

TWINNING CONTRACT

BA 15 IPA SR 01 17

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



STUDY VISIT REPORT

on

Production prices in construction

Activity 2.3.4

Study visit to Denmark

11-13 September 2018

Version: Final

Table of contents

1. General comments.....	3
2. Lessons Learned.....	3
3. Conclusions and recommendations.....	5
Annex 1. Programme	6
Annex 2. Persons met.....	7

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 study visit report was prepared within the EU Twinning Project "Support to the reform of the statistics system in Bosnia and Herzegovina". and organised under component 2 - Business Statistics, activity 2.3.4. Representatives of FIS did not take part in SV for objective reasons.

The purpose of the study visit was organized in order to introduce the BiH statisticians to current practice and development of Production prices in construction in Statistics Denmark.

The staff of BHAS, and RSIS 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 Denmark and which highly facilitated the 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, CBBH, Statistics Denmark, INSEE, Statistics Finland and Croatian Bureau of Statistics.

2. Lessons Learned

During the study visit participants were introduced to information on statistical system, organisational structure, historical development and legal basis of Statistics Denmark. Statistics Denmark has a long tradition as a producer of official statistics and member of the European Statistical System. *It is necessary, in the future, to adopt a new Law on Statistics of Bosnia and Herzegovina in accordance with generic Law on Statistics.*

The first day of the study visit we were informed about extensive use of administrative sources data for production of official statistics in Denmark (about more than 90 %). The significant flow of data comes from administrative sources and institutional cooperation and data exchange is on very high level, therefore reporting units are approached only when necessary. BiH should follow this practise in the future and start with using all available administrative sources in order to improve data quality, reduce costs and response burden. Activity on use administrative data for statistical purposes in Bosnia and Herzegovina could be supported through IPA 2015 Twinning Project . BC finds out about Statistical Information System and Register Model which comprises three main administrative registers available in Denmark: Register of Persons, Register of Dwellings and Register of Businesses. Danish companies reporting on the web site www.virk.dk.

The subject matter of second presentation was the GSBPM (Generic Statistical Business Process Model). Statistics Denmark has in recent years been adopting the use of the GSBPM as an enterprise architecture tool, for documenting the work flows connected to the NSIs statistical products. It provides a standard framework and harmonized terminology, by describing and defining a set of business processes needed to produce official statistics. The statistical business process model in Statistics Denmark is a Danish adoption of the joint UNECE, Eurostat and OECD GSBPM version 5.0. The main reason for the introduction of GSBPM is to improve the quality of statistics, make the statistical production process more efficient and create a frame for analysis and gradual improvement.

The purpose of implementing GSBPM is both to use the model as a mean to fulfil the quality related principles of the European Statistical Code of Practice, but also a strategic effort to capitalize on efficiency gains in the statistical production in the future through standardization. The long term ambition for the project is to integrate the use of the model into both IT, production of statistical products, metadata and for documentation purposes. BHAS has already implemented some phases of the GSBPM model, but it needs to be fully implemented.

Next topic was business data collection in Statistics Denmark. All Danish businesses are registered in The Danish Central Business Register with a unique Business Register number. Statistical data in business statistics are collected through digital post boxes and unique digital signature.

Presentation on questionnaire design was particularly focused on way of creating questionnaires, functional organisation of data collection process and use of electronic questionnaire in Statistics Denmark. This was very helpful having in mind intention of BiH statistical institutions to start introducing of web based surveys (data collected by email or internet).

BiH makes efforts to develop web surveys in order to reduce response burden on reporting units and the costs. Electronic questionnaires and automatized systems of editing could help to considerably increase cost-efficiency and reduce response burden. In addition, there is a high potential to improve the quality of statistical results.

The second day of the study visit, was dedicated to Price statistics, precisely to Index theory. Danish experts held the presentation about types of indices, choice of the ideal index, choice of elementary index, missing observations and quality adjustments and similar. Index gives a simple expression for developments in values or highlights differences between groups. Ideal Index for the Danish Price Indices is Walsh index, but it is not applicable in practice. The Young Index is used in the Danish SPPI, PPI and CPPI. The HICP uses the Lowe index. Most often in reality price indices are being calculated in a two-step procedures: elementary indices and aggregate indices.

BHAS prepared example on CPPI calculation for new residential buildings. Also, on the basis of the presented theories, the verification of the calculation method for the CPPI for civil engineering in Bosnia and Herzegovina was carried out. It was concluded that the method applied was appropriate and could continue to be applied in Bosnia and Herzegovina.

One of the topic was organisation of publication of data. Through these presentations, we became more familiar with process of web surveys, design of web questionnaire, data collection and reducing the non-response. Statistics Denmark had hundred new digital reporting solutions in last ten years and 25-40 re-designs per year. They publish New releases daily at 8:00 am, presented in tables, graphs and maps.

Regarding publication of data, BC was able to see how process of data publication is organized in Statistics Denmark. Data from administrative registers, questionnaires and web surveys are incorporated in Statistical Register. Data prepared in Sum Database are published on Statbank Denmark and website of Statistics Denmark: www.dst.dk. This is good example how BiH data publication system could be organized. Experts also have provided examples of how often they have courses for statisticians, eg on how to make a First Releases.

The third day of the study visit was reserved for the presentation of the CPPI and SPPI IT application. Since the CPPI and SPPI IT application are in the development phase, the expert has presented an SPPI IT application that is conceptually very similar to the CPPI IT application. During the second and third missions, that will be held in Sarajevo or Banja Luka, IT application will be installed and tested, and no later than the end of the third mission expert will provide the technical documentation for the IT application.

Beside aforementioned activities that were discussed, a special part of study visit was dedicated to specific topics of interest for our subcomponent. Participants were left a great option for questions. Experts provided specific answers and practical examples. All experts have shown willingness for continuation of cooperation and further assistance by responding to all questions sent by email.

3. Conclusions and recommendations

1. The study visit was a good opportunity for the participants to familiarize with experiences and practices used by Statistics Denmark. Experience gained from this SV will be used in BC further work on development of Construction statistics, especially for Construction Producer Price index.
2. The knowledge gained during the study visit will help in the further verification of the calculation method for the CPPI for civil engineering in Bosnia and Herzegovina.
3. Danish expert will support three statistical institutions in BiH in future development and maintenance of common IT application for CPPI and SPPI, which is of great importance to our future work.
4. According to the information gained through the presentations, it is necessary to think about new ways of collecting data - developing electronic questionnaire in order to increase the efficiency of statistics production and increase of response rate.
5. More intensive use of administrative data sources for production of official statistics in BiH should be one of the highest priorities.
6. Based on information and recommendations provided by our MS colleagues, BC will consider the possibility to implement similar procedures in BiH statistical system.
7. Importance of reaching goals based on activities planned and implemented through IPA 2015 Twinning Project, to contribute to further harmonization of BiH statistics with EU requirements.
8. Received valuable materials will be further analyzed and made available to all interested in the statistical system of BiH.

Actions needed for moving forward

Action	Deadline	Responsible institution / person
1. BHAS should develop new web site with all features	By mid of 2019	BHAS/Dissemination Department
2. Constant training of statistician and IT staff		
3. Interaction and communication between statistician and reporting companies		
4. Future work on the IT application CPPI and SPPI and its development to enhance the existing as well as planned surveys, with the help of Danish experts	By the end of 2019	All three statistical institutions in BiH and MC expert
5. Intensive use of administrative data sources for production of official statistics in BiH (i.e. VAT database)	By the end of 2020	All three statistical institutions in BiH Expert's support
6. Conducting Pilot survey on CPPI for civil engineering and establishing regular survey	Pilot: January 2019	All three statistical institutions in BiH Expert's support
7. Full Implementation of GSBPM	to be defined	All three statistical institutions in BiH Expert's support
8. Development of web data collection	to be defined with all three statistical institutions in BiH	All three statistical institutions in BiH Expert's support

Annex 1. Programme

	<u>Tuesday 11 September 2018</u>	<i><u>Venue: Styrelseslokalet</u></i>
10.00 - 11.00	Welcome and introduction to Statistics Denmark	Charlotte Juul Hansen
11.00 - 12.30	Process model – how it's used at Statistics Denmark	Rasmus Anker Kristiansen
12.30 - 13.30	Lunch	
13.30 - 15.30	Data collection – from paper to online reporting	Hanne-Pernille Stax
15.40 - 16.00	Reflection on lessons learned and application in BiH	Beneficiary institutions
	<u>Wednesday 12 September 2018</u>	<i><u>Venue: Bergsøe 1</u></i>
10.00 - 12.30	Price statistics - theory	Martin Larsen
12.30 - 13.30	Lunch	
13.30 - 14.30	Price statistics	Janni Stavad/Martin Ausker
14.30 - 15.40	Publication of statistics	Marianne Mackie
15.40 - 16.00	Reflection on lessons learned and application in BiH	Beneficiary institutions
	<u>Thursday 13 September 2018</u>	<i><u>Venue: Bergsøe 1</u></i>
10.00 - 12.00	New IT application	Søren Netterstrøm
12.00 - 13.00	Lunch	
13:00 - 15:00	New IT application cont.	Søren Netterstrøm
15.15 - 15.45	Conclusions, discussion on lessons learned, next steps and main points to include in the Study Visit Report	Beneficiary institutions
15.45 - 16:00	Evaluation of the study visit	Charlotte Juul Hansen

* Janni Stavad and/or Martin Ausker will participate through the whole study visit.

Annex 2. Persons met

List of participants

Agency for Statistics of Bosnia-Herzegovina

Fahir Kanlic, Head of Department for Industry and Construction Statistics

Dženita Babić, Senior Adviser for Construction Statistics

Anita Brković, Senior Officer for Construction Statistics

Amra Halilović-Hasić, Senior advisor for classification server development and maintenance (ICT)

Institute for Statistics of Republika Srpska

Danica Babić, Senior Statistician for STS

Želimir Radišić, Senior Statistician for Construction and Housing

Biljana Đukić, Head of Production Statistics

Pero Kazanovic, System programmer

RTA Office

Djemka Sahinbasic, Interpreter

Statistics Denmark

Charlotte Juul Hansen, Senior Adviser, International Consulting

Rasmus Anker Kristiansen, Head of Section, Methodology and Analysis, Quality Unit

Hanne-Pernille Stax, Head of Division, Business Data Collection and Registers

Janni Stavad, Head of Section, Prices and Consumption

Martin Ausker, Chief Adviser, Prices and Consumption

Martin Larsen, Senior Adviser, Prices and Consumption

Marianne Mackie, Senior Adviser, Communication

Søren Netterstrøm, Consultant