TWINNING CONTRACT

Support to the Statistics

Kosovo



MISSION REPORT

on

Activity 2.3.1.5: Continued support to implementation of Action Plan. Special focus on SUT

Component no 2 National Accounts

Mission carried out by Søren Larsen, Statistics Denmark

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IPA 2012

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List of Abbreviations

ESA 95	European System of Accounts 95	
ESA 2010	European System of Accounts 2010	
EU	European Union	
GDP	Gross Domestic Product	
HBS	Household Budget Survey	
IMF	International Monetary Fund	
LFS	Labour Force Survey	
KAS	Kosovo Agency for Statistics	
NA	National Accounts	
NACE rev.1	Nomenclature statistique des activités économiques dans la	
	Communauté européenne, revision 1	
NACE rev.2	Nomenclature statistique des activités économiques dans la	
	Communauté européenne, revision 2	
NAD	National Accounts Department	
R&D	Research and development	
SBS	Structural Business Survey	
SUTs	Supply and Use Tables	
ToR	Terms of Reference	

Executive Summary

The purpose of this mission was to investigate the realism of a plan to compile Supply and Use tables for the year 2013 and to look into the source data needed for this purpose that is already available or are planned to be available later in 2015.

During the mission some work was carried out on an experimental basis. A first version of a possible product classification to be used in the SUTs was drawn up based on the rather detailed VAT-statistics for 2013. The number of products will probably still need to be reduced, given the limitations in the information available for drawing up an initial version of the use-table.

It was planned to establish an Excel framework that can contain the SUTs in a format that follows specific rules. Statistics Denmark has developed a system of Excel macros that can be used for data entry, balancing and extraction of product balances, output- and input-structures from such a framework.

As an experiment agricultural output from the existing national accounts was coded by the proposed product classification and brought on the standardized format that is used for dataentry by the Excel-macros. It was furthermore investigated how other data sources can be coded and converted in a similar way. It was specifically noticed that intermediate consumption is already classified by products.

It was concluded that it is possible to compile the SUTs for 2013 and that a proposal for a time schedule should be presented before a following mission. A proposed time schedule is shown as part of this report.

The quality of the SUTs will depend on the availability of data for 2013. Some important data, SBS- and PRODCOM-statistics cannot be expected to be available until sometime after the summer holidays. Finally the proposed time schedule may need to be adjusted to take into account when the data becomes available.

The success of the project will of course depend on the availability of human resources in the KAS as work will need to be carried out between the missions. The Danish experts will – together with the staff of KAS – define the tasks that will need to be carried out before each following mission.

1. General comments

This mission report was prepared within the Twinning Project "Support to Statistics". In a mission 21-23 January it was decided to investigate the possibility of compilation of Supply and Use tables for the year 2013 as a part of this twinning project. It was decided to use the present mission to provide a feasibility study for such a project. The mission should carry out experiments on the conversion of existing source data into a form suitable as input in an SUT framework, provide a picture of the present availability of data sources and discuss the need for further source data. If it can be concluded that it is realistic to proceed with the project a schedule should be drawn up for the remaining part of the SUT project.

The concrete objectives of the mission were:

- To investigate existing source data.
- To point out the necessity for statistics that should be ready before specific phases of the project.
- To look into the possible classifications of products, industries, consumption groups and other final uses that must be defined before a SUT framework established.
- To carry out an experimental coding by SUT classifications of some data that is already available in the present national accounts.

The desired result should be a realistic plan for compilation of SUTs including a time schedule for future missions.

The consultant would like to express his 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 consultant.

This views and observations stated in this report are those of the consultant and do not necessarily correspond to the views of EU, KAS or Statistics Denmark and our implementation partners (NI-CO / Statistics Finland / Istat / Statistics Lithuania).

2. Assessment and results

2.1 The project seems realistic.

The mission in March 2015 was dedicated to consideration of how SUTs for the year 2013 can be compiled. Based on experiments with available source data it was decided that it is considered realistic to compile SUTs for 2013 within the present twinning project. The exact time schedule will, however, depend on availability of the source data among which information on production by products and industries seems to be the most critical at the moment.

2.2 The proposed SUT Framework.

Supply and Use Tables (SUTs) for the years 2005, 2006 and 2007 have previously been elaborated but updated estimates were not realised. However, a planned SUT for 2013 should preferably be established by new methods based on the available source data for this year. It will then be based by statistics that is classified by NACE rev.2 and CPA 2008.

It is recommended that the SUT-framework is contained in an Excel workbook of the type that has been developed in Statistics Denmark. This will make it possible to call Excel macros for entry and extraction of data from the system as well as macros for balancing of supply and use and adjustment to targets for inputs, final consumption and other final uses. Such macros have been developed in Statistics Denmark and have earlier been used in compilation of SUTs in other countries.

In the January mission the experts made a presentation showing examples of supply and use matrices. It was demonstrated how various statistical sources should be used to fill different parts of the table and it was shown that the dimensions of a SUT-framework can take into account the availability of data and resources for the compilation.

A SUT-system requires definition exhaustive classifications for products, industries, consumption groups and subgroups of capital formation. They should be chosen in a way that takes into account the availability of source data and shall preferably have a well-defined relation to official international classifications e.g. CPA, NACE, COICOP or COFOG.

The new system will require the definition of an exhaustive classification of products preferably based on an established international classification e.g. CPA, but aggregated to a number of products that can be identified in Kosovo's source data. Similarly classifications for industries, consumption groups and subgroups of capital formation must be chosen in a way that takes into account the availability of source data.

The full use of the Excel framework requires that source data are brought on a standardised format using well defined classifications for products transaction types, industries and final uses. The classifications used in the SUTs must be defined as they determine the dimensions of the Excel tables. Inputs from different statistical sources will typically be available classified by different coding systems. It will be necessary to establish correspondence tables between each of these classifications and the classifications used in the SUTs.

2.3 Output by products in the SUTs.

As in most other countries it can be assumed that foreign trade statistics is coded by the harmonized system with a level of detail that is sufficient to be aggregated into any realistic SUT-product classification.

A specific problem is the lack of information on the breakdown of industry outputs by products. Production in agriculture can be found in "Economic Accounts for Agriculture" that contains the specification by various agricultural products.

New SUTs for 2013 will at least require information on:

- The values for Total output
- Intermediate consumption
- Compensation of employees

for each of the industries shown as columns in the SUT.

When the SBS-questionnaires for 2013 were collected some problems turned up, among which:

- Unusually low response-rate in the 2013 survey. The survey was collected during the summer holidays.
- The original validation procedure was cut down, leaving many errors to be corrected manually.

It can be assumed that the values from statistical sources are underestimated in industries that contain non-observed economy.

Non-response units can be identified in administrative registers e.g. the VAT-register. Detailed data for the missing units may be found in SBS for 2012 or 2014 that, together with the VAT-statistics may be used in the estimation of total output and input of these units. Otherwise imputed data may be based on relations from units that have responded. In some industries the value of output may need to be based mostly on VAT statistics.

If it is assumed that output of each 4-digit industry belong to a specific SUT-product (defined as an aggregate of CPA-products) it is possible to produce a sufficiently detailed supply matrix. As an experiment a product classification was drawn up based on VAT-turnover for detailed industries. In this way some 370 products could be distinguished. This classification is probably too detailed and some products will need to be merged after comparison with the classifications used in source data on input structures, household final consumption and consumption of general government.

It can probably be assumed that many industries consist of small units that produce a single SUT-product. Bigger enterprises are said to be few. For such enterprises the size of secondary activities may be found in the SBS and the breakdown of total output can probably be based of PRODCOM statistics on the condition that this statistic is available at the time when it is needed. As a last resort it may be possible to collect supplementary information from the bigger enterprises, and this information does not necessarily need to be from 2013.

It is important that a plan is drawn up for the calculations of output- and input totals are established. These values are needed as targets for column-totals in the SUTs and balancing is not possible without such estimates.

2.4 Choice of industry classification for production, intermediate consumption, and components of gross value added.

The choice of classification used for output- and input-columns can probably be limited to a choice between 64- or 86 industries or a compromise between the two. While 86 industries correspond to 2-digit NACE rev.2, the 64 industry classification is the one required by the EU Transmission Programme and for international comparisons in general. For I-O purposes one may prefer the more detailed classification, but the less detailed industries may be more feasible where source data is scarce and uncertain.

2.5 Classifications of final consumption.

Detailed initial estimates of the use of products for household final consumption can be obtained from the household budget survey for 2013. The survey should be used in a grossedup version that covers consumption by the population as a whole.

The survey is classified by a 5-digit COICOP that should be easily translated into SUTproducts using a correspondence table, when a final product classification has been decided upon.

In the use-table household consumption should be shown as a number of columns for consumption groups, each containing the distribution of products belonging to its specific COICOP classification. The number of such consumption groups may be between 12 corresponding to 2-digit COICOP (plus 2 columns for residents' consumption abroad and non-residents' consumption on the domestic territory), but could be subdivided into a considerably larger number of COICOP-based columns if sufficient reliable source data is available.

Similarly it must be considered how final consumption of NPISHs and general government should be shown. A subdivision of government consumption into columns for COFOG groups is possible for individual as well as collective consumption. Individual consumption might be shown by COICOP-groups. The realistic proposal is probably to show government consumption as columns for 2-digit COFOG-groups (=divisions).

Gross fixed Capital formation should be subdivided by type of fixed asset as detailed as required by the ESA 2010 transmission programme. Changes in inventories can be shown columns for materials, finished products and work in progress and goods for trade.

2.6 Initial distributions of use by products.

For agriculture the most important inputs can be found in "Economic accounts for Agriculture 2013". Inputs in industries covered by the SBS can probably use information in this statistics. even if its coverage is somewhat unsatisfactory. During the mission a special investigation into data from government accounts showed that input in general government is already coded by type of product. It is probably rather simple to draw up a correspondence table between this coding and the product codes that will be used in the SUTs.

It can generally be assumed that data on the input structures of industries is more or less incomplete, but that it is possible to fill the gaps in knowledge using supplementary information on inputs from earlier or later years, from other countries, and in many cases by pure common sense. In the end many inputs will be determined by the available supply for domestic uses.

For specific products it is possible to determine their uses as intermediate consumption, household final consumption or capital formation from their characteristics. This "commodity flow" method is, however uncertain where the same products are typically used for more than one of these uses. Hence it is preferable that initial product structures are constructed for all columns at the uses side, but during the balancing process one will usually prefer to adjust the values that are most uncertain.

3. Conclusions and recommendations

It is recommended that compilation of a benchmark SUT is planned to take place after the system for current production of quarterly figures has been stablished. Because source data from SBS and the agricultural survey cannot be expected to be ready before the second half of 2015, work on the SUT will have to await the appearance of these sources. It is also important that the people who will be working on the project are available during the period in which the work is planned to take place. It is, however, possible to work on the definition of rows and columns for the SUTs before the actual data is available and it should also be possible to establish correspondence tables between the coding of source data and the coding decided to be used in the SUT.

A proposal for a time schedule for missions on the SUT project could consist of the present and 6 more missions each with duration of one week:

Proposed plan for activities in 2015/2016

	Time	Most important issues
1	March 09-13 2015 (this mission)	Fact finding mission
2	June 22-26 2015	Classifications, correspondence tables and coding of source data.
3	Early September 2015	Data entry, distribution of taxes, trade- and transport margins.
4	Mid or late October 2015	Balancing of supply and use for each product.
5	Mid or late November 2015	Adjustment to targets for industry inputs and final uses
6	Mid January 2016	Final balancing of margins, taxes and VAT, breakdown of GVA, symmetric I-O table.
7	February 2016	Unsolved issues. Presentation of final versions of the results. Proposals for future work.

Much of the work will need to be done between the missions and the success of the project will depend on availability of resources for the purpose in KAS. In each mission a description should be made of the specific tasks that need to be carried out before next mission.

The first step will be to make an Excel workbook that will contain the framework for the SUTs. This requires a choice of classification for products, industries, consumption groups and other final uses that will determine the size of SUT-system. They should be chosen in a way that takes into account the availability of source data and shall preferably have a well-defined relation to official international classifications e.g. CPA, NACE, COICOP or COFOG. When decisions have been made an "empty" SUT-framework can be created.

Before the SUT framework can be populated with data correspondence tables must be drawn up between the codes used in various data sources and the classifications used for rows and columns in the SUTs.

Some source data, such as SBS and PRODCOM statistics that are used in the estimation of the supply matrix, will have to be available before the population of the Excel framework with actual data that is here planned to take place in September 2015.

Source data will need to be brought on a standardised format and aggregated into the SUT-classifications before it can be entered into the SUT framework. It is recommendable that practically all initial data entry is finished before the planned October mission. Realistically some unresolved problems may probably need to be investigated in connection with the start of balancing in this mission.

Balancing of product balances and final balancing of trade-margins, taxes and VAT could require at least two missions, but such requirements will of course depend on the size and detail of the SUT as well as the quality of the data that are initially entered into the system.

When a fully balanced SUT system has been compiled, a symmetric Input-Output table can be compiled. This is here planned to start in the mission in January.

It is necessary that those people who will work on SUTs have the necessary time. It is considered unrealistic that population of the SUT framework with data can start before the second half of 2015.

The proposed time schedule depends on the availability of input data when they are needed. In some cases it may be considered to find alternative ways to estimate specific parts of the supply matrix. It could, however, be necessary to wait for important data in which case some planned missions may have to be delayed.









EU Twinning Project KS12 IB ST 01 Support to Statistics

Terms of Reference:

Component 2: National Accounts

Activity 2.3.1.5: Continued support to implementation of Action Plan.

Special focus on SUT

Scheduling:

Tor –ready date: 20 February 2015 Start / end of activity: 9-13 March 2015

Reporting time: 20 March 2015

Mandatory result of the component:

	Mandatory result of the component:				
Mandatory	Intervention logic	Benchmarks	Sources of	Assumptions	
Result			information		
2.3.1	Initial support to implementation of Action Plan for National Accounts Continued support to implementation of Action Plan for National Accounts Final Support to implementation of Action Plan for National Accounts	Mission report uploaded on project homepage Selected areas of the National Accounts updated according to ESA2010	 Twinning quarterly reports Mission Report Updated action plan 	 Sufficient absorption capacity Low turn-over of staff involved in implementation Staff works on project related tasks in between missions Access to accurate primary statistics A detailed Terms of Reference is developed in a timely manner detailing tasks (input), expected output, 	

Γ			participants of
			the activity and
			agenda

Subject / purpose of activity: 2.3.1.5 activity

Support to the compilation of national accounts in Kosovo. Special focus on Supply and Use Tables (SUT). This mission is a continuation of the mission with Gravesen, Ivan-Ungureanu and Larsen. It will be a fact-finding mission, with the primary purpose of investigating whether it is possible to form the Supply and Use Tables (SUT) for National Accounts in Kosovo.

Expected output of activity 2.1.1:

Mission report describing the presence and quality of data to be used for SUT Recommendations for the way ahead for SUT in KAS

Description of work done during the mission and work that needs to be completed before the next activity

KAS resources:

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Description of the background for the activity

The 2012 Adapted Global Assessment report (AGA) prepared by Eurostat states the following about National Accounts (p.53-54): In 2010 KAS prepared with IPA support an "Action Plan for compiling and publishing comprehensive statistics on National Accounts and labour market". That Plan is in principle a useful instrument to organize the future development of National Accounts together with the development of standards and sources that are needed for the enhancement of coverage and improvement of National Accounts data.

The Twinning Project has already had 7 activities in Component #2 National Accounts:

During the last mission KAS and the expert found that maybe it would be possible to create SUT for National Accounts in Kosovo. This mission will investigate the requirements for source data and the possibilities for fulfilling of these requirements with the intention to reach a decision on whether this is possible or not.

Activities to be undertaken in preparation for the mission:

Previous mission reports on NA component. All published at www.dst.dk/kosovo

The expected activities are:

- Update of action plan for improvement of National Accounts with SUT
- Development of detailed plan for future actions on SUT by the twinning program

Expected output:

- Mission report according to template
- Detailed plan for further activities to be completed in component 2 by the twinning program
- Updated version of the National Accounts action Plan including the possibility and timetable for SUT ready for consideration by KAS senior management

Annex 1. Programme, - March 2015

Day	Place	Time	Event
1	KAS	10:00	KAS: Overview of what has been accomplished since the previous mission on NA in November 2014
		10:45	Coffee break
		11:00	MS: Introduction to SUTs
		12:00	Lunch break
		13:30-	MS: An Excel framework for SUTs and it's data
		15:30	requirements.
			Planning the rest of the week
2	KAS	09:00- 16:00	Workshop/discussions Availability of data. What and when? Which level of detail? A first attempt to determine the size of a SUT framework.
			A first attempt to determine the size of a SUT-framework for Kosovo.
3	KAS	09:00-	Workshop/discussions
		16:00	Organization of the work:
			Structure of directories and files. Standardized format for data inputs. Reponsibities for persons involved.
			www.inpower.rependentes for persons in verveus
4	KAS	09:00	Further discussions on various approaches ahead for KAS with SUT: A realistic template for a SUT-framework in Excel.
			Assesment of the need for resources and future misions.
		10:30	Coffee break
		10:45	A tentative time-schedule for future work
			Discussion on recommendations
		12:00	Lunch break
		13:30	Report writing
5	KAS	10:00	Debriefing: Experts, Component Leader and RTA
	12.10	10:30	Report writing