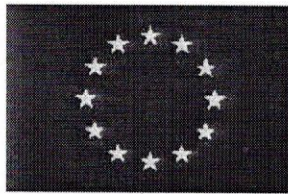


TWINNING CONTRACT

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**Support to the State and Entity Statistical
Institutions, phase VI**



MISSION REPORT

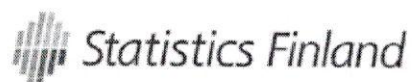
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**Activity 1.3
Plan for ESA 2010 updates II**

Mission carried out by
Mika Sainio, Statistics Finland
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01-05 June 2015

Version: Final



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List of Abbreviations

BHAS	Agency for Statistics of Bosnia and Herzegovina
BiH	Bosnia and Herzegovina
CBBH	Central Bank of Bosnia and Herzegovina
EC	European Commission
EU	European Union
FBiH	Federation of Bosnia and Herzegovina
FIS	Institute for Statistics of Federation of Bosnia and Herzegovina
MS	EU Member State
RSIS	Institute for Statistics of Republika Srpska
RTA	Resident Twinning Adviser
TOR	Terms of Reference

1. General comments

This mission report was prepared within the Twinning Project "Support to the State and Entity Statistical Institutions, phase VI". It was the third mission to be devoted to national accounts within Component 1 of the project.

The purposes of the mission were:

- to continue the analysis of main differences between previous and new ESA manual and to identify areas relevant for updating in the BiH National Accounts,
- to analyse the requirements of the data transmission programme, and
- to develop the practical plans for implementation of ESA 2010, including technical data transmission issues

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 Bosnia-Herzegovina and which highly facilitated the work of the consultants.

The views and observations stated in this report are those of the consultants and do not necessarily correspond to the views of EU, BHAS, FIS, RSIS or Statistics Finland.

2. Assessment and results

ESA 2010 implementation plans

The status of ESA 2010 implementation plans was analysed. In the previous mission, two drafts were prepared for capitalisation for R&D and for non-life insurance. BiH authorities presented two new implementation plans drafted as a follow-up work of that mission: capitalisation of military expenditure and output for own final use for market producers. Minor modifications were done for those drafts.

Experts presented a possible outline for the current and future development of national accounts in BiH. The idea is to take a gradual approach, where the short-term development would focus on the data sets currently compiled by BiH authorities and which would primarily contain transition issues (from ESA95 to ESA 2010), and the long-term development would cover issues concerning areas not compiled yet (e.g. sector accounts). Short-term ESA 2010 implementation plan – as it looks at the moment - would cover capitalisation of R&D, output for own final use for market producers, non-life insurance, capitalisation of military expenditure, SDMX implementation and improvements for calculation of consumption of fixed capital. It was agreed that the compilation of FISIM would also be on the short-term plan.

It was noted that the results from regional IPA project would also impact the final content of the short-term plan. It was agreed that in any case there will be only one short-term plan, even if preparations and planning has been made in two parallel projects. Concerning time-table, it was agreed to set year 2017 as a preliminary goal for the dissemination of new ESA 2010 data. However, the developments in the regional IPA project may also impact this timetable. The preparations and planning for short-term plan will be in final phase at the time of next mission, Activity 1.4.

BiH authorities reported on the progress on co-operation group to be formed between statistical institutions, CBBH and other stakeholders. It was clarified that only one group is being formed, to deal with both ESA 2010 issues and sector classification issues. The importance of that group was underlined, and it was reminded that all ESA 2010 implementation plans should be discussed in the

group once it is in place. The group is also important for the longer-term development of national accounts, which requires the establishment of co-operation arrangements and the definition of division of duties between institutions.

Perpetual Inventory Method (PIM) and consumption of fixed capital

Experts presented the general background and requirements of PIM model, including gross capital stock, net capital stock, consumption of fixed capital, and retirements of assets. It was highlighted that the PIM model always provides estimates, not exact data, and sometimes discrepancies occur when PIM data is compared to other statistical sources. Experts recommended taking a gradual approach when the development of PIM is started: begin from very aggregate level to test the calculation of different variables, and after the model is working, introduce more details with possibly different service lives and different depreciation profiles: breakdowns by assets types, industries, sectors.

Practical excel examples on the calculation of gross capital stock, net capital stock, and consumption of fixed capital were presented, for both linear and geometric depreciation profiles. The application of different formulas related to PIM model was explained. The challenges related to the estimation and the use of initial capital stock were presented. It was noted that the geometrical profile is simpler to implement.

BiH authorities presented preliminary calculations made in the context of regional IPA project. So far the results have not been analysed in more detail. As a next step, BiH authorities will receive feedback from the experts of that project. The problems relate to e.g. the short length of available investment time series. No estimation of initial capital stock has been done so far.

BiH authorities presented the current situation concerning the current compilation practices. For corporate activities, the consumption of fixed capital is calculated using data from financial statements. For public services, such data is only partially available and therefore estimates based on fixed percentages of value added and intermediate consumption are applied. It was concluded that on the basis of current compilation practices, more progress is needed for public services.

Non-life insurance

As a follow-up from previous mission, the ESA 2010 changes related to non-life insurance were discussed. BiH authorities presented the results from inquiries related to floods in 2014. It was concluded that according to the results, the issue of the treatment of catastrophic losses in the calculation of non-life insurance output is in practice relevant for BiH. Insurance claims had increased for some units, having an effect also on the aggregate figures.

Experts introduced the ESA2010 manual non-life insurance paragraphs in case when a catastrophe occurs, along with guidance on how to calculate adjusted claims in accordance with ESA 2010. An example on the use of insurance corporations' data of equalization reserves was presented. The outcome is that when the change in equalisation reserves/provisions is taken into account when calculating non-life insurance adjusted claims, this may already take into account also the claims related to catastrophes, and no additional adjustments would be required. Experts recommended to carry out further investigation on insurance corporations' data, and to use data on equalization reserves, if possible.

ESA 2010 activity plan on non-life insurance was updated according to the discussions during the meeting. The timing of making the methodological changes was discussed, and the experts recommended making it in the same time with other ESA 2010 changes, even though the issue of floods of 2014 would be possible to deal with already earlier.

Technical aspects of SDMX introduction

Experts presented a straightforward way to produce SDMX tables using excel spreadsheets, csv. format files and SDMX converter. SDMX converter tools CLI (command line interface) and GUI (graphical user interface) are provided by the SDMX consortium sdmx.org, and required mapping and DSD (data structure definition) files are provided by Eurostat. The idea behind this approach is that it avoids the use of excel-conversion templates that, according to current plans, Eurostat will be maintaining only for a limited time.

National accounts datasets should be transformed to reporting table format. The correct dimensions for each reporting table can be found from the mapping files provided by Eurostat. From an Excel sheet that has the transmission programme dimensions and codes, csv. files can be easily obtained and inserted to the SDMX converter. Using the CLI version of the SDMX converter a more automated production of SDMX tables can be obtained, but also using the GUI version of the SDMX converter is possible. Both of the versions require the data part file (csv.), the header file, DSD file and mapping file.

The experts recommended production of an Excel (or database) table containing SDMX reporting dimensions and codes, on the basis of table to be delivered by Statistics Finland. After that BiH authorities could test the table by filling it with some of national accounts data of BiH, and convert it into csv-file, and convert it further into SDMX format. As a first step, the conversion into SDMX should be made using GUI converter, but in the longer run CLI is recommended to be taken in to use in order to automate the production process.

ESA 2010 Transmission programme of data – Assessment of the current situation and possible ways forward

ESA 2010 transmission programme was gone through table by table and discussion of the problematic points was conducted. For some tables, BiH already fulfils significant part of the requirements: for example for table 1 on main aggregates, the data covers over 90 % of the required variables. In many parts of the transmission programme, there are big challenges, notably related to sector accounts and supply and use tables, and timeliness for quarterly data. However, for some parts there are useful pre-requisites already in place, for example for regional accounts where the current entity-level data can provide a basis for calculations.

Experts presented views on the fulfilment of transmission requirements of current EU member states in practice. It was explained that there seems to be different approaches between countries in respect of situations where countries have applied for derogations for transmission programme, and also in respect of different flags (metadata that indicates whether data is e.g. provisional, based on estimates, or confidential) that are attached to the data transmitted to EU.

It was noted that the overlap of IMF-GFS data with several ESA 2010 tables (e.g. T2, T9, T11, T27) is important in the context of creating future co-operation arrangement between statistical institutions and CBBH. More generally, it was concluded that the fulfilment of also many other requirements necessitate the creation of appropriate means of co-operation between all relevant institutions.

Calculation of price indices for gross fixed capital formation, using data from supply and use tables (SUT)

The experts presented briefly the framework of supply and use tables, as well as an approach to compile national accounts deflators based on SUT. Data sources, methods and problematic issues were discussed. The way to derive price indices for investments (gross fixed capital formation) for national

accounts was presented: the implicit price/volume indices from the supply and use tables system are used in the national accounts compilation system.

The situation of BiH in the compilation of constant price national accounts was explored. BiH authorities also presented experiences from 2009 SUT experimental calculations.

It was concluded that progress in the area of constant price national accounts could be achieved by using information on product level. The experts recommended that if SU tables are to be developed by BiH authorities, this should start with compilation of current price figures at a relatively aggregate level.

Preparations for next activities

The content of next mission in the component, Activity 1.4 ESA 2010 updates III, was discussed. The timing of the mission is preliminary on 21.-25.9.2015.

3. Conclusions and recommendations

The preparation of a short-term ESA 2010 implementation plan, which focuses on the implementation of new ESA 2010 methodology in GDP/GNI relevant issues, is advancing according to timetable. Most elements of the plan have been identified, and draft work plans have been prepared for four issues. The final content and timetable of the short-term plan will be finalised in the coming missions. It was preliminary concluded, that ESA 2010 based figures could be published in 2017.

The analysis of ESA 2010 requirements as regards data transmission indicates, that there are major challenges concerning several data sets. For example, non-financial sector accounts data is not compiled at the moment, and the responsibilities in this area are not clear. The solving of these issues in the longer run requires the establishment of appropriate means of co-operation between all relevant institutions. In this context, experts underlined the importance of the working group that is being formed to deal with sector classification and ESA 2010 implementation issues.

It was confirmed that the calculation of non-life insurance output is a relevant ESA 2010 transition issue for BiH. It is recommended to implement the changes related to this simultaneously with other ESA 2010 changes. Specifically, BiH authorities were recommended to calculate insurance claims utilising data on insurance corporations' equalisation reserves/provisions, if such data is available.

The calculation of consumption of fixed capital has been identified as an important area to be developed. Experts recommended taking a gradual approach when the implementation of PIM is started: begin from a very aggregate level to test the calculation of different variables.

Significant progress is possible in the short run for SDMX reporting of national accounts data. It is recommended to start testing an excel-csv-SDMX conversion approach, which avoids using excel-conversion templates provided by Eurostat, which will be maintained only for a limited time.

Action	Deadline	Responsible person
Prepare a draft ESA 2010 implementation plan, including FISIM calculation	September 2015	all authorities (BHAS, FIS, RSIS, CBBH)
To continue the establishment of a working group for ESA 2010 implementation and sector classification	As soon as possible	BHAS as coordinator
Investigate the non-life	September 2015	BHAS, FIS, RSIS

insurance companies' data on equalisation reserves, in order to choose the method to implement ESA 2010 changes related to the calculation of non-life insurance output		
Test the excel-csv-SDMX approach to implement the technical requirements of national accounts data transmission	September 2015	BHAS
Test the calculation of consumption of fixed capital using PIM model at an aggregate level	November 2015	BHAS, FIS, RSIS

Annex 1. Terms of Reference

EU Twinning Project BA-12-IB-ST-01
Terms of Reference

Component 1: National Accounts
01th – 05th June 2015

Banja Luka, Veljka Mleđenovića 12 d, – Republika Srpska Institute of Statistics

Activity

1.3 Plan for ESA 2010 updates II

Benchmarks

- Delimitation of market and non-market producers according to the ESA 2010 criteria completed by 8th project quarter
- Staff in three statistical institutions trained to implement SNA 2008/ESA 2010 by 8th project quarter
- Guidelines for implementation of institutional sectors according to SNA 2008/ESA 2010 available by 8th project quarter
- Plan for practical implementation of ESA10 made by 8th project quarter

Purpose of activity

The expected activities are:

- Main differences between previous and new manual (ESA 2010)
- Areas relevant for updating the BiH National Accounts
- Drafting of plan for the practical implementation (what, how, who, when)

Expected output

- Presentation of differences between new and old manual (ESA 2010) made
- Issues to be updated in the BiH NA identified
- Draft plan on implementation of updates made

Agenda

Location: Banja Luka, Veljka Mleđenovića 12 d

Time	Day	Place	Event	Purpose / Detail of event
09:00-12:00	Monday, morning		MS experts briefing with the RTA	To discuss the mission, introduce the experts to each other, discuss previous experience
13:00-15:30	Monday, afternoon		Workshop with BC Experts	Welcome and Introduction EU requirements in area of implementation of the ESA 2010 – Manual on the changes between ESA 95 and ESA 2010 – Plan for implementation of ESA 2010 in national accounts of BiH, prepared by BiH experts BC participants and MS experts
8:30-15:30	Tuesday, morning		Workshop with BC Experts	EU requirements in area of implementation of the ESA 2010 – Perpetual Inventory Method– Consumption of fixed capital BC participants and MS experts
	Tuesday, afternoon		Workshop with BC Experts	Non – life insurance, analysis of available data and relevancy of implementation ESA 2010 BC participants and MS experts
8:30-15:30	Wednesday, morning and afternoon		Workshop with BC Experts	ESA 2010 Transmission programme of data – Assessment of the current situation and possible ways forward, technical aspect of SDMX introduction. BC participants and MS experts
	Thursday, morning		Workshop with BC Experts	Calculation of price indices for Gross fixed capital formation, using data from SUT BC participants and MS experts
8:30-15:30	Thursday, afternoon		Workshop with BC Experts	Preparation for the next mission (list of activities to be done before the next mission) BC participants and MS experts

8:30-13:00	Friday, morning	Meeting with BC Experts	Presentation of results, Agreement on report. Implications for the next activities (missions) BC participants and MS experts
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Annex 2. Persons met

BHAS:

Dijana Mlikota, Assistant Director for Macroeconomic Statistics

Edina Kozić, Head of National Accounts Department

Rade Čolaković, Senior Officer

Vanja Erak, Junior Officer

Adnan Gušić, IT expert (via videolink)

FIS:

Nermina Ibrišević-Ademović, Head of National Accounts Department

Zumreta Dugalija, Senior Adviser

Šejla Šehović-Karšić, Senior Adviser

RSIS:

Jelena Đokić, Assistant Director in Sector for National Accounts, Registers and Sampling

Rada Radanović, Head of National Accounts Department

Dijana Maleš, Senior Associate

Žana Alagić, Senior Associate

Jadranka Luburić, Senior Associate

Milka Ciganović, Senior Associate

Mladen Marić, IT expert

RTA Team:

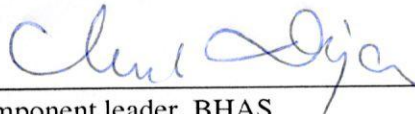
Søren Leth-Sørensen, RTA

Haris Imamovic, interpreter

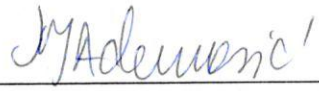
Signatures

For the approval of the contents of this report, representatives from BHAS, FIS and RSIS as well as experts and the RTA sign here:

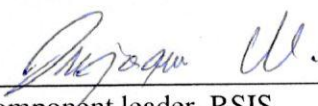
Date: 05.June.2015.




Component leader, BHAS




Component leader, FIS



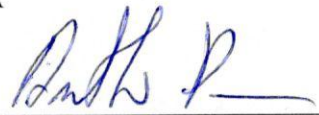
Component leader, RSIS



RTA



MS Expert



MS Expert