

Statistics for a brighter future

Results of the EU financed Twinning project "Support to the reform of the statistics system in Bosnia and Herzegovina", 2018-2020





The European Union supports BiH in producing statistics for better policy-making

The European Union has supported the development of official statistics in Bosnia-Herzegovina (BiH) with 1,500,000 euro as part of the EU's Instrument for Pre-Accession.

The aim of the project was to strengthen the statistical system in BiH and to increase the number of statistics harmonised with EU standards. The beneficiary institutions in BiH were:

- Agency for Statistics of Bosnia and Herzegovina (BHAS)
- Central Bank of Bosnia and Herzegovina (CBBH)
- Institute for Statistics of Federation of Bosnia and Herzegovina (FIS)
- Republika Srpska Institute of Statistics of (RSIS)

The project was implemented between January 2018 and April 2020 with Statistics Denmark (the national statistical institute of Denmark) as the contracting EU partner.

In total, 72 missions to Bosnia-Herzegovina and 9 study visits to EU member states have been implemented with the assistance of 50 experts from the national statistical institutions of Croatia, Denmark, Finland and France.

Likewise, a large number of staff from the beneficiary institutions in BiH has been actively involved in the project.

This brochure presents the results achieved during the project.

The views expressed in this publication do not necessarily reflect the views of the European Commission.





Information on economic and income conditions in the regions of BiH

While national accounts look at the economy of an entire country, regional accounts illustrate the production and income a within different regions of a country.

The most important indicator of regional accounts is the Gross Domestic Product (GDP), which expresses the value of the total production of the region.

It is also possible to produce indicators on e.g. regional capital investment and employment. Before the project, BiH had never produced regional accounts. Now after two years of work, an experimental version of regional accounts, which follows EU guidelines, has been produced.

This also means that regional indicators on for example the GDP have been calculated to show the economic activity and income conditions.

However, challenges remain in setting up a regular production and therefore regional accounts is still to be made available to users in the future.





Insights into the complex structure of companies: Improving the Statistical Business Register

A Statistical Business Register provides a repository of information on businesses. It is used as a tool for the preparation of surveys on businesses' economic activities, and for carrying out statistical analysis of the business population.

The statistical business register can be viewed as the backbone of the statistical production.

During the project, a 5-year development plan for how to improve the statistical business register in BiH has been developed.

The development plan seeks to both meet the future requirements of the EU and to improve the information available in the current register.

Large and complex enterprise groups is a definition used to describe enterprises who operate as multiple legal units (sort of individual companies), which are interlinked and often located in different countries.

Due to their size, they play an important part in a country's economy and we need to understand their structure, and thus how they influence business statistics.

Through the project, a model for how to link legal units and thus create enterprise groups has been created. The beneficiary institutions have also been trained in how to profile enterprise groups to understand how they look in BiH.

Finally, information on enterprise groups in BiH is integrated into one database.

However, the work is manual and would greatly benefit from automated updates and access to relevant administrative data on businesses from other public authorities.





How prices in constructing roads, tunnels and bridges develop over time

The index on producer prices in civil engineering measures the monthly changes in the price of construction materials for constructing main roads, highways, tunnels and bridges.

The index thus provides information on how prices in civil engineering construction work are changing over time.

BiH had never published such an index before the project but in February 2020 the first ever release of the index was made available to the public. The statistics is available here.

constructing
A lot of work lies ahead of publishing prices indices such a designing survey questionnaires and preparing interviewers for conducting the survey.

The data used in this index comes from a survey, which collects market prices for performed construction works in a given year. The prices are collected from construction companies engaged in constructing civil engineering structures.

During the project, an IT application was developed to make the calculation of price indices easier and more automated. The application is fed with data from the survey, which is then treated in the system in various way.





How prices in architectural and engineering consultancies develop over time

The index on producer prices in services provides information on the development of prices for various service industries e.g. transportation and postal services.

Within the project, the price index for the service industry "Architectural and engineering activities and other technical consultancies" has been produced for the first time in BiH.

The index provides information on how prices are changing over time for services related to architecture and construction.

The data has been collected by sending questionnaires to large and medium sized companies involved in this sector.

In order to increase the response rate of this new survey, staff from the statistics institutions visited companies to help them better understand the questions they had to report on.

An IT application has been developed to make the calculation of price indices easier and more automated. The application is fed with data from the survey, which is then treated in the system in various way.

The new index was published in May 2020 and is available here.





Where and how residents of BiH go on holiday: New tourism statistics

Tourism is an important economic activity with high potential for contributing to economic growth and employment.

The project has supported the production of statistics on tourism of residents in BiH e.g. the most visited countries, length of the holiday and means of transportation.

Data on tourism activities has been collected by face-to-face interviews in approx. 9600 households in all parts of BiH.

The interviewers were trained before the survey was conducted for them to understand the questionnaire and interview techniques.

In the future, telephone interviews or web-based solutions might be introduced. Once the data is collected, it is analysed and different indicators on tourism is calculated.

The new statistics on tourism activities will be published in 2020 and be available on BHAS' website: http://bhas.gov.ba





BiH's financial connection to the rest of the world is described in greater detail

The Central Bank of BiH published in December 2019 its first release of quarterly statistics on international investment positions. International Investment Positions show the value of total financial assets claimed by residents of BiH from non-residents and liabilities of residents of BiH relative to the rest of the world.

See more here.

The Central Bank has also produced a so-called quality report for Balance of Payments. Balance of Payments explain the economic transactions between residents and non-residents. Thus, it determines the exposure of an economy to the rest of the world.

A quality report describes the quality of a statistics such as accuracy and relevance. It follows EU's principles for quality of statistics. The quality report produced by the Central Bank shows for example that errors in Balance of Payments of BiH are low.

The production of the quality report proved to be a good exercise to evaluate the quality of Balance of Payments published by the Central Bank.

Finally, the Central Bank has benefitted from the project through the establishment of a dashboard containing interactive charts and tables to display trends in the Balance of Payments and international investment positions.

The dashboard allows the Central Bank to select different instruments, to display series on a credit/debit or asset/liability basis and other customized choices.

The dashboard calculates the differences between two versions of the data, which allows the Central Bank to keep track of data revisions.





Reducing the cost of producing statistics by using data already available in public authorities

Like other national statistical institutions around the world, the statistical institutions and the Central Bank in BiH are interested in moving away from using expensive surveys. Instead, they want to use more administrative data in the production of statistics.

Administrative data is data on citizens and companies which is gathered by public authorities as part of their function as public service providers.

A mapping exercise showed that a lot of administrative data is actually already used in the production of statistics in BiH. However, there is great potential that needs to be further explored.

To support this effort, the project helped the beneficiary institutions to identify the arguments needed to convince other public authorities to share administrative data

Also, it investigated how to formalize the data sharing via signed Memorandum of Understanding with public authorities.

It is important to make sure that administrative data has the right quality before it is used in the statistics production.

The Indirect Taxation Authority in BiH has shared data on VAT, which has now been analysed and compared with survey data. It is expected to use the data on VAT in the future to produce short-term business statistics.





Reducing the burden on companies in filling in questionnaires: The case of business statistics

Conducting surveys among businesses is a burden on companies, as they are obliged to spend time filling in questionnaires.

Since their response is important for producing statistics, statistical offices have a responsibility to reduce unnecessary burden on companies.

A way to reduce such burden is to replace surveys with administrative data, which is already available.

The annual survey on structural business statistics is a big burden on companies but the good news is that there are administrative data available, which can be used.

In November 2018, structural business statistics was published for the first time based on a combination of data from a survey on enterprises with 20 and more persons employed,

as well as administrative and other available data for enterprises with less than 20 persons employed.

See more here.

Getting access to administrative data is not as easy as it sounds. It requires the cooperation between public institutions.

The Financial Intelligence Agency (FIA) is at this stage not willing to share administrative data with the Institute for Statistics of Federation of BiH.

Until this issue is resolved, FIS must use other data sources. On the other hand, the financial agencies in Republika Srpska and Brcko District share administrative data with the statistical institutions.

The beneficiary institutions have also made a calculation on how much the reporting burden on companies has been reduced due to the use of administrative and other available data.





Giving users relevant details about how statistics are produced

A quality report conveys information about the quality of a statistical product and is based on the quality principles in the European Statistical Code of Practice.

A quality report is an essential part in understanding how the statistics is produced, its limitations, what the data shows, how it can be used etc. This information is important for users of statistics to understand which story the statistics tells.

By the end of the project, quality reports for a number of business statistics have been produced and will be made available for users on the websites of the institutions.

Increasing the use of advanced programming language to produce statistics

Data handling and statistical analysis are complicated matters, and the more advanced you want your statistics to be, the more analysis you need to carry out. Different software exists to support this process.

During the project, statisticians and methodological staff have been trained in the programming language called R. R is used for statistical computing and graphics and is widely used among statisticians and data miners for developing data analysis.

R is also widely used by the statistical institutions within the EU. R can also be used to automate some processes which otherwise have been more manual, thus releasing time of the staff to swpend on other more valuable tasks.



For more information about the project, please visit

Project website: http://dst.dk/bosnia2018-20/

Facebook: EUtwinningStatisticsBiH

For more information about the beneficiary institutions:

Agency for Statistics of Bosnia and Herzegovina: http://bhas.gov.ba/

Central Bank of Bosnia and Herzegovina: https://cbbh.ba/

Institute for Statistics of Federation of Bosnia and Herzegovina: http://fzs.ba/

Republika Srpska Institution of Statistics: https://www.rzs.rs.ba/

For more information about the EU in BiH:

https://europa.ba/

For more information about Statistics Denmark:

https://dst.dk/en

