## 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 3.3.9

Mission carried out by
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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 Statitstical Institutions, phase V". It was the fourth mission to be devoted to dissemination within Component 3.3 of the project.

The consultant would like to express his 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 consultant.

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 objectives of the mission were:
$>$ Pilot installation of PX-Web (Windows and Internet Information Server - must be available)
$>$ Initial training in PX-Web
> Initial training in PX-Edit for production of PX-files
$>$ Technical briefing on how to implement a web database based on PX-Web software
Many of the recommendations given during the activity were based on the consultants experience with helping to implement www.armstatbank.am in Statistics Demarks Twinning project with the Armenian State Statistical Service. Various reports from this activity can be found on www.dst.dk/armenia. The armstatbank.am had an implementation period of 5 months spanning over the Armenian summer holiday, this means that it is realistic, although ambitious to launch a BiH statistical database before the end of the current twinning project. If the statistical authorities in BiH decide to implement a solution based on PX-Web it should at least be ready well in advance of the dissemination of upcoming population and housing census. Al decisions and discussions related to an output database should be aligned with the upcoming overall strategy for BiH statistics and the also upcoming dissemination strategy. Both strategies are being compiled in the framework of the Twinning project.

It is the understanding of the consultant that the possibility of using SuperStar / SuperWeb for dissemination has also been discussed. As Statistics Denmark has no recent experience with the SuperStar platform it is not possible for the expert to give a direct comparison.

## 2. Assessment and results

## Comparable experiences

www.armnstatbank.am was mentioned as a PX-Web based output database established during a twinning project. The Armenian solution was used as example of good and not so good practices when implementing PX-Web. The advantages of the Armenian case, is that it works with both Latin and Cyrillic alphabets and shows the full advantages of shifting effortlessly from one language to another (Armenian and English). In the Armenian solution the files are mainly sourced from existing tables and publications and this does not show the full potential as the system works best with tables that are designed for web and not for paper. The BiH is advised to source as many tables as possible from the basic sources / statistics and not from existing excel files or PDF documents.

Another recommendation from the Armenian implementation is that it is important that the production of files initially should be concentrated to a small number of staff so that they can become proficient in the work. However in the long run the production of data should be as closed to the subject matter experts as possible.

The Armenian implementation period went from early April to mid September were armstatbank.am was launched at press conference. This relatively short period was only possible thanks to a very strong management commitment.

## Management Perspective

The implementation of a database is highly recommended according to the Adapted Global Assessment report also the European Code of Practices has a goal of electronics first in terms of dissemination. The Armenian experience shows that a fixed date for "going live" must be set and worked towards. When the date is fixed the necessary resources must be committed by management. The necessary resources are mainly staff working time. At the launch the database do not need to contain all data produced by the NSI. But for the launch to be credible in the eyes of users and the international community a plan for adding the remaining data must be in place and followed. When statistics covered by the database are published the next time, the database must also be updated. In the long run the quality and credibility of the database is defined by these continuous updates. The updating procedures must be included in the normal production and dissemination process. These considerations are independent of the technical solution chosen, but are central if a database is to be successfully implemented.

## Pilot installation of PX-Web

Each participant brought a laptop with windows 7 and IIS server installed. On these computers PXWeb and PX-Edit were installed. Some problems were encountered in terms of having the proper configuration of the Internet Information Server and setting the appropriate security rights. The issues found should be addressed in the available documentation of PX-Web. The consultant will forward this information to the developer team at Statistics Sweden. However all problems were solved with great enthusiasm and skills by the Bosnian-Herzegovina side.

## Initial training in PX-Web

The various possibilities for adopting PX-Web to local requirements in terms of 'look and feel' were demonstrated. It was shown how new subject areas and files can be added to the database. An initial translation of the user interface was done by the participants. From the discussions with the BosnianHerzegovina side it appears that up to 5 different languages may be needed to cover all requirements.

## Initial training in PX-Edit

It was shown how multiple language files are created using PX-Edit. The need to present data in Cyrillic alphabet means that PX-Edit is the only software available for creating the necessary files. Significant time was spent on producing files with real data from the various statistical institutions in Bosnia-Herzegovina thereby giving the participants a realistic feel for the tasks that are needed to produce the files.

## Population Census

One of the reasons for implementing PX-Web in Bosnia-Herzegovina is dissemination of the upcoming population census. Staff related to the census project participated in the workshop and a demonstration was conducted on how to convert data (in excel file format) into PX-Web at various geographical and administrative levels. As an example of the use of PX-Web to disseminate census data, the Croatian and Slovenian websites can be mentioned.

## 3. Conclusions and recommendations

It is possible to implement a PX-Web based solution before the end of the twinning project if sufficient management support is given to the project as qualified staff is clearly available at all levels of the BiH statistical system. An implementation will involve at least one more intervention by the twinning project. Preferably two activities should be dedicated to the implementation. To be most efficient a follow up mission should be dedicated to practical work with a small group of technicians who will be dedicated to the project (No more that 3 to 5 persons).

From activity 3.3.9 the following conclusions and recommendations can be given:

- The management perspective on dissemination databases is independent of the chosen software platform and must be addressed independently
- The role of a dissemination base must be clearly stated and defined in the overall Strategy for Statistics and in the coming dissemination strategy
- It will be possible to launch a PX-Web based solution before the end of the twinning project
- The initial task should be delegated to a small number of staff that can set aside the necessary time
- Priority should be given to statistics with high user demand and high updating frequency (monthly) - Alternatively to long time series
- The subject structure should be coordinated with the quality and metadata descriptions being prepared
- A priority list of statistics to be published in the system must be compiled and approved by management
- As much data as possible should be sourced from the basic statistics and not from current publications
- The organisational set up should be decided as soon as possible
- The level of regional aggregation should be decided as soon as possible (National level or how much lover?)


## Before an eventual next activity dedicated to PX-Web the following activities are recommended:

- Make a decision if a new activity is needed - PX-Web or not?
- Small dedicated group - Decide who that will work with it - February?
- Prepare (10) PX-files one week before activity
- Prepare files for population statistics
- Finish translation of user interface to local language(s)
- Discuss work share between statisticians, dissemination and IT


## Annex 1. Terms of Reference

## Dissemination <br> $11^{\text {th }}$ December 2012 to $14^{\text {th }}$ December 2012 <br> Terms of Reference - Activity 3.3.9 <br> EU Twinning Project BA 08-IB-FI-03 <br> Agency for Statistics of BiH <br> Zelenih beretki 26, Sarajevo

## 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 $8^{\text {th }}$ project quarter
B) Comprehensive training of the staff
C) Planning for the building of a comprehensive dissemination database

### 3.3.9 PC-Axis staff training

## Background:

It has been decided to implement a dissemination database in Bosnia-Herzegovina using the PX-Web software. The software is developed by Statistics Sweden. An initial license has been procured by the twinning project and will cover the first year of implementation. As stated in the report from mission 3.3.3 (Ellemose Jensen \& Stefansson) especially foreign trade statistics will benefit from an output database. But also the results from the upcoming population and housing census can with benefit from a dissemination database. Also the adapted global assessment report mentions the benefits of a dissemination database. This activity will help develop a plan / roadmap for implementing PX-Web in Bosnia-Herzegovina.

The GiZ has mentioned that the possibility for sharing a dissemination database between the statistical authorities and the Central Bank should be explored.

## The expected activities are:

> Briefing on the institutional / management aspects of implementing a dissemination database
> Technical briefing on how to implement a web database based on PX-Web software
> Pilot installation of PX-Web (Windows and Internet Information Server - must be available)
> Discussions / workshop on different ways / road maps for introducing a dissemination database
> Initial training in PX-Web (on the job training)
> Initial training in PX-Edit for production of PX-files
> Eventually discussions / briefings with other relevant stakeholders like the Central Bank
> Discussions for potential adjustments to the twinning work plan to better support the implementation of PX-Web.
> Preparation for the next mission

- Preparation of the list of activities to be done before the next mission
- Preparation of the list of topics for the next missions


## Expected output

The purpose of the activity is to brief relevant stakeholder on the tasks required in implementing a dissemination database base on the PX-Web software. The mission will allow the relevant stakeholders to develop an implementation plan for introducing PX-Web.

The mission will provide the web staff with an understanding of how PX-Web works and how it is installed

A prototype installation will be performed given that a suitable computer (Windows operating system and Internet Information Server) is available

Prototype PX -files for the database will be produced - in at least two languages
Data suitable for inclusion in a database will be identified
Recommendations on how a dissemination database is best implemented will be provided Recommendations on possible information structure of a dissemination database will be provided

## Annex 2. Persons met

## Agency for statistics of $\mathbf{B i H}$

Sulejman Hasanović, Head of Department for applications and database management Adnan Gušić, IT
Sabrina Omerbašić, Professional advisor in dissemination sector
Senad Mujkić, Professional advisor
Selma Bajramović, Senior Associate
Radoslav Corović or Vladimir Mijović, Professional advisor in demography sector

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

Zehra Kaba, Head of Department for dissemination
Amer Korić,Head of Department for database development, support to dissemination and data entry
Kološ Mahir, Professional advisor in dissemination sector
Haris Čengić, Professional advisor for foreign trade
Elmina Ramić, Senior Associate for economic accounts and prices in agriculture
Zijo Eskić, Professional advisor for internet and intranet

## Institute for Statistics of Republika Srpska (RSIS)

Radoslav Latinčić, Assistant director in sector of information technology and publishing
Vladan Sibinović, Head of division for creation of publication databases and statistical publications
Aleksandra Zec, Senior statistician for DPT designing
Igor Radan, Senior statistician for administration of statistical data bases
Dijana Maleš, Senior statistician for investments, national treasury and consumption of fixed capital

## EUPHC

Victor Dinculescu, Team Leader
Marija Radulescu, Key expert for dissemination
Adana Karovic, Project assistant

## RTA Team:

Bente Dyrberg, RTA
Djemka Sahinpasic, RTA Assistant

