TWINNING CONTRACT

Support to the State and Entity Statistical Institutions, phase V

Bosnia-Herzegovina



MISSION REPORT

on

Extended household budget survey (EHBS)

Component no 2, Activity 2.7

Mission carried out by: Giorgio Della Rocca, Istat Leonardo Tininini, Istat

9-13 December 2013

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List of Abbreviations

BiH	Bosnia and Herzegovina		
BHAS	Agency for Statistics of Bosnia and Herzegovina		
EHBS	Extended Household Budget Survey		
ESS	European Statistical System		
FIS	Institute for Statistics of Federation of Bosnia and Herzegovina		
HBS	Household Budget Survey		
LSI	Local Statistical Institutions		
RSIS	Institute for Statistics of Republika Srpska		
Istat	Italian National Institute for Statistics		
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 V". It was the fifth mission devoted to EHBS within the Component 2 of the project.

The concrete objectives of the mission were:

- 1. To finalize dissemination plan for the EHBS including necessary steps, activities and relation to users
- 2. Workshop on the prepared dissemination strategy
- 3. Adjustment of the existent HBS Data Warehouse with EHBS 2011 results

We would like to express our thanks to all officials and individuals met for the kind support and valuable information received during the stay in Bosnia-Herzegovina, and which highly facilitated our work.

This views and observations stated in this report are those of the consultant and do not necessarily correspond to the views of EU, BHAS / FIS / RSIS or Istat.

2. Assessment and results

Introduction

Main objectives of the mission were to provide the Bosnian team with the capability to:

- 1. update Data Warehouse for future HBS
- 2. harmonize HBS and EHBS result in Data Warehouse
- 3. prepare dissemination plan for future survey

Current situation of process

During the previous missions we proceeded to complete the process of Editing & Imputation on the data related to the HBS 2011. The main objectives of this mission was to support the Local Statistical Institutions (Agency for Statistics of BiH, Institute for Statistics of Federation of BiH, Institute for Statistics of Republika Srpska, in the following collectively referred to as LSIs) in several activities related to the dissemination of the EHBS 2011 results. More specifically:

- 1. Harmonize 2011 EHB Survey micro data with the 2008 HB Survey
- 2. Discussing the EHBS 2011 dissemination plan with LSIs participants, along with the required preliminary steps and activities
- 3. Defining a dissemination strategy
- 4. Identifying the data to be disseminated according to the users' needs as well as EU requirements;
- 5. Adding the EHBS 2011 results to the existing HBS data warehouse, thus providing an integrated solution for the dissemination of both surveys.

The main activities carried out during the mission (all involving both Istat experts and local participants) were the following:

- 1. Check of the IstarMD installations (in terms of both application and database components) owned by each of the three LSIs
- 2. Review of the main concepts underlying the IstarMD web data warehouse.

- 3. Review of the dissemination plan in terms of objects, classifications, and corresponding combinations (tables) and definition of the EHBS 2011 dissemination plan in IstarMD.
- 4. Review of the ETL process and definition of the aggregation rules (rules to compute the aggregate data/statistical tables to be disseminated starting from microdata) by using the Foxtrot component of IstarMD.
- 5. (whenever necessary) transformation of the microdata (e.g. by the reclassification of some variables, renaming of some columns, etc.) to exactly match the classifications defined in the dissemination plan and the IstarMD ETL process requirements.
- 6. Microdata aggregation by means of the IstarMD ETL module

The check of the various IstarMD installations was not possible for RSIS: due to a virus infection of the server used, the IT staff could not recover the customized version of IstarMD data and application. It was therefore agreed that RSIS IT staff would cooperate after the mission with the Agency IT staff, to recover the required "Serbian-English" version of the system, and later apply the required customizations of the IstarMD user interface (e.g. logo, institution name, etc.).

Although a detailed explanation of all IstarMD features was obviously beyond the scope of the mission, it was agreed that a review of the main concepts underlying the IstarMD web data warehouse was required, as most current participants were not involved in the previous HBS dissemination activities. The main conceptual and technological components of the system were therefore discussed with LSIs participants, by using some practical examples taken from the previous HBS dissemination plan. In this way LSIs participants were made able to manage the data to be disseminated in terms of objects, classifications and combinations thereof (tables) by using IstarMD administration tools.

Meanwhile were created two new micro data files, one with the qualitative data of the single components called Individuals, each other with qualitative and quantitative data for each household called Household.

In order to harmonize the data with the structure of the data warehouse, necessary checks have been carried out on the nomenclature of the variables, classifications and data consistency. With the involvement of LSIs specific programs have been developed in order to solve some problems observed during this phase.

It was agreed a dissemination plan for EHBS that will guarantee a good harmonization with the previous HBS. The LSIs participants were able to autonomously insert (by using the IstarMD Foxtrot component) the combinations corresponding to the EHBS dissemination plan, as well as the aggregation rules, required to compute the aggregate data starting from the EHBS micro data. They were also able to compute the actual aggregate data by using the IstarMD ETL module and to fix some problems highlighted by the ETL process (typically related with incorrect modality codes, column naming, etc.).

3. Conclusions and recommendations

At the end of the mission a complete pre-release version of HBS+EHBS web data warehouse for the Agency and for FIS was obtained (the RSIS version of the system had to be delayed, because of the virus issue, already mentioned above).

Before the final deployment of the system(s) on the web, the pre-release versions should be made available on the respective Intranets to extensively check the data and fix possible problems related with them. Also, before the final deployment of the various system(s) on the web, the IT staff of each LSI should design a deployment architecture which is beyond the scope of the IstarMD system (e.g. reverse proxies, firewalls, etc.) and discuss it with ISTAT experts.

Furthermore, for safety reasons, some data, as well as some software components, should be completely removed from the system before Web deployment. In particular, the microdata in the database used by the ETL process and the administrative part (Foxtrot) of the IstarMD application should be completely removed.

Extended Household Budget Survey (EHBS) 9th to 13th of December 2013 Terms of Reference - Activity 2.7 EU Twinning Project BA 08-IB-FI-03 Veljka Mladjenovica 12d, Banja Luka

Component 1 Business Statistics

- 1.1. Statistical Business Register
- 1.2. Structural Business Statistics
- 1.3. Construction Statistics
- 1.4. Retail Trade Statistics
- 1.5. Tourism Statistics

Component 2 Extended Household Budget Survey

Component 3 Institutional Capacity

- 3.1. Long term strategy
- 3.2. Metadata and classification system development
- 3.3. Promotion of dissemination

Benchmarks

- A. Data collection for EHBS 2011 finished by 3rd project quarter
- B. Results from EHBS 2011 available by 5th project quarter
- C. Methodology and complementary documentation prepared on good quality data cleaning, analysis and dissemination of EHBS by 8th project quarter
- D. Statistical staff trained in analysis of EHBS by 8th project quarter

2.7. Activity Dissemination plan and dissemination of results of the EHBS

The expected activities are:

- ➤ Consultations in how to prepare dissemination plan for the EHBS including necessary steps, activities and relation to users
- ➤ Workshop on the prepared dissemination strategy
- > Consultations in identification of important data for users and to fulfill EU requirements
- ➤ Adjustment of the existent HBS Data Warehouse with EHBS 2011 results

Expected output

- > Staff capacity increased to be able to analyse available data and to produce a range of important indicators in a suitable way (dissemination means) for users including the EU
- > Staff able to prepare the Data Warehouse for future HBS
- > Staff able to use HBS and EHBS results in DataWarehouse
- > Staff able to prepare dissemination plan for future HBS

Explanation of the Expected outputs:

The Household Budget Survey in Bosnia and Herzegovina was conducted three times: in 2004, 2007 and 2011. It is a source of data for measurement of level and structure of consumption expenditure, poverty and living standard analysis, as well as for calculating of weights for consumer price indices and use in national accounts statistics.

The last survey was extended with two ad hoc modules on social inclusion:

- a) Social inclusion, migration and remitances and
- b) Health status and health services

It was an attempt to make a bridge to EU-SILC and to have data to produce some basic social indicators.

The Household Budget Survey in Bosnia and Herzegovina is very dependent on donor's support. It is the reason why the survey was only three times conducted and why its frequency was irregular.

For previous surveys there are some publications and dissemination tools which were used as an interpretation of the survey results, but they are not fully in line vith EU best practices. These publications could be revised, consolidated and amended according the plan proposed by experts. The updating of the existing Data Warehouse should be finalized in order to present main survey results to data users on the web sites of the statistical institutions. This plan proposed by experts should contain all necessary activities on survey dissemination preparation, deadlines and responsible persons.

List of Participants

Agency for Statistics of BiH

Edin Šabanović, Assistant Director in the Sector for Statistical Methodology, Standards,

Planning, Quality and Coordination

Dajana Mitrović, Senior Advisor for HBS

Jasna Hadzic, Head of the Sampling Method Division Senad Mujkić, Senior Advisor in Dissemination Sector

Neno Svjetlanović, Specialist in ICT sector

Institute for Statistics of Federation of BiH (FIS)

Mesuda Kamberović, Head of Price Statistics Division

Nermina Ibrišević-Ademović, Head of the National Account Division

Nataša Radović, Senior Advisor in ICT sector

Džemal Borovina, ICT

Institute for Statistics of Republika Srpska (RSIS)

Bojan Stanković, Senior Officer - implementation of standards and methodologies of

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Biljana Tesic, Senior Officer for Price Statistics

Nataša Gojković, Senior Officer for Data Confidentiality and Control of Data Disclosure

Experts

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Agenda

9 Dec (Monday) – 13 Dec (Friday)

Time	Event	Purpose / detail
9 Dec Start 12:00	Welcome	Introduction on the program of the week All participants
	Discussion on dissemination of survey results	BiH participants Experts
	Discussion	
	MS experts to present Eurostat requirements regarding the results on Household Budget Survey and to propose a realistic plan how to create dissemination plan for Bosnia and Herzegovina	Experts
	Discussion	
	Development of dissemination plan	BiH participants Experts
	Discussion	
	Existing Data Warehouse update with EHBS 2011 results	BiH participants Experts
	Discussions	
	Train local staff to use and maintain the existing Data Warehouse tools and prepare survey results in accordance with EU requirements and user needs.	BiH participants Experts
	Discussion	_
	Future work. Which topics? What to do for the next survey?	Possible suggestions BiH Participants Experts
13 Dec End 12:00	Debriefing	Other issues and evaluation of the Mission Experts BiH Participants