

TWINNING CONTRACT

Support to the Statistics

Kosovo



MISSION REPORT

on

2.3.1.4 Support to implementation of action plan for NA with special
focus on Quarterly National Accounts

Component no 2 National Accounts

Mission carried out by
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List of Abbreviations

ANA	Annual National Accounts
BoPs	Balance of Payments
CBK	Central Bank of Kosovo
CFC	Consumption of Fixed Capital
CPI	Consumer Price Index
ESA 95	European System of Accounts 95
ESA 2010	European System of Accounts 2010
EU	European Union
GDP	Gross Domestic Product
GFCF	Gross Fixed Capital Formation
GFC	Government Final Consumption
HFC	Households Final Consumption
IMPI	Import Price Index
IPA	Instrument for Pre-accession Assistance
IMF	International Monetary Fund
IT	Information Technology
LFS	Labour Force Survey
QNA	Quarterly National Accounts
QGDP	Quarterly GDP
KAS	Kosovo Agency for Statistics
MoU	Memorandum of Understanding
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

NOE	Non-Observed Economy
PPI	Producer Price Index
R&D	Research and development
SIDA	Swedish International Development Cooperation Agency
SBS	Structural Business Survey
STS	Short term statistics
SUTs	Supply and Use Tables
ToRs	Terms of Reference

Executive Summary

The second mission carried out in component 2 – National accounts of the twinning project had as main objectives to analyse QGDP estimates for the period 2010-2012, to provide recommendations for the first quarter 2013 estimation and to update the action plan in the field of national accounts. Currently, the NAD of KAS is involved in IPA 2011 multi-beneficiary project and is beneficiary of the IMF technical assistance. In the IPA 2011 project, KAS has two main objectives: implementation of ESA 2010 and start of quarterly national accounts implementation; the project will finished in May 2014. IMF technical assistance provides support for the improvement of annual national accounts by production and expenditure approaches, in current and constant prices; this project will finish in June 2014. In these conditions, the twinning project represents the main support for the development of annual and quarterly national accounts in Kosovo in the next two years (2014 and 2015).

The implementation of QGDP started under IPA 2011 project; the first step of this process was the elaboration of a time series of quarterly data, for the period 2010-2012, using available data sources and the annual results of GDP by production and expenditure approaches. Based on the methodology developed, the experimental estimates for the quarters of 2013 will be done during this year the plausibility of the results will be checked with the annual estimates of GDP by expenditure approach (September 2014) and by production approach (November 2014). In December is planned to publish the QGDP for the period 2010- 2013 by production and expenditure approaches, in current and constant prices and first two quarters of 2014.

The action plan for the improvement of national accounts, including QNA in the frame of the twinning project was elaborated during the first mission carried out in January 2014. The millstones decided were based on the on-going projects and the work plan of KAS for 2014. Their achievement depends not only on the development of national accounts, but on the progress of other statistical fields, as structural and short-term statistics, prices, social statistics and access to administrative data sources. A Memorandum of Understanding (MoU) between KAS and Ministry of Finance (Tax Authority) was signed at the beginning of March 2014 and will ensure the access to the administrative data, especially to the financial data of enterprises. A similar memorandum is in preparation process, in order to be signed with the Central Bank of Kosovo (CBK).

The action plan is very ambitious in its own right and depends on the primary statistics being developed and made available as required by the action plan for national accounts. For quarterly national accounts compilation is absolutely necessary to develop the short term statistics (STS) and provide information in regular basis.

1. General comments

This mission report was prepared within the Twinning Project „Support to Statistics”. It was the second mission to be devoted to National Accounts (NA) within Component 2 of the project.

The concrete objectives of the mission were:

- Analysis of QGDP estimates for the period 2010-2012 and
- Recommendations for the first quarter 2013 estimation.

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

The current development in the implementation of quarterly national accounts was analysed during the mission.

2.1 Quarterly GDP estimates for 2010-2012 in current prices

The first results of QGDP for the years 2010, 2011 and 2012 in current and constant prices have been analysed during the mission. The activity in this field started with the elaboration of a time series of QGDP by production and expenditure approaches. The annual data of GDP has been “quaterlized” using different methods based on the availability of sources.

The statistical sources available in quarterly basis are:

- Short term indicators on hotel statistics: number of visitors and number of nights spends;
- Quarterly producer price index (PPI) for mining, manufacturing and electricity, gas and water supply, based on NACE Rev. 1.1; the base year is 2007.
- CPI, estimated at 4 digits level of COICOP, published started with 2002;
- Monthly agricultural input price index for 68 components; the base year is 2005.
- Monthly agricultural output price index for 64 products, having 2005 as base year
- Starting with 2012, LFS was conducted monthly in order to provide quarterly results. Results for 2013 will be published by the end of May 2014. For current year (2014) it is foreseen to provide figures in a regular basis, means 102 days after the end of the quarter.

The monthly and quarterly administrative data sources are:

- Monthly turnover provided by Tax Authority. In March 2014 a Memorandum of Understanding (MoU) was established between KAS and Ministry of Finance (Tax Authority) and monthly information concerning the turnover, number of employees, wages, is provided in electronic form, at 60 days after the end of the period;
- Quarterly revenues and expenditures of government;
- Data provided by Veterinary Agency concerning the number of animals and the expenditures made by government for the animals;
- Financial statements of banks and insurance companies;
- Quarterly Balance of Payments (BoPs) elaborated by Central Bank;
- Financial statements of electricity company (KEK), post and communication (PTK and IPKO) and of railway and air transport companies.

For agriculture there is not information on quarterly basis. The estimation of the period 2010-2012 was based on the annual production and the distribution of output by quarters from the neighbour countries (Albania and Macedonia).

The main sources used for the estimation of quarterly output of mining, manufacturing, trade, transport and other services was the turnover obtained from Tax Authority. The method used has as assumption that the quarterly output has a direct correlation with the quarterly turnover. In this way, the share of quarterly turnover in the annual turnover was applied to the total output of the year.

The quarterly intermediate consumption (IC) of these activities was estimated based on the annual ratio of the intermediate consumption in output (I/O coefficient). The assumption is that the share of the IC in the output in quarterly basis is the same as in annual.

The output and IC of government was estimated based on quarterly data from Ministry of Finance. The consumption of fixed capital (CFC) in quarterly basis was estimated based on annual values divided by four.

The construction output was estimated using the input method. The intermediate consumption is calculated based on the value of raw materials from import (provided by Customs) and from domestic production. The information concerning the domestic production used in construction is obtained through a special questionnaire sent by the National Account Department to main producers of such products (cement, bricks, glasses, etc.). The IC is considered to represent 65% of the output. It was observed that the total value of construction output is included in the GFCF, which is not correct. The output includes also the small repairs made by enterprises and households, which do not represent GFCF.

For FISIM and other financial intermediation activity, the estimation of quarterly indicators have been realized in an independent way, based on data provided by Central Bank of Kosovo (CBK).

Other activities have been distributed among quarters in a linear way because of the lack of data sources; is the case of insurance activity, imputed rent, and services provided by non-profit institutions serving households (NPISHs).

During the mission, the GDP by expenditure approach was calculated for the quarters of 2010-2012. A method to estimate HFC was established based on the commodity flow approach, due to the fact that for the moment any other data sources in quarterly basis are available. The main correlations have been established and the HFC of 2010, 2011 and 2012 has been distributed among quarters based on the methodology developed.

The estimation of GFCF by quarters was made for the big components: agriculture, construction and equipment and machinery. Annual investment in agriculture was split in equal parts for the 4 quarters, due to the lack of sources. Estimation of machinery and equipment was based, as in annual estimates, on import data provided by Customs. The investment in construction was explained above.

The government final consumption (GFC) was estimated based on quarterly data provided by Ministry of Finance, following the same methodology as in annual calculations.

The final consumption of NPISHs was estimated by quarters based on annual data divided in equal parts. In annual data, changes in inventories are roughly estimated, by applying a growth rate to the value of the previous year. First estimation of the value by quarters was done by divided the annual value in four equal parts.

Import and export of goods and services was estimated based on the data from Customs and BoPs.

2.2 Quarterly GDP estimates for 2010-2012 in constant prices

The first estimates of QGDP by production approach in constant prices for 2011 and 2012 have been analysed during the mission. In general, the method used for the estimates followed the annual practice: separate estimation of the output and IC, the GVA in constant prices being the differences between these two indicators.

The estimation of output by industry was based on Producer Price Indexes (PPI) and Consumer Price Index (CPI). PPI was used for the estimation of mining, manufacturing and

electricity output; CPI was used for output deflation for services (trade, transport, insurance, other business services, etc.). Agriculture output in quarterly basis was deflated with the annual price index.

The IC was estimated in constant prices, taking into accounts the share of the imports of goods and services in total consumption. Kosovo is a country with big share of import in the supply of goods, and for this reason it was taken the decision to deflate separately the value of the quarterly IC which is supplied by domestic production and by imports. The ratio of the two components in the total IC is provided by the last Supply and Use Tables (SUTs) 2007. The imported IC was deflated using the Import Price Index (IMPI) and the domestic production in the IC for each activity was calculated in constant prices, based on its structure and the corresponding prices (PPI or CPI).

During the mission, GDP by expenditure approach was estimated for the years 2011 and 2012. Each element of the HFC was deflated with the corresponding CPI. For agriculture goods which are provided by the own production, the agriculture price index was used.

The final consumption of NPISH was estimated in constant prices using the CPI of other services.

The intermediate consumption and the GVA of government were estimated separately in constant prices. The main components of the IC were deflated with the corresponding CPI. The GVA of the corresponding quarter of the previous year was extrapolated with the employees' index. The CFC was deflated with the price index of total GFCF. The government market production was deflated with the CPI of the other services.

The elements of GFCF were deflated separately. The imported raw materials used in construction have been deflated with the corresponding Import Price Index (IMPI); for the estimation of raw materials provided by the domestic production in constant prices, the PPI were used. The share of the IC in output from current prices was applied to IC in constant prices in order to obtain the output in constant prices. For the GFCF in agriculture, price index from agriculture has been used. The estimation of investment in machinery and equipment in constant prices was obtained by deflating each element with the IMPI.

The estimation in constant prices of the quarterly values of imports of good was realized based on the corresponding IMPI. For the export of goods, corresponding PPI were used; export of services were deflated with corresponding CPI. Due to the lack of data, the estimation in constant prices of import of services, the general price index of annual data was used.

Any independent calculation was made for the changes in inventories in constant prices. The values will be analysed in the process of balancing production and expenditure approaches.

2.3 Estimation of first quarter 2013

During the mission, the methodology to estimate QGDP for 2013 based on the available sources and in the condition of the lack of annual data was discussed and calculations of some indicators started.

For the production approach, the main data source is provided by Tax Authority and represents the value of turnover, detailed by activities. The data for 2013 was not available, so the estimations for output did not started. The methodology was discussed, an exercise was made for 2012 and work sheets elaborated for the calculation of the first quarter 2013. The estimation of the output is based on the nominal growth rate of the turnover, detailed by activities, at 2 digits level of NACE rev.1 applied to the value of the output of the corresponding quarter of the previous year.

In order to check the plausibility of this method, an exercise was made for 2012. The results obtained based on the growth rate of the turnover were not very different from the estimates made based on the method explained above. Of course, is a rough estimation, but is the only possible to be realised, due the availability of statistical and administrative data sources in quarterly basis.

The estimates for 2013 of the GDP by expenditure approach will follow the same procedure as for the previous years. For the GFCF some estimates have been realised; data for import and export of goods and services have been collected and it is any problem to do the estimates. The HFC will be calculated after the estimation of the output by activities.

3. Conclusions and recommendations

During the mission, specific recommendations on the calculation of NA indicators have been provided and included in the estimates realized.

The work plan discussed and decided with NAD staff and management for QGDP is the following:

- Estimation of QGDP by production and expenditure approach for the first two quarters 2013, based on ESA 95 and NACE rev.1
Deadline: End of April 2014
- Estimation of QGDP 2013, quarters III and IV, based on ESA 95 and NACE rev.1
Deadline: July 2014

- Revision of QGDP estimates 2010-2013, in current and constant prices, based on revised annual data, using ESA 2010 and NACE rev.2
Deadline: October 2014
- Estimation of QGDP 2014 for the quarters I and II
Deadline: November 2014
- Publication of QGDP 2010-2013 and quarter I and II 2014
Deadline: December 2014

The general recommendations and main problems concerning the implementation of QGDP are presented below.

- The main problematic area for quarterly estimates of GDP is agriculture. It was recommended firstly, that the experts in charge with the estimation of this activity from National Account Department collaborate closely with the experts from Agriculture Department in order to know and understand the method used for annual calculations. Secondly, it was recommended to identify all possible data sources for the estimates in quarterly basis, which can be provided by Ministry of Agriculture, Food and Veterinary Agency, but also by professional associations. Based on this information and the annual estimation of national accounts indicators, a specific method can be developed for quarterly estimates. As for example, the estimation of the output of a specific product can be based on the surface planted and the usual production harvested by unit of surface (hectares).

Starting with May 2014, the Agriculture Department (AD) will be involved in IPA 2012 multi-beneficiary project, having specific tasks for the improvement of agriculture indicators. It is recommended to establish collaboration between NAD and AD in order to obtain some benefits for quarterly estimates.

- It was recommended to improve the estimation of the construction output and its integration into NA. The GFCF in annual and quarterly basis contains the finished construction output and the major repairs, not the total value of construction.
- It was recommended to improve the estimates of HFC in quarterly basis; data from special units which provide services for population as suppliers of water and steam, public transport, telephone services, electricity, etc. can be used for a direct estimation of the households consumption.
- The quality of QGDP depends of data sources used for the compilation. It is absolutely necessary to develop the short term statistics and to provide reliable results necessary for NA.

One of the objectives of this mission was to update the work plan in national accounts established at the beginning of the twinning project. In the plan, it was foreseen to elaborate the SUTs 2013 during next year. The elaboration of SUTs requests special and detailed information of economic indicators and a significant amount of work. In the frame of the twinning project, with its technical support, the experts of NAD will be able to carry out this activity. The revision of annual accounts based on ESA 2010 and the implementation of QGDP will be done by the end of this year, so next year they will be able to concentrate their activity to the SUTs elaboration. The new SUTs (the last was for 2007) is important for the improvement of annual and quarterly estimates of GDP.

Concerning the data sources, the attention should be paid to the SBS for 2013. This represents the only source which provides detail of the turnover and purchases, necessary for the estimation of SUTs indicators. In this field, it is necessary a strong support for its improvement. The main lines are (not to be considered exhaustive):

- Revision of the questionnaire in order to follow the EU regulations in the field of SBS, but also to answer to the need of SUTs elaboration (detail of turnover, of changes in inventories of finished goods and semi-finished goods, details of purchases by products, elements for the calculation of trade and transport margins, etc). Taking into account the structure of Kosovo economy, it will be good to have 2 questionnaires; one with detailed information for the big enterprises which represent 70% of the turnover of the activity, and one, shorter for the small enterprises.
- To improve the sample and the grossing up procedures for SBS based on an improved SBR (this represents also an important issue);
- To improve the quality of data collected. In my opinion, if the same procedure will be used for SBS 2013, means to use an external company and enumerators for the collection of data, it is absolutely necessary to have a good training of the enumerators, explaining all the internal correlations of the questionnaire and the links with the accounting system of the enterprises.
- To develop an IT tool for the data entry, in order to ensure the consistency of the questionnaires. Now, the data entry is made in excel sheets; after this process is finished, the experts from SBS Department start to analyse the data and the correlations between indicators. At this stage, if it is a problem, it is difficult and take a lot of time to identify the mistakes (could be from data entry, could come from the answers of the enterprises, etc.).

It is absolutely necessary that the management of NA Department and of Economic Statistics Department ensure their commitment to fulfil of these objectives, means to elaborate SUTs 2013 and to improve SUTs 2013 in order to take all the needed measures.

And of course, it necessary an intensive support in the frame of the twinning project. As the survey is planned to start the field operation at the beginning of May, it is necessary to have a mission for the questionnaire and sample design, as soon as possible, at the beginning of April.

Concerning the other milestones established during the first mission for annual accounts it was identified any modification. The achievement of the objectives depends not only on the activity developed by the NAD; they are dependent on the data provided by other directions and departments of KAS. In this line, it is recommended that the compilation of the conversion bridge tables between NACE rev. 1 and rev.2 is accelerated in order to be finalised in June 2014. If this will not be done, the entire work plan established for national accounts will be delayed.

Annex 1. Terms of Reference**EU Twinning Project****KS12 IB ST 01****Support to Statistics****Terms of Reference:****Component 2: National Accounts****Activity 2.3.1.4: Support to implementation of Action Plan for National Accounts with special focus on Quarterly National Accounts****Scheduling:****Tor –ready date: 17 February 2014****Start / end of activity: 3-14 March 2014****Reporting time: 21 March 2014****Mandatory result of the component:**

Mandatory Result	Intervention logic	Benchmarks	Sources of information	Assumptions
2.3	Support to implementation of Action Plan for National Accounts with special focus on Quarterly National Accounts	<ul style="list-style-type: none"> • Mission report uploaded on project homepage • Roadmap detailing the implementation of the action plan with special focus to Quarterly National Accounts agreed • Timeline for implementation of QNA developed and discussed 	<ul style="list-style-type: none"> • Twinning quarterly reports • Mission Report • Updated action plan 	<ul style="list-style-type: none"> • 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, participants of the activity and agenda
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Subject / purpose of activity: 2.3.1.4 activity

Consultations and discussion with unit of National Accounts.

The road map for National Accounts found in table 2 in the mission report from activity 2.1.1 (Assessment and update of Action Plan) by Graversen and Ungureanu details a number of required steps (2.1 to 2.7) in order to accomplish regular publishing of quarterly national accounts. This activity is the first of a number of activities designed to support the steps described in the updated action plan.

Implementing quarterly national accounts during 2014 is an ambitious undertaking. The activity should therefore help detailing the steps that needs to be carried out and help KAS get an increasingly accurate estimate of the required resources and necessary prioritisations.

Expected output of activity 2.3.1.4:

Mission report. Analysis of QGDP estimates for the period 2010-2012 and recommendations for the first quarter 2013 estimation.

Practical training on job for QGDP estimation.

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 AGA further states that KAS is encouraged to produce experimental estimations of quarterly GDP from the production and the expenditure side. The National Accounts division needs to be provided with data of high quality from various statistical areas, and in particular from business statistics.

The Twinning Mission Report on Assessment and update of action plan (Ivan-Ungureanu and Graversen, Statistics Denmark) says that KAS develops an intense activity for the implementation of quarterly national accounts. The activity started at the beginning of 2013, in the frame of IPA 2011 multi beneficiary programme. The implementation process began with the estimation of QGDP by production and expenditure approaches for the years 2010-2012, for which annual data are available. The analysis of the results will be used to define a methodology of the QGDP estimation in real time, based on the available data sources. In the frame of IPA 2011 project, the experimental results for the first 2 quarters of 2013 will be presented.

This mission of the KAS Twinning Project support this work with one activity to plan and start the implementation of quarterly national account.

The expected activities are:

- Analysis of the first estimation of QGDP for the period 2010-2012 in current and constant prices
- Establishing the methodology for 2013 estimates based on available data sources

Expected output:

- Mission report – according to template
 - Provisional estimates for QGDP 2010-2012 I current and constant prices
- Recommendations for further activities for QGDP implementation process

Annex 1. Programme, - March 2014

Day	Place	Time	Event
1	KAS	09:00	Planning the week
		09:30	Analysis of first QGDP estimates by production approach for the period 2010-2012 in current prices
		10:30	Coffee break
		11:00	Analysis of first QGDP estimates by production approach for the period 2010-2012 in current prices - continuation
		12:00	Lunch break
		13:15	Analysis of first QGDP estimates by production approach for the period 2010-2012 in current prices - continuation
		14:30	Coffee break
		15:00	Analysis of first QGDP estimates by production approach for the period 2010-2012 in current prices - continuation
		16:30	Preliminary conclusions
2	KAS	09:00	Analysis of first QGDP estimates by production approach for the period 2010-2012 in current prices - continuation
3	KAS	09:00	Analysis of first QGDP estimates by expenditure approach for the period 2010-2012 in current prices
4	KAS	09:00	Analysis of first QGDP estimates by expenditure approach for the period 2010-2012 in current prices
5	KAS	09:00	Analysis of first QGDP estimates by expenditure approach for the period 2010-2012 in current prices
6	KAS	09:00	Analysis of first QGDP estimates by production and expenditure approaches for the period 2010-2012 in constant prices
7	KAS	09:00	Analysis of quarterly statistical and administrative data sources collected for 2013
8	KAS	09:00	Define the methodology for QGDP estimation for 2013
9	KAS	09:00	Define the methodology for QGDP estimation for 2013 _continuation

10	KAS	09:00	Discussion concerning the main problems of QGDP development
		10:30	Coffee break
		10:00	Recommendations for further activities
		12:00	Lunch break
		13:15	Debriefing: Experts, Component Leader and RTA

Annex 2. Persons met

KAS:

National Accounts

Ilir Berisha, director of Economic Direction,

Xhevrie Fetahu, head of National Accounts Department,

Ylli Shala, Ilir Mazrekaj, Emine Bajrami Florije Krapu, Nysret Sylejmani, Besim Mehmeti

SBS and Business register

Hysni Elshani, head of Economic Statistics Department and Muhamet Kastrati, expert

RTA Team:

Per Knudsen, RTA

Nora Zogaj, RTA Assistant