for the computation of Supply and Use Table has to be done under reservation.

Initially, due to large scale of missing data for the intermediate consumption variable and to the lack of personnel it was proposed that the algorithms will be applied for enterprises with 50 employees and more for those enterprises having as main activity in industry and construction and 20+ employees for trade and services. However, since the number of enterprises in trade and services having more than 20 employees was rather high (about 1500) it was suggested that the same threshold (50 employees and more) to be applied as well.

The rules of imputing data are included in the Annex 2.

The imputation algorithms and rules were part of the training provided by the expert for National Account, SBS and business register staff. Additional two junior staff attended the training session with the purpose to be subsequently involved in the calculation and imputation of the SBS data.

During the mission the main data to be produced to National Account and the way to calculate the variables and the list of variables have been delivered as well. Weighted (grossed up) figures have to be provided by the SBS team while the National Accounts staff will aggregate the data according to the formulas received. The tables to be produced are covered by the Annex 3.

3. Conclusions and recommendations

In general, the consultant finds that KAS has a relatively good foundation for business statistics in terms of good administrative registers covering the business community and good relationship and cooperation with the relevant authorities.

The main issues regarding statistics are timeliness, quality and exhaustiveness of the statistics.

Administrative data should be used in the future to verify the consistency of the data collected and to complement the surveyed enterprises data.

It is recommended that an IT tool for data imputation should be developed.

The whole process of data collection and processing has to be revised in order to reduce the time needed to produce SBS data.

Keeping similar variables from one year to another in the questionnaire model (employment, expenditures, income, and stocks) is a key element for having consistent yearly data. KAS was advised to use a simplified questionnaire for micro and small enterprises and to not include the table on intermediary consumption for those enterprise categories.

Insufficient number of staff to deal with SBS is the main obstacle for further development of the structural business statistics. Allocation of an additional person to work on SBS during the validation process would reduce the time and increase the data quality.

Taking into account the current situation of the SBS and BR it is strongly recommended that the SBS and BR staff to participate to a hands-on training in one member state in order to get acquainted with the SBS production system, usage and maintenance of statistical business register.

Annex 1



EU Twinning Project KS12 IB ST 01 Support to Statistics

Terms of Reference:

Component 3: Business Statistics

Activity 3.2.1.4: Improving Quality of SBS

Scheduling:

ToR –ready date: 19 December 2014

Start / end of activity: 26-30 January 2015

Reporting time: 6 February

Mandatory result of the component:

| Mandatory Result | Intervention logic | Benchmarks | Sources of information | Assumptions |
|-----------------------------|--|---|---|---|
| Mandatory Result 3.2 | Structural Business Statistics (SBS) Reducing of production time and improving quality of SBS | <ul style="list-style-type: none"> Mission report describing work done and work further to be completed on questionnaire and sample design | <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 3.2.1.4:

To consult and work with KAS professionals on SBS. In cooperation with KAS the expert will work on improving SBS data. Quality data from SBS are important for National Accounts Division who are planning to use Supply and Use Tables for coming versions of the National Accounts.

This mission is a continuation of activity 3.2.1.2.

Expected output of activity 3.2.1.4:

KAS people after this mission have greater understanding of how to improve the SBS to make it useful for National Accounts.

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. LuljetaKrasniqi, Senior Officer for SBS, luljeta.krasniqi@rks-gov.net
 Mr. BekimBojku, Senior Officer for energy statistics, bekim.bojku@rks-gov.net
 Employees from National Accounts will attend when required

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:

Ms. Virginia Balea, Senior Consultant, Statistics Denmark, Virginia.balea@insse.ro

Twining 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 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 the following about SBS:

The most important issue is to have data ready for National Account at a much earlier stage.

The methods for sampling, imputation and estimation may need to be revised.

A major reason for the late availability of data is that the sample from SBR was delayed. This issue has to be addressed by SBR and some improvement should be obtained for 2013. After collection is completed, data are verified; missing data are obtained from larger units (+200 employees) or imputed. This takes 2 months. The project should look into these matters in order to find ways to further improve the timeliness.

The questionnaire and the methods for estimation should be examined and revised if needed.

A long term development plan for future improvements must be developed.

In the previous mission, also conducted by Virginia Balea, the expert remarked: *The aim of the mission was to analyse the current Structural Business Statistics (SBS) questionnaire and revise it in order to align it to the SBS EU regulation’s requirements and to answer National Accounts needs. Several chapters have been introduced to address the demand to produce SBS tables according to the Regulation 295/2008 for industry, construction, trade and services. Additional four chapters have been added in order to cope with National Accounts requests to compute the SUT table based on the data to be collected for 2013 reference year.*

The second objective covered the issue of sampling design for the 2014 SBS survey. A document on how to design the sample based on the random approach has been provided. The quality of Business Register has to be improved so that the Business Register can be used in a proper manner as sampling frame for all business surveys.

This mission is a continuation of the activity 3.2.1.2 where the proposed work plan was:

- Data validation: **December 2014-January 2015**

- Dissemination of (provisional data): **December 2014**
- Provide NA with provisional data for the reference year 2013: **January 2015**

Activities to be undertaken in preparation for the mission:

All previous mission reports on SBS and National Accounts can be found at www.dst.dk/kosovo

The expected activities are:

- Workshop with KAS participants on SBS data. Working with tasks from the work plan. Updating the work plan.

Expected output:

- Mission report – according to template
- Detailed plan for further activities to be completed in component 3.2 by the twinning program

Annex 1. Program, January 2015

| Day | Place | Time | Event |
|----------|-------|------------------|--|
| | | | |
| 1 | KAS | 10:00 | Introductory remarks to this part of component 3 |
| | | 10:00 – 16:00 | Workshop: Reviewing SBS data |
| | | | |
| 2 | KAS | 09:00- | Workshop: Reviewing SBS data |
| | | | |
| 3 | KAS | 09:00- 16:00 | Workshop: Reviewing SBS data |
| | | | |
| 4 | KAS | 09:00 | Workshop: Reviewing SBS data |
| | | | |
| 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 3

Nace Rev2newfinal111 – main activity of the enterprise

Weighted data

Pivot table by Nace

Rev2newfinal111

| | | |
|--|-----|------------------------------------|
| Average number of persons employed | PT1 | Sum by Nace Rev2newfinal111 of PT1 |
| Number of full time employees | PT2 | Sum by Nace Rev2newfinal111 of PT2 |
| Number of part-time employees | PT3 | Sum by Nace Rev2newfinal111 of PT3 |
| Average number of employees | PT4 | Sum by Nace Rev2newfinal111 of PT4 |
| Number of employees for R&D | PT5 | Sum by Nace Rev2newfinal111 of PT5 |
| Average number of self-employed/unpaid persons | PT6 | Sum by Nace Rev2newfinal111 of PT6 |
| Owners and partners working | PT7 | Sum by Nace Rev2newfinal111 of PT7 |
| Number of unpaid family members | PT8 | Sum by Nace Rev2newfinal111 of PT8 |
| Number of hours worked by employees | PT9 | Sum by Nace Rev2newfinal111 of PT9 |

Pivot table by Nace Rev2newfinal111

| | | |
|---|-----|------------------------------------|
| Turnover total | A1 | Sum by Nace Rev2newfinal111 of A1 |
| Turnover from produced goods | A2 | Sum by Nace Rev2newfinal111 of A2 |
| Turnover from selling merchandises/goods for resale | A3 | Sum by Nace Rev2newfinal111 of A3 |
| Turnover from the services provided | A4 | Sum by Nace Rev2newfinal111 of A4 |
| Income from sub-contracting | A5 | Sum by Nace Rev2newfinal111 of A5 |
| Income from subsidies related to net turnover | A6 | Sum by Nace Rev2newfinal111 of A6 |
| Inventories of finished goods and work in progress - credit | A7 | Sum by Nace Rev2newfinal111 of A7 |
| Inventories of finished goods and work in progress - debit | A8 | Sum by Nace Rev2newfinal111 of A8 |
| Work performed for its own purposes and capitalised | A9 | Sum by Nace Rev2newfinal111 of A9 |
| Other operating incomes | A10 | Sum by Nace Rev2newfinal111 of A10 |

Pivot table by Nace Rev2newfinal111

| | | |
|---|--------|---------------------------------------|
| total expenditures for material and similar | ShTot1 | Sum by Nace Rev2newfinal111 of ShTot1 |
| Raw materials and consumables | Sh2 | Sum by Nace Rev2newfinal111 of Sh2 |
| Other materials (inventories, animals, packaging etc) | Sh3 | Sum by Nace Rev2newfinal111 of Sh3 |
| Other expenses (energy and water, fuel etc) | Sh4 | Sum by Nace Rev2newfinal111 of Sh4 |
| Merchandises/goods for resale | Sh5 | Sum by Nace Rev2newfinal111 of Sh5 |
| Expenditure on external services | Sh6 | Sum by Nace Rev2newfinal111 of Sh6 |

| | | |
|--|------|-------------------------------------|
| Payments for agency workers | Sh7 | Sum by Nace Rev2newfinal111 of Sh7 |
| Payments to sub-contractors | Sh8 | Sum by Nace Rev2newfinal111 of Sh8 |
| Payments for long-term rental and operational leasing of goods | Sh9 | Sum by Nace Rev2newfinal111 of Sh9 |
| Expenditure on environmental protection | Sh10 | Sum by Nace Rev2newfinal111 of Sh10 |
| Total expenditures for intermediate consumption | Sh11 | Sum by Nace Rev2newfinal111 of Sh11 |
| Personnel cost | Sh12 | Sum by Nace Rev2newfinal111 of Sh12 |
| Wages and salaries | Sh13 | Sum by Nace Rev2newfinal111 of Sh13 |
| Social security costs (health, social insurance, pensions) | Sh14 | Sum by Nace Rev2newfinal111 of Sh14 |
| Other taxes, fees and similar payments | Sh15 | Sum by Nace Rev2newfinal111 of Sh15 |
| Other operating expenses | Sh16 | Sum by Nace Rev2newfinal111 of Sh16 |

Pivot table by Nace Rev2newfinal111

| | Stocks at the beginning of the year | | Stocks at the end of the year | |
|--|-------------------------------------|------------------------------------|-------------------------------|--------------------------------------|
| Total | SF1 | Sum by Nace Rev2newfinal111 of SF1 | SFnd1 | Sum by Nace Rev2newfinal111 of SFnd1 |
| Raw materials and consumables, supplies, inventory | SF2 | Sum by Nace Rev2newfinal111 of SF2 | SFnd2 | Sum by Nace Rev2newfinal111 of SFnd2 |
| Work in progress and unfinished | SF3 | Sum by Nace Rev2newfinal111 of SF3 | SFnd3 | Sum by Nace Rev2newfinal111 of SFnd3 |
| Finished goods | SF4 | Sum by Nace Rev2newfinal111 of SF4 | SFnd4 | Sum by Nace Rev2newfinal111 of SFnd4 |
| Merchandises/goods for resale | SF5 | Sum by Nace Rev2newfinal111 of SF5 | SFnd5 | Sum by Nace Rev2newfinal111 of SFnd5 |

Pivot table by Nace Rev2newfinal111

| | |
|---|--|
| Total investment | Sum by Nace Rev2newfinal111 of InvTot1 |
| Intangible Assets | Sum by Nace Rev2newfinal111 of Inv2_1 |
| Concessions, patents, licences and trade-marks and similar rights | Sum by Nace Rev2newfinal111 of Inv3_1 |
| Software | Sum by Nace Rev2newfinal111 of Inv4_1 |
| Mineral exploration | Sum by Nace Rev2newfinal111 of Inv5_1 |
| Databases | Sum by Nace Rev2newfinal111 of Inv6_1 |
| Research&Development | Sum by Nace Rev2newfinal111 of Inv7_1 |
| Tangible assets | Sum by Nace Rev2newfinal111 of Inv8_1 |

| | |
|--|--|
| Lands | Sum by Nace Rev2newfinal111 of Inv9_1 |
| Structures and existing buildings | Sum by Nace Rev2newfinal111 of Inv10_1 |
| Construction and alteration of buildings | Sum by Nace Rev2newfinal111 of Inv11_1 |
| Machinery and equipments | Sum by Nace Rev2newfinal111 of Inv12_1 |
| Other | Sum by Nace Rev2newfinal111 of Inv13_1 |

Pivot table by R_aktiv

| | Turnover | Capitalised production | Stocks of finished goods, work in progress | | Stocks of merchandises/goods for resale | | Total number of persons employed | Total number of employees | Wages and salaries | Investments in tangible goods |
|---------------------------|-------------------------|-------------------------|--|------------------------|---|-------------------------|----------------------------------|---------------------------|-------------------------|-------------------------------|
| | | | at the beginning of the year | at the end of the year | at the beginning of the year | at the end of the year | | | | |
| Nace Rev.2 Code (4 digit) | | | | | | | | | | |
| R_aktiv | Sum by R_aktiv of R1_1S | Sum by R_aktiv of R1_2S | Sum by R_aktiv of R1_3S | Sum by R_aktiv of _4S | Sum by R_aktiv of R1_5S | Sum by R_aktiv of R1_6S | Sum by R_aktiv of R1_7S | Sum by R_aktiv of R1_8S | Sum by R_aktiv of R1_9S | Sum by R_aktiv of R1_10S |

Annex 4. Persons met

KAS:

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

Mr. Hysni Elshani, Head of sector

Mr. Muhamet Kastrati, Manager of database

Ms. Luljeta Krasniqi, Senior Officer for SBS

RTA Team:

Per Knudsen, RTA

Nora Zogaj, RTA Assistant