

## TWINNING CONTRACT

# Support to the State and Entity Statistical Institutions, phase V Bosnia-Herzegovina



## MISSION REPORT

on

Promotion of Dissemination

**Component no 3.3**


**Activity no 3.3.8**

Mission carried out by  
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&

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		 <b>STATISTICS DENMARK</b>
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## List of Abbreviations

BHAS	Agency for Statistics of Bosnia and Herzegovina
FIS	Institute for Statistics of Federation of Bosnia and Herzegovina
RSIS	Institute for Statistics of Republika Srpska
ToR	Terms of Reference
RTA	Resident Twinning Adviser

## 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 tenth mission to be devoted to dissemination within Component 3.3 of the project. As such it was the last mission in the component. As stated in the ToR for the mission the mandatory results of the component have already been reached.

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 we will very much like to congratulate our Bosnian colleagues with the results of the twinning project.

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 Denmark.

The concrete activities of the mission were:

The mission took place in 3½ days. The mission was conducted in Banja Luka. It was the 3<sup>rd</sup> mission of the component that took place in Banja Luka.

The twinning project still have the possibility of assigning one more activities in this area before it closes down at the end of December 2013, however, additional needs can only be identified as the BC starts the implementation process.

## 2. Assessment and results

As this was the last mission it was mainly designed to provide follow up on outstanding issues. Some of activities regarding output / dissemination databases (PX-Web)

### *Dissemination Strategy*

The dissemination strategy has been approved by all three entities and is now integrated with the general strategy which has been signed by the entities. What is left in this areas is to set up an action plan on which activities should be prioritized and when. The action plan should indicate which way to go to reach the goals in the strategy.

### *Usability testing*

The conclusions from the usability test carried out of the 3 BC websites were discussed. The work was done on the English web site company [usertesting.com](http://usertesting.com). The results of the test in June 2013 had given very useful feed-back to the dissemination staff. In general the possibilities for sourcing a local service similar to usertesting.com should be investigated. It should be emphasis that most of the information obtained from services like usertesting.com can also be gained from “thinking aloud tests”. This method was briefed and demonstrated during the twinning project.

The extraordinary workload due to the census made it difficult to implement the recommendations learned from the tests. However, some of the lessons had been incorporated into the design of the census website. Also analytic tools had been installed on the census website. In Srpska several changes to the navigation had been made and the year book had been split into multiple files for easier downloads. Also browser compatibility issues had been fixed. The Release calendar is now visible on the publication site, and the subjects have been harmonized.

### *Preliminary census data*

PX tables with the recently released provisional results of the 2013 census had been prepared. These tables show that the software is understood by the BC. The final and detailed results are not expected to be ready for dissemination in the nearest future (Up to two years is expected). Best practice for table design, for cooperation and responsibility between Dissemination, Statisticians and IT was discussed and it was suggested that continuous cooperation, in particular between Dissemination and Statistical Departments took place in a formalized way.

#### *Creation of files*

Various methods for building the files was discussed and demonstrated. It would have been more instructive to use population census pilot data but some conclusions are still clear.

The files can be created from scratch using PX-Edit and then adding the data later. Also excel can be used to create outlines / designs that can be used to create files in PX-Edit. Excel templates / examples with 2, 3 and 4 variables were prepared to illustrate how data is best structured for easy import to PX-Edit.

However, the easiest way is to create data and the basic metadata (heading, variables and variable values) directly from the database containing the “cleaned” census data. This can be done in cooperation between IT and Dissemination. A demonstration on a laptop on Danish dummy data using a MS-SQL database holding 11 million records shows that CSV / Excel files for initial creation (including aggregation) of a PX file can be done in less than 45 seconds. This clearly shows that the files can be created through “try and error” by dissemination and IT staff working together. Only when sitting down together creating files will the outstanding issues become clear. This should therefore happen as soon as possible.

#### *Database tables versus printed publications*

Tables produced to the database should be as detailed as the confidentiality permits and at the same time be comprehensible for the users: a max of 5-6 dimensions/variables could be a reasonable guideline. One should not try to enter tables that are only suitable for books. However if there are good reasons for designing specific tables to a book, tables that are not multidimensional cross tables, they can be printed with a link to the tables in the database where more data can be found. This should not prevent the design of multi dimensional tables to Px-Web.

#### *Lack of resources*

During the discussions there was a general concern that a dissemination database would just be an additional task for an already overworked staff. This is an obvious and legitimate concern. However, it is often easier to get funding to improve and further develop something that is already being used and appreciated by users.

#### *Support for multiple languages*

During the mission a minor issue with PX-Edit’s support of the special alphabets used in Bosnia and Herzegovina was identified. It was demonstrated how the problem could be circumvented. The work around is okay for dissemination of census results but would not work in day production. The Agency for Statistics of Bosnian and Herzegovina is by law not allowed to consider software that does not support the 3 official languages of Bosnian and Herzegovina. Statistics Finland has therefore made changes to the PX-Edit software so that it fully supports the 3 official languages. The updated version is available from [www.jesperellemose.dk/pxedit](http://www.jesperellemose.dk/pxedit).

### 3. Conclusions and recommendations

This was the last mission in the component on dissemination. In general all the tasks originally set out in the twinning project regarding dissemination has been concluded. This makes this part of the twinning project successful.

The following recommendations can be provided:

- Set up action plans for realizing the goals of the dissemination strategy
- Testing of dissemination platforms (paper and especially internet) should be prioritized
- User satisfaction and web metrics should be continuously monitored
- Ambitions should be matched with resources – it is better to do what you can than await the perfect solution
- Written design guides, standards for metadata and procedures adopted
- PX-Web / PX-Edit should be implemented across all the institutions in Bosnian and Herzegovina – the Twinning project can still finance the initial procurement costs
- Establish a formal working group to work on a dissemination database
- A division of labour and responsibilities regarding production of PX-files between Dissemination, Statistical units and IT is to be agreed

#### *Formal group for implementation of dissemination database*

It is suggested that a formal group is established with dissemination representatives from each entity. The group should take initiative and formulate a 2-year plan for filling the database to be agreed. The plan should contain a prioritized list of statistical areas to be entered during the period, - fx 1) the preliminary results from Census, 2) Demography, 3) Macro economics (CPI, Foreign trade,) how many tables, and the expected resources required to fulfill the plan.

The plan should be presented to the management. A demo of the database, showing the possibilities could also be presented to the management when around 20 tables are ready.

#### *Organization of work*

It is recommended that a division of work and responsibilities between Dissemination, Statistical units and IT is agreed very soon. Experience from Statistics Denmark and recommendations on how to share the responsibilities were discussed. It is advised that continuous cooperation takes place between Dissemination and Statisticians - and even IT should be involved in the setting up of the database and the tools. IT should also be responsible for making sure a back-up of the database is taken with regular intervals.

#### *Written procedures / design manuals*

Both in terms of organizing the work and in relation to doing the actual work development of written procedures are recommended. This use of documentation and established procedures is also recommended by the dissemination strategy and the overall strategy for the statistical system in Bosnia and Herzegovina.

It is tempting and logically appealing to prepare procedures / guidelines before the actual work on a dissemination base begins. However it is a balance between gaining momentum through “learning by

doing” and not getting the project off the ground because the focus of getting the job right the first time is too big.

*Documentation to be linked to database*

It is recommendable that all tables are linked directly to methodological documentation. This was done nicely in the files prepared with the preliminary census results. Again it should be noted that the EU code of practice expects documentation to be available on the internet for each statistics. As it seems that quality descriptions and metadata will not be stored in Colectica as otherwise recommended by the twinning project – it’s not clear what IT solution that will be available for this. However a simple link to current methodological information will be easy to implement while an alternative strategy is decided and implemented. Again by our opinion it is important to get started instead of waiting for the perfect automated system.

## **4. Next Mission**

This was the last mission in the twinning project on dissemination. A new twinning project is currently being tendered. It is not expected to include activities on dissemination. If a decision is made to implement PX-Web a “setting to work” mission can be scheduled from December 9. But to be feasible this must be a working mission.

**Dissemination**  
**26<sup>th</sup> November 2013 to 29<sup>th</sup> November 2013**  
**Terms of Reference - Activity 3.3.8**  
**EU Twinning Project BA 08-IB-FI-03**  
**Institute for Statistics of Republika Srpska of BiH**  
**Veljka Mladjenovica 12, 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) Staff trained in electronic dissemination by 8<sup>th</sup> project quarter
- B) Dissemination strategy prepared by 8th project quarter

**Activity 3.3.8** - Follow up on the work done on dissemination

**Background:**

Component 3.3 Promotion of dissemination has concluded 8 missions in Bosnia and Herzegovina and study visit to Denmark. Originally 8 missions were planned in the component. Through unallocated savings in the budget two additional missions (3.3.9 and 3.3.10) were dedicated to training in PC-Axis / PX-Web support the Benchmark C (Planning for the building of a comprehensive dissemination database).

The mandatory results for 3.3. *Promotion of dissemination* where defined as:

- Dissemination strategy prepared by 8th project quarter
- Staff trained in electronic dissemination by 8th project quarter

During two mission conducted in Banja Luka (October 2012 – Ellemose Jensen & Stefansson and April 2013 Zangenberg and Stefansson) a framework for a dissemination strategy was

prepared. The strategy was agreed by the relevant parties. Thereby the first mandatory result of component 3.3 was accomplished.

Activity 3.3.5 in April 2013 (Interactions with users – Ellemose Jensen & Wulff) made a number of recommendations for improving the websites of the statistical actors in Bosnia and Herzegovina. Thereby training the staff in best practices related to electronic dissemination (web sites). This activity supported the second part of the mandatory results.

The last mission in the component is therefore to be seen as a possibility for the involved staff to ask additional questions to the issues already covered during the twinning project. Also any new staff recruited since the beginning of the project can get an opportunity to familiarize themselves with the material.

### **Activities to be undertaken in preparation for the mission**

- Familiarize BiH staff with the findings from the assessment activity in march 2012
- Prepare a status of the dissemination strategy and its current implementation
- Prepare a status of planned or already done web site improvements
- Prepare a status of PX-Web implementation

### **The expected activities are:**

#### 1. Dissemination strategy

During the mission the BC experts / participants will brief each other and the experts on current status of dissemination in Bosnian and Herzegovina. The current status will be discussed in relation to the dissemination strategy. This will allow experts and participants to follow up on the issues covered during the project and give experts a possibility to assist the BiH in their coming work.

#### 2. Results from user tests of web sites

Evaluate changes done because of tests – has anything been done because of the tests and did it work?

#### 3. PC-Axis software family overview

What is PX-Web? How to get data online? How to create PC-Axis data files? PX-Edit for creating and updating data files. Advanced use and Visualization

#### 4. PC-Axis around the world – best practices

Different PC-Axis setups, policies, guidelines and standardization. Organisational issues.

#### 5. PX-Web / PX-Edit follow up

Procedures for creating PX-files. Tools to create PX-files (Typical scenarios).

Fixing problems with local languages' files in BiH



## 6. Process of publishing data

Folders with PX-files. SQL-database.

## 7. Practical sample

Creating excel file, converting into px file and publishing into PC-Axis software

## 8. Division of duties and responsibilities among departments

Use the sample of other European statistics e.g. Statistics Denmark

<b>Expected output</b>
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According to the original project document activity 3.3.8 is expected to deliver the following results:

A one day seminar presenting the results of the web dissemination component.  
Mission report stating the results achieved in the component and describing further possibilities for development.

<b>List of Participants</b>
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**Agency for Statistics of BiH**

Sabrina Omerbašić, professional adviser for preparing of user's database and contacts with users

Senad Mujkić, UN organizations for DEV-Info

Radoslav Ćorović, professional advisor in demography department

Vladimir Mijović, professional advisor in demography department

Adnan Gušić, IT

Neno Svjetlanović.IT

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

Amer Koric, head of department for database development , support and dissemination of data entry

Senija Muhić , professional advisor in demography department

Zijo Eskić , professional adviser in dissemination department

Amel Sikirić ,professional adviser in database development, support and dissemination of

data entry

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

Will follow

**Experts**

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**Interpreter**

Jelena Ljuboja

### Time schedule

All times are tentative and subject to change.

The time Schedule will be filled out during the activity

Time	Activity	Purpose	Required participants
Tuesday 12:00-13:00	Dissemination Strategy	Status of the agreed strategy. What has been implemented do to the strategy and what new activities will be implemented?	BiH representatives will brief each other and experts on the current status and challenges ahead
Tuesday 13.00-13.15	Coffee break		
Tuesday 13:15-14:30	Support to new ideas	Experts will orient BiH staff on how best to implement new ideas / initiatives from the strategy	Experts/ BiH
Tuesday 14.30-14.45	Coffee break		
Tuesday 14.45-16.00			
Wednesday 09:00-10.30	Results from user tests of web sites	Evaluate changes done because of tests – has anything been done because of the tests and did it work?	BiH/ Experts
Wednesday 10.30-10.45	Coffee break		
Wednesday 10.45-12.00	PC-Axis software family overview	PC-Axis software overview What is PX-Web How to get data online How to create PC-Axis data files	Experts
Wednesday 12.00-13.15	Lunch Break		
Wednesday 13:15-14.30	Continued	PX-Edit for creating and updating data files Advanced use and Visualization	Experts/ BiH hands on
Wednesday 14.30-14.45	Coffee break		
Wednesday 14:45-16.0	PC-Axis around the world – best practices	Different PC-Axis setups Policies, guidelines	Experts/BiH discussions

		and standardization Organisational issues	
Thursday 09:00-10:30	PX-Web / PX-Edit follow up	Procedures for creating PX-files Tools to create PX-files (Typical scenarios)	
Thursday 10.30-10.45	Coffee break		
Thursday 10.45-12.00		Fixing problems with local languages' files in BiH	
Thursday 12.00-13.15	Lunch Break		
Thursday 13.15 - 14.30	Process of publishing data	Folders with PX-files SQL-database	
Thursday 14.30 – 14.45	Coffee break		
Thursday 14.45 – 16.00	Practical sample	Creating excel file, converting into px file and publishing into PC-Axis software	Experts/BiH
Friday 09.00- 12.00	Division of duties and responsibilities among departments	Sample from Statistics Denmark	Experts/BiH

**MS experts will prepare detailed mission report by 6<sup>th</sup> of December and BC will comment by 12<sup>th</sup> of December 2013.**