

# TWINNING CONTRACT

BA 15 IPA SR 01 17

## Support to the reform of the statistics system in Bosnia and Herzegovina



## MISSION REPORT

### Activity 1.4: Data sources III

#### Component 1: National Accounts

Mission carried out by  
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## List of Abbreviations

BC expert	Beneficiary Country expert
BD	Brcko District
BHAS	Agency for Statistics of Bosnia and Herzegovina
BiH	Bosnia and Herzegovina
CoE	Compensation of Employees
EU	European Union
FBiH	Federation of Bosnia and Herzegovina
FIS	Institute for Statistics of Federation of Bosnia and Herzegovina
FISIM	Financial Intermediation Services Indirected Measured
GFCF	Gross Fixed Capital Formation
GVA	Gross Value Added
INSEE	Institut national de la statistique et des etudes economiques
LFS	Labour Force Survey
MS expert	Member State expert
NACE	Nomenclature statistique des Activites economiques dans la Communaute Europeenne
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 EU Twinning Project "Support to the reform of the statistics system in Bosnia and Herzegovina". It was the fourth mission in the project and it was devoted to data sources identification on the regional level within Component 1 National accounts.

The purposes of the mission were:

- Follow up from the third mission
- Present and discuss the overview table of all available sources by NACE activities
- Discuss and analyses data sources for remaining regional categories which are foreseen according to Project component 1 (CoE, GFCF and employment data)
- Continue working of regional GVA
- Review of selected data

Expected output of activity:

- Data sources reviewed
- Suggestions made for how to handle data sources
- Input provided to the ToR of next activity

The consultants would like to express their thanks to all officials and individuals met for the kind support and valuable information which we received during the stay in Bosnia-Herzegovina and which highly facilitated the work of the consultants.

These 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, Statistics Denmark, INSEE, Statistics Finland and Croatian Bureau of Statistics.



## 2. Assessment

The fourth mission of the project was held in Sarajevo and was attended by the BC experts from all the statistical offices (BHAS, BD, RSIS and FIS) together with MS experts. The main aim was to examine and analyse of all available data sources which could be used in the process of setting up and compilation of regional accounts for all components planed in Project (GVA, CoE, GFCF and Employment data).

One of the recommendations from the last mission was reaching conclusion about the organisation of future work between all involved parties from BC's side (BHAS, RSIS, FIS and BD). BC experts informed MS expert about agreement they reached. All compilation processes will be organized according to MS experts' requirements with focus on multiregional units, in a way that all the three statistical institutes will prepare all needed inputs and compilations for their competence or work. Prepared data will be reviewed in joint working meetings, discussed and harmonised in common document/material which will be sent to MS experts as a result of particular phase of work.

Moreover, BC experts presented their findings about the years they choose to be as reference years. Calculation of ESA categories for the purpose of Regional Accounts within the EU Twinning project, Component 1 National Accounts will be done for 2015 and 2016.

### 2.1. Presentation and discussion the overview table of available data sources by NACE activities with focus of GVA

Timetable of the project implementation for component 1 is created in a way that, besides activity 1.1 – assessment of the current situation of National Accounts, following three activities were focused on the identification and analyses of all available data sources which could be used in the process of setting up and compilation of regional accounts (activities 1.2, 1.3 and 1.4 – Data sources).

During the activity 1.2 experts reviewed data sources for NACE activities A to F. Activity 1.3 was follow up with focus on data sources on NACE activities G -U, taxes and subsidies.

At the end of third mission (activity 1.3) MS experts' recommendation was to prepare an overview table which would consist all available data sources that could be used in the compilation process at one place. MS experts created framework for table and BC experts filled it with all relevant information at NACE division level for each of the three statistical institutions. Overview table was delivered to MS experts week before the mission.

At the mission, BC experts presented overview table (activity by activity) to MS experts, gave additional explanations, methodological background of mentioned data sources, advantages and weakness. MS experts are introduced with information about new data sources and surveys which have been carried out or planned to be implemented and could be considered as potential improvement in compilation process.

During the presentation of the overview table some minor mistakes are noticed and will be removed or corrected and the second version of table will be delivered to MS experts.

MS expert recommendation is to keep overview table updated and used it as a part of final report and methodological document which should be prepared at the end of the project.

## **2.2. Discuss and analyse data sources for remaining regional categories which are foreseen to according to Project component 1**

### **2.2.1 Employment in persons**

The MS expert talked about the concept of employment in persons used in the National Accounts. Number of employed is a headcount, meaning that only a person's main job is included. The employment in National Accounts is based on place of work – the domestic concept – opposite to the concept used in LFS which is the national concept – where the persons live.

The MS expert presented MS experience with compilation of employment data at national level. Based on the MS experiences and the available sources in BiH, the MS expert gave a recommendation on how to compile employment data at national and regional level.

The LFS was mentioned as a possible data source. There BC experts mentioned that the LFS has not been used as a main data source by the National Accounts. Years ago this source was analysed and back then it was found that the quality was insufficient for the needs of National Accounts. The BHAS experts mentioned that the population according to LFS is about 500.000 persons below the actual population in BiH and asked how to deal with that.\*

### **2.2.2 Compensation of employees**

The MS expert briefly talked about the allocation principles for CoE. The allocation principle is the same as for GVA and employment, which means that the allocation of CoE should be based on LKAU.

The available data sources for CoE were discussed. It was also mentioned, that contrary to the employment concept, the CoE includes CoE from both main jobs and from secondary jobs.

### **2.2.3 Gross fixed capital formation**

The MS expert talked about the allocation principles for GFCF. The main principle is that the GFCF should be allocated to the unit that owns the asset. However, for those enterprises that have more than one LKAU the GFCF should be allocated to the LKAU where the asset is used.

## **2.3. Treatment of FISIM in national and regional accounts**

Treatment of FISIM in national and regional accounts was one of the topic that experts discussed during the third mission. In report stands following: "At the moment, FISIM is not allocated to NACE activities in the annual National Accounts and instead of that, it is shown separately from the GVA. Therefore, it is not possible to make a regional allocation by activities before annual one is made, due to the needed consistency between national and regional accounts."



The MS expert prepared and presented Croatian experience in the process of FISIM calculation and its allocation. A short methodology of FISIM was presented (according to ESA 2010 and Manual on Regional Accounts), data sources for directly and indirectly measured output, intermediate consumption and gross value added for NACE 64.19 – Other monetary intermediation were shown. Moreover, formulas for calculation of internal and external reference rate is explained, calculation of FISIM produced in domestic economy by sectors (separately for loans and for deposits) is shown as well as calculation of Exports of FISIM for loans and for deposits.

Presentation will be sent to BC experts in following week.

It is recommended that currently calculated FISIM (which is shown separately below the GVA as negative item due the fact that it is not allocated to user sectors) should be adjusted in accordance with changes in the NACE 64 that will appear in relation to the figures of regional accounts.

### 3. Recommendations and conclusions

#### 3.1. Recommendations

After the fourth mission has been carried out, MS experts recommended following:

1. It is important to keep agreement about the joint meetings between all involved parties (BHAS, RSIS, FIS and BD) active. The main purpose of those meetings is to discuss and analyse prepared materials with concrete arguments and methodological background. All data in the compilation process that will be prepared and sent to MS experts need to be shown in one mutual document and not sent separately for each of the three statistical institutions. All MS experts advices and recommendation about the following steps in compilation process could be discussed on those meetings as well as all other issues concerning exchange of data for multiregional companies between all three statistical institutions.

2. According to project timetable, two following missions are planned for setting up and compilation process of regional accounts. Due to the fact that missions last 3,5 day each (which is too short for actual compilation of data), MS experts recommended that following work could be organised in a way that exchanging of data, instructions, descriptions and requests and answers between BC experts and MS experts takes place via e-mail. In this way MS experts want to ensure that at the next mission first version of calculation for some NACE activities is available for analysis and discussion on possible problems and solutions.

3. Regarding the employment in persons the available sources are the LFS and the Labour Statistics. The recommendation from the MS expert is that the total number of employed should be based on the LFS. By using one data source for the compilation of the total employment double counting of persons is avoided. The recommended compilation method consists of the following steps:

a. First the employment must be adjusted to the NA concept. This is done by adding the persons who commute to the region in question from other regions and countries and subtracting the persons commuting to other regions and countries. The possible data sources is question no. 17 in the LFS questionnaire, where information about the place of work can be found. There is no available information about the number of persons living in other countries and commuting across the border. A possible data source to estimate that number could be the CoE paid from BiH to the rest of the world from the BoP statistics. The adjustment from the national to the domestic concept is not the only adjustment to be made. The following adjustments could be made, if there is any available information: Inclusion of employed persons below the age of 15; inclusion of employed persons on long term leave and inclusion of employed persons living in collective households. However, most of the MS that use LFS don't make these adjustments.

b. The second step is to allocate the number of employed persons to NACE activities. The distribution of the employment by NACE activity in the LFS is usually unreliable.



Therefore it is recommended that the number of employees by NACE activity should be based on other sources. The data sources "Persons in paid employment" from the Labour statistics could be a possible data source for this purpose. This source should provide information about the number of employee jobs by NACE activity (which is not currently available) and the number of jobs should be adjusted to the number of person if possible.

- c. The recommendations regarding self-employment by NACE activity is LFS.

However, if LFS source is not reliable, other sources could be considered.

During the mission it was mentioned that the population according to LFS is lower than the actual population in BiH. As a consequence of that the number of employed is probably underestimated in the LFS. The best way to deal with this is to multiply the employment rate from the LFS by the actual population in BiH.\*

4. Regarding the CoE the possible data source is the data source RAD-1 from the Labour Statistics. The data source covers all NACE activities and provides data about gross salaries by LKAU. This source is appropriate for regional allocation purposes.

5. Regarding the GFCF the possible data source is the investment survey. This source is collected at enterprise level. In the survey, there is information about where the investments have actually been made. This information could possibly be used for regional allocation of GFCF for multiregional enterprises.

### 3.2 Conclusions and next steps

According to MS experts recommendation, following phase of the work will be mostly carried out via emails between BC experts and MS experts.

Deliverables that should be prepared and sent to MS experts before next mission are following:

1. BC experts have to update and correct minor errors in overview table of available data sources by NACE activities for regional gross value added. New version of updated table should be delivered to MS experts by 17. September 2018.
2. BC experts from FIS need to prepare table with information about the number of business entities which have local kind of activity units on the territory of other entity and BD for NACE activities A to (including) F according to the information from Statistical Business Register. Table should be delivered to MS experts by 17. September 2018.
3. Current data of calculated output, intermediate consumption and gross value added for years 2015 and 2016 from national accounts should be delivered to MS experts. MS experts would like to receive mentioned categories by the entity statistical institutions and

total from the Agency for NACE A to (including) F plus NACE O on 2.digit level. Furthermore, for each NACE division all parties are asked to provide data for individual multiregional companies that have their LKAU on the territory different that main activity is registered (on the territory of other entity and BD) (output, intermediate consumption, gross value added, number of employees and number of LKAU). Data have to be prepared and sent to MS experts by 31. October 2018.

4. All available data sources regarding employment should be sent to MS experts, including data from LFS and employment data from the Labour Statistics. Also CoE paid to persons living abroad but who work in BiH from BoP statistics should be sent if possible. GFCF source data by NACE activity (1. digit level) and by type of asset should be sent. The data should be delivered by 31. December.

MS expert's findings and recommendations, which are part of this Mission report, are presented to BC experts and signed.\*

*\* RSIS does not agree with paragraphs with recommendations concerned LFS corrections and actual population number in BiH.*

RTA is informed about the agreements made.

**Deliverables:**

Action	Deadline	Responsible person for delivery to MS experts
Update the overview table of all presented sources by NACE activity (BHAS, RSIS, FIS and BD). Deliver the table to MS experts	17. September 2018	Brana Taraba-BHAS
Prepare a list with number of business entities (total and multiregional which have LKAU on the territory of RSIS or BD) for NACE A – (incl.) F for FIS entity	17. September 2018	Brana Taraba-BHAS
Deliver current data on P1, P2 and GVA for entities and Agency from NA (2015 and 2016) at division level + individual data on multiregional companies (P1, P2, GVA, number of employees, number of LKAU), NACE A-(incl.) F and NACE O	31. October 2018	Brana Taraba-BHAS
Send all available sources regarding employment to Danish MS expert	31. December 2018	Brana Taraba-BHAS

Send GFCF data by NACE activity and type of asset to Danish MS expert	31. December 2018	Brana Taraba-BHAS
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### 3.3 Other

To avoid different communication issues, all parties concluded that the way of communication with MS experts is as follows: All prepared and collected materials from entity statistical institutions should be delivered to regional project coordinator from BHAS. Regional project coordinator from BHAS is in charge of forwarding of mentioned materials to MS experts with RTA and other parties (RSIS, FIS and BD) in copy.



**Annex 1: Term of Reference****Terms of Reference****EU Twinning Project BA 15 IPA ST 01 17****Component 1: National Accounts****04-07 September 2018****Hosting Institution: BHAS, Zelenih beretki 26, Sarajevo****Activity 1.4: Data sources III****1. Mandatory results and benchmarks for the component**

Mandatory result:

- Regional accounts, as a subsystem of national accounts, introduced and regional indicators at NUTS 2 level produced in line with EU standards by 8<sup>th</sup> project quarter

Benchmarks:

- Data sources identified and adjusted for regional accounts by 5<sup>th</sup> project quarter
- First test version of regional accounts at NUTS 2 level produced by 8<sup>th</sup> project quarter
- First version of basic regional indicators produced by 8<sup>th</sup> project quarter (Gross value added, Gross domestic product, Gross fixed capital formation, Employment data, Compensation of employees data)
- Quality report for regional accounts developed by 8<sup>th</sup> project quarter

**2. Purpose of the activity**

- Follow up from the 3<sup>rd</sup> mission:  
Present and discuss the overview table of all presented sources by NACE activity
- Discuss and analyse data sources for remaining regional categories which are foreseen according to Project component 1 (CoE, GFCF and employment data)
- Continue working on regional GVA
- Review of selected data
- Treatment of missing data

**3. Expected output of the activity**

- Data sources reviewed
- Suggestions made for how to handle data sources
- Input provided to the ToR of next activity

## **Annex 2: Persons met**

### **Agency for Statistics of BiH (BHAS)**

- Dijana Mlikota, Assistant Director for Macroeconomic Statistics
- Edina Kozić, Head of National Accounts Department
- Brana Taraba, Senior Adviser for Regional Accounts
- Senija Fačić, Head of the Branch Office Brcko

### **Institute for Statistics of Federation of BiH (FIS)**

- Nermina Ibrišević-Ademović, Head of Department
- Danijela Bujak-Buzuk, Senior Adviser for National Accounts
- Šejla Šehović-Karšić, Senior Adviser for Investment of fixed assets
- Belma Karadža, Senior Associate for National Accounts
- Almira Muraspahić, Senior Associate for National Accounts
- Sanjin Čengić, Senior Associate for National Accounts

### **Institute for Statistics of Republika Srpska (RSIS)**

- Rada Radanović, Head of National Accounts Department
- Dragana Kunovac, Senior Associate for State and Financial Sector - Project Component Coordinator for Regional Accounts
- Dijana Maleš, Senior Advisor for Investments, National Assets and Fixed Capital Consumption

### **MS Experts**

- Natalija Krunić, Croatian Bureau of Statistics
- Ulla Ryder Jørgensen, Statistics Denmark

### **Twinning Project Administration**

- Katja Møller Hjelvang, RTA
- Đemka Šahinpašić, RTA Assistant
- Haris Imamović, Interpreter

**Signatures**

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

Date: 7<sup>th</sup> of September 2018


  
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Component leader, BHAS

  
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Component leader, RSIS

  
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MS Expert

  
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