TWINNING CONTRACT

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Strengthening the capacity of Jordan's Department of Statistics in terms of compilation, analysis and reporting of statistical data in line with International and European best practices

MISSION REPORT

on

Component 1
**Roadmap for the development of an integrated administrative data system in Jordan
with pilots on Statistical Business registers (SBR) and population statistics**

Activity: 1.2.8:
Suitable Resources for Variables in SBR

Mission carried out by
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Amman, Jordan

19-22 August 2024

Version: Final

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List of Abbreviations

- BC – Beneficiary Country
- DoS – Department of Statistics
- MS – Member State
- PL – Project Leader
- RTA – Resident Twinning Advisor
- STE – Short-term Expert
- SBR - Statistical Business Register
- MIT - The Ministry of Industry and Trade
- CCD - The Companies Control Department
- SSC - Social Security Cooperation
- GAM - Greater Amman / Local Administration

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Executive Summary

Five administrative data sources have been identified for inclusion into the Statistical Business Register (SBR) in the Department of Statistics of Jordan (DoS). Earlier activities have looked at the process of meta data descriptions of these data sources and validation of their variables, there is still work to do here. This activity's focus was to select the most reliable, up to date variables from the different data sources to populate and update the SBR. A decision tree was created to control this inflow of information according to predefined predecense rules.

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1. General comments

This mission report was prepared within the Twinning Project "*Strengthening the capacity of Jordan's Department of Statistics in terms of compilation, analysis and reporting of statistical data in line with International and European best practices*". This Mission related to the following Mandatory Results (MR) and indicators:

"MR 1.2: MR 1.2: Pilot project to develop strategy for integrating administrative data sources for the purposes of creating an SBR.

- **Indicator 1.2.A:** Administrative data sources identified and assessed and plan developed for integrating these with Census of Establishments (CoE) information in an SBR

- **Indicator 1.2.B:** Documentation prepared on database structures and compliance with statistical standards, classifications (e.g. ISIC, Rev 4) etc. and use of common identifiers etc.

- **Indicator 1.2.C:** Explore how SBS can benefit other statistical domains in the DoS

The purpose of this activity was:
- Identification of suitable sources for variables in SBR – primary and secondary sources;
- Selection of variables to be used to build a SBR;
- Preparation of a decision tree for data sources;
- Preparation of data for upload into StatBuS in Jordan;

The consultants would like to express their sincere thanks to all officials and individuals met for the kind support and valuable information which they received during the online sessions which highly facilitated their work. The views and observations stated in this report are those of the consultants and do not necessarily correspond to the views of EU, Statistics Denmark or Statistics Finland or Destatis.

2. Assessment and results

The MS and BC experts reviewed newly updated meta data descriptors for the remaining two sources that have been updated since activity 1.2.7. Sample extracted data of different AD sources was reviewed to gain a better understanding of the actual data received at DoS. Based on a comprehensive list of variables of StatBus (the SBR software with which the DoS SBR is to be implemented) a priority list was created to be used during the imputation of data from the different data sources.

After discussions with the IT department of the procedure for receiving administrative data, it was suggested and agreed upon that the responsibility for creating meta data descriptors and validation business logic will be on the substance experts (SBR team). These should be documented into an excel and submitted to the IT together with data extraction requests. The IT department will then carry out the data validation for received data based on the defined Business Logic. This concept could be standardized by DoS for all received administrative data sets.

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A list of tasks to be completed before the next activity was drafted and agreed by the activity participants, as well as a draft of tasks to be carried out during the next activity (1.2.9.).

The Experts and the SBR Team also found that Local and Gam Data Only Include commercial leases and therefore do not contain many smaller companies. Which means that this data alone cannot be used to define active companies

3. Conclusions and recommendations

There is still a need for the SBR Team to gain better knowledge of content in the administrative data. Likewise, it is important to take in all variables even if they are not going to SBR/Statbus.

SBR staff shall have R on their computers and have half a hour each day for self learning in R. The experts still recommend formal training in the R-program to support their tasks in the analysis of SBR data.

If a SBR in production shall be a succes the staff must have the time to look into the data and understand whats included and excluded.

Before the next mission the following tasks need to be carried out:

1. DoS: Prepare unmodified original data source files for the 5 AD sources, Legal units (in preparation for Mission 1.2.9. tasks) + a DoS ISIC 4-digit file.
2. DoS: (ASAP) Prepare and submit obscurified dummy test data sets of the 5 sources (original variables and 20 dummy rows of data for input-testing).
3. DoS: Create the Business Logic column in the Meta data spreadsheet.
4. DoS: The IT-department will carry out validation based on the Business logic of the MIT, CCD and SSC files.
5. DoS: The SBR team should have training in R.
6. DoS: Verify/Modify/Finalize the Jordanian Classifications that have been worked on earlier or identified later.
7. DoS: Prepare the SBR-StatBus2 server (Hardware , operating system, PostgreSQL server).
8. DoS: Verify access to the SBR team to the PostgreSQL server SBR database.
9. StatBus: Stabus installed successfully in Morocco.
10. StatBus: Perform test imports on the dummy data (point 2) based on the variables priority list.

Tasks drafted for the next activity (1.2.9)

1. Confirm loading of test data / comment on results of the test.
2. Install StatBus v2 on the SBR server
3. Test/Load 50 units from MIT and CCD data (creation)
4. Update the 100 units with data from SSC
5. Investigate the results (is all as expected)
6. Load all units from the three sources (Legal units)

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Annex 1. Terms of Reference

Purpose of the activity

The purpose of this activity is:

- Identification of suitable sources for variables in SBR – primary and secondary sources;
- Selection of variables to be used to build a SBR;
- Preparation of a decision tree for data sources;
- Preparation of data for upload into StatBuS in Jordan;

Expected output of the activity

- Activity report;
- Suitable sources and variables in SBR has been selected;
- Data prepared for upload in StatBus;

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Annex 2: Programme for the mission

Day 1 (09:30 – 15:00):
- o **BC:** Welcome
- o **BC:** Presentation of results from preparation actions taken by DoS before the Mission
- o **BC and MS:** Joint review of data sources

Day 2 (09:30 – 15:00):
- o **BC and MS:** Peer-to-peer activity on:
  - o Selection suitable sources for variables in SBR - primary and secondary sources;
  - o Selection of variables to be used to build a SBR

Day 3 (09:30 – 15:00):
- o **BC and MS:** Peer-to-peer activity on preparing a decision tree for data sources

Day 4 (09:30 – 15:00):
- o **BC and MS:** Follow up from the previous days
- o **BC and MS:** Agreement of next steps to be taken
- o **BC and MS:** Summing up and conclusion

Abbreviations:
MS = EU Member State (Denmark, Germany, Italy, Lithuania, Finland);
BC = Beneficiary Country (Jordan)
DoS = Department of Statistics, Jordan

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Annex 3. Persons met

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