

TWINNING CONTRACT

JO/13/ENP/ST/23

Strengthening the capabilities of the Department of Statistics in Jordan



MISSION REPORT

on

Activity 3.9: Quality Audit - I

Mission carried out by

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List of Abbreviations

BC	Beneficiary Country
CoP	European Statistics Code of Practice
DoS	Department of Statistics of Jordan
MS	Member State
ToR	Terms of Reference
QASA	Quality auditing and Self-Assessment

1. General comments

This mission report was prepared within the Twinning Project "Strengthening the capabilities of the Department of Statistics in Jordan". It was the first mission to be devoted to Activity 3.9: Quality Audit I within Component 3: Quality and Metadata of the project.

The purposes of the mission were:

- Assessment on current use of quality audit
 - What has already been done in the matter of quality assessment?
 - What have been the general conditions in which audit like activities have been planned?
 - What are the needs and expectations from the DoS management on quality assessment?
 - What is the implementation state of other quality projects, particularly quality reporting and the computation of quality indicators?
- Presentation of different solutions regarding quality audit, based on e.g.
 - DATQAM – Handbook on Data Quality Assessment Methods and Tools
 - QAF – Quality Assurance Framework
 - DESAP
- Presentation of the Italian and in general the European Union, experience in quality auditing.
- Discussion on the best options for DoS regarding quality audit

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 Jordan and which highly facilitated the work of the consultants.

During this mission the key elements for evaluating the most suitable solutions to introduce an audit-like quality assessment strategy have been acquired from the representatives of the Beneficiary Country (BC). The range of possible approaches that can be implemented in the DoS context have been presented by the experts. Requirements, advantages and disadvantages of the approaches have been discussed with respect to DoS scopes and expectations, available resources, organisation, re-use of already available tools and procedures for quality assurance (checklist, quality declarations,).

The views and observations stated in this report are those of the consultants and do not necessarily correspond to the views of EU, DoS or Istat.

The Director General for DoS, his Excellency Dr. Qasem Al-Zubi, honoured the group by participating to one of the meetings.

2. Assessment and results

2.1. Assessment on current use of quality audit

DoS experts presented the past and current situation on quality assessment with respect to the organisational structure and the activities carried out, and enhancing the links with other ongoing activities within components 3.

A Quality Division, under the Directorate of Quality Auditing, has been instituted about three years ago, with the tasks of: documenting operations; monitoring press releases; monitoring statistical production in general.

An auditing system already exists, based on the evaluation of the volumes "Methodology and Detailed results" which is produced for each disseminated statistical product. If lack of compliance with respect to some criteria is found by the Quality Unit, a process managed by the Technical Assistance of the

Director General (DG) is activated, and the survey manager, i.e. the responsible of the survey, is asked for clarifications.

A Checklist for data quality assurance in statistical surveys is also available, based on 16 technical items, covering the main phases of the production process including publication and dissemination steps and collecting evidence on each of them.

In addition, Quality Declarations including some quality indicators expressed in a qualitative scale, are in the process of being compiled based on outcomes from Activity 3.5: Development of Quality Declarations.

DoS is also equipped with operation books which are collections of operational procedures for 'technical' (i.e. statistical) and non-technical work in survey processes, used for describing quality procedures to be followed.

2.2. Presentation of different solutions regarding quality audit

An audit is a systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which the audit criteria are fulfilled. In statistical organizations, usually the elements supporting an auditing program are: Reference Standards, supporting quality documentation, an auditor team interviewing the survey manager with a structured auditing questionnaire, an Evaluation report with improvement actions, a system to evaluate the implementation of the improvement actions, an organizational structure supporting the auditing system. Similarly, self-assessment can be implemented with the only difference that there is not an auditor team, and the auditing questionnaire as well as the final evaluation report are both compiled by the survey managers.

During the mission, the MS experts presented the key issues related to the introduction and maintenance of a statistical auditing program, framing it in the context of a general quality policy. Therefore the range of assessment methods and tools have been presented based on the framework proposed in the Handbook on Data Quality Assessment Methods and Tools (DATQAM¹). The types of auditing and some European experiences of auditing and self-assessment have been summarized. The Italian auditing and self-assessment procedure has been illustrated in detail, together with the implemented tools (Quality Guidelines; Auditing and self-assessment questionnaires; other documents supporting the assessment activity, i.e. the process and product quality reports; the final evaluation report with improvement actions; the follow-up system to monitor improvement actions). Details on the time and resources necessary to currently carry out an auditing and self-assessment program at Istat were also provided.

With respect to the key elements of an auditing system, examples on how some already internationally available tools could be used have been provided. Therefore, it has been illustrated how the Quality Assurance Framework (QAF) of the European Statistical System² could be used to assess some of the European Statistics Code of Practice principles (CoP). In addition, the two versions of the European Self Assessment Checklist for Survey Managers (DESAP), the short and the long version, have been illustrated as possible questionnaires that can be used for the quality assessment in an auditing procedure.

¹ Available at: <http://unstats.un.org/unsd/dnss/docs-nqaf/Eurostat-HANDBOOK%20ON%20DATA%20QUALITY%20ASSESSMENT%20METHODS%20AND%20TOOLS%200%20L.pdf> (last access: November 2014)

² Available at: http://epp.eurostat.ec.europa.eu/cache/ITY_PUBLIC/QAF_2012/EN/QAF_2012-EN.PDF (last access: November 2014)

The Istat Quality Guidelines for Statistical Processes³ were presented and examples on how the principles contained in the guidelines are assessed throughout the auditing and self-assessment questionnaires (available only in Italian language), were illustrated.

The Istat template used to draft the Evaluation Report, including strengths and weaknesses, as well as improvement actions and good practices, has been translated into English and shared with the experts from the BC.

Based on the list of the key elements to be defined when planning the introduction of an auditing program in a statistical organization, a discussion on advantages and disadvantages of different solutions and their feasibility in the DoS environment, has been conducted.

3. Conclusions and recommendations

As a result of the assessment and sharing of information phases, it is evaluated that at DoS there is a strong awareness of the importance of quality documentation, monitoring and assessment. DoS has in place many activities on quality, some of them could be thought as audit-like activities, i.e. the control on the dissemination based on the evaluation of the volumes “Methodology and Detailed results”. In addition, DoS can rely on many documents, that could effectively and efficiently support the quality auditing and self-assessment (QASA) program, that are: the volumes “Methodology and Detailed results”, the checklists, the operational manuals.

Despite the availability of this material, a general and structured framework, in which these documents can assume a coherent and complementary role for the assessment policy, seems to be lacking.

A general recommendation is that many of the quality procedures and the available material could be systematized and streamlined in the light of the introduction of a quality auditing system at DoS.

In the following, for each key element of an auditing program some possible options for the DoS are reported and recommendations are provided. They are listed here and translated in actions in the below table. They are the results of the discussions of MS experts with the DoS quality group.

The first element to be considered is which type of audit is to be conducted, whether on process quality (e.g. on given technical and non-technical reference standards) or on product quality (i.e. on the quality dimensions: relevance, accuracy, ...) or if on both product and process quality. Depending on this choice, Standard Reference (or guidelines or operational manuals) to comply with, should be available. It is recommended that DoS to continue with the existing in-depth auditing system based on the evaluation of the volumes “Methodology and Detailed results” on a limited number of surveys/products, and complement it with a self-assessment on a wider basis. The criteria used for the in-depth auditing should be clearly defined (Action 1) and made public. With respect to the self-assessment, the references to be followed should be identified (Action 2). Standard references could also be based on existing manuals (operation manuals) or be a new one, and could cover the whole production process or be focused only on a specific phase. As an example the index of Istat Quality Guidelines used in the QASA program are attached in Annex 3. The whole text is available on line. Following this example and with respect to the relevant areas for DoS, DoS could gather all the already existing material spread all over the Institute, and put it together in a comprehensive way.

The tools supporting the assessment should also be identified, preferably among those already available: the checklist, the quality declaration. As QASA questionnaire, it is recommended that DoS evaluates the fitness for purpose of the checklist as it is, or the opportunity to integrate it with additional items (Action 3), for example comparing it with the long version of the DESAP checklist.

³ Available at: http://www.istat.it/it/files/2011/11/QualityGuidelines_EngVers_1.11.pdf (last access: November 2014)

The quality declarations are assessed by the MS experts to be already suitable as supporting documentation in the QASA program, and do not require any additional adjustment. In addition, DoS could evaluate the opportunity to complement the information included in the “Methodology and Detailed results” volumes with the that of the checklist and of the quality declarations, when performing in-depth auditing.

It is recommended that both procedures (auditing and self-assessment) use a Standardized Evaluation Report, including the main process strengths and weaknesses and the quality improvement actions (and good practices, if DoS considers it). It is recommended that DoS develops a template of the Evaluation Report (Action 4). As an example, Istat final evaluation report has been included to this mission report (Annex 4).

A QASA plan should be drafted (Action 5). The steps of the procedures (both auditing and self-assessment) should be exactly defined in advance. It means that the following elements are to be defined: the criteria for surveys/products selection, who are going to be the auditors and reviewers and what are their tasks, who fills in the documentation (checklist, quality declarations), who fills in the Final Evaluation Reports with the improvement actions, how are the improvement actions approved and followed up, who is in charge of managing and monitoring the overall QASA program (the Quality Unit, a specifically established Quality Committee, etc.). The plan should be accompanied with a timetable of the activities within the QASA program. Also an evaluation of the resources needed to implement and carry on the QASA program should be made (Action 6).

MS experts are available to provide feedbacks on draft documents prepared by DoS during the time before the next mission (action 7).

Given the strategic nature of QASA programs, all the choices made and the main features of the tools that are being developed should be approved by the top management, in order to guarantee its commitment.

Table of foreseen activities for the next mission

N.	Action	Deadline	Responsible person
1	Draft of the criteria for in-depth auditing based on the evaluation of the “Methodology and Detailed results” volumes	2015, February 8	DoS Quality Unit in collaboration with the Quality team
2	Identification of the Reference Standard/s for the QASA: Evaluation of the suitability of one of the already available tools or Definition of the content of a new manual	2015, February 8	DoS Quality Unit in collaboration with the Quality team
3	Evaluation on the fitness of DoS checklist to be used as an auditing/self-assessment questionnaire as it is or Identification of the items to be added for its use	2015, February 8	DoS Quality Unit in collaboration with the Quality team
4	Drafting of a first version of an Evaluation report with strength & weaknesses and improvement actions	2015, February 8	DoS Quality Unit in collaboration with the Quality team
5	Drafting of the QASA plan: steps, responsibilities, tasks, outputs, time scheduling, number of surveys to be assessed annually...	2015, February 8	DoS Quality Unit in collaboration with the Quality team
6	Estimation of resources necessary to carry on the outlined QASA program	2015, February 8	DoS Quality Unit
7	Feedback from the MS experts	2015,	MS experts

		February 8	
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Annex 1. Terms of Reference

<p style="text-align: center;">Terms of Reference</p> <p style="text-align: center;">EU Twinning Project JO/13/ENP/ST/23</p> <p style="text-align: center;">23 -27 November 2014</p>

Component 3: Quality and metadata

Activity 3.9: Quality Audit – I

0. Mandatory results and benchmarks for the component

- Statistics published by DoS are quality assured and documentation is improved (Apr 2015)
- Assessment report on current situation (Jan 2014)
- The consequences of applying the European Statistics Code of Practice in DoS are discussed (Apr 2014)
- Develop a standard format for a quality declaration (Jul 2014)
- A quality declaration for the national accounts is completed and published on the DoS website (Jan 2015)
- Develop a metadata strategy (Jan 2015)
- Design and test a quality audit (Apr 2015)

1. Purpose of the activity

- Assessment on current use of quality audit
 - What has already been done in the matter of quality assessment?
 - What have been the general conditions in which audit like activities have been planned?
 - What are the needs and expectations from the DoS management on quality assessment?
 - What is the implementation state of other quality projects, particularly quality reporting and the computation of quality indicators?
- Presentation of different solutions regarding quality audit, based on e.g.
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 - DESAP
- Presentation of the Italian and in general the European Union, experience in quality auditing.
- Discussion on the best options for DoS regarding quality audit

2. Expected output of the activity

- Knowledge gained on DoS' experience with quality audit and relevant tools
- Transfer of the Italian and in general the European Union, experience in quality auditing.
- Recommendations prepared on relevant solutions for DoS
- A lining up of work programme for the next activity (3.10, scheduled for the 8 February -12 February 2015)
- To decide upon the preferred timing of activity (3.11, scheduled for the 15 March – 19 March 2015)

3. Participants

DoS

Mr Mohammad Khalaf, Head of Quality Division (*Component Leader*)

Mr Duraïd Al-Shawawreh, Quality Division

Quality team:

Mr Bassam Al-Zain, Agricultural Survey Directorate

Mr Basem Shannek, Development & Strategic Planning Unit

Mr Mohammad Damrah, Economic Survey Directorate

MS experts

Ms Orietta Luzi, Chief of Research. Head of Unit “Methods and Techniques supporting the Statistical Production” at the Department for National Accounts and Business Statistics”,

ISTAT

Ms Giovanna Brancato, Senior Researcher, Head of Unit Quality, Auditing and Harmonization,

ISTAT

Programme for the mission

Time		Place	Event	Purpose / detail
Sunday, morning	08.30 – 10.00	Hotel /DoS	Meeting with RTA	To discuss the programme of the week
Sunday, morning	10.00 – 12.00	DoS	Meeting with BC Component Leader and BC Experts	Discussions of the week's programme Presentations by DoS of the current use of quality audit. -What has already been done in the matter of quality assessment? -What have been the general conditions in which audit like activities have been planned? -What are the needs and expectations from the DoS management on quality assessment? -What is the implementation state of other quality projects, particularly quality reporting and the computation of quality indicators?
	12.00 – 01.00		Break / Preparations / Report writing	Break / Preparations / Report writing
Sunday, afternoon	01.00 – 03.30	DoS	Meeting with BC Component Leader and BC Experts	Presentation by experts on different solutions regarding quality audit
	03.30 – 04.00		Preparations / Report writing	Preparations / Report writing
Monday, morning	08.30 – 09.00	DoS	Preparations / Report writing	Preparations / Report writing
	09.00 – 12.00		Meeting with BC Component Leader and BC Experts	Continued.
	12.00 – 01.00		Break / Preparations / Report writing	Break / Preparations / Report writing
Monday, afternoon	01.00 – 03.30	DoS	Meeting with BC Component Leader and BC Experts	Continued.
	03.30 – 04.00		Preparations / Report writing	Preparations / Report writing

Tuesday, morning	08.30 – 09.00	DoS	Preparations / Report writing	Preparations / Report writing
	09.00 – 12.00		Meeting with BC Component Leader and BC Experts	Presentation by experts of the Italian and in general the European Union, experience in quality auditing.
	12.00 – 01.00		Break / Preparations / Report writing	Break / Preparations / Report writing
Tuesday, afternoon	01.00 – 03.30	DoS	Meeting with BC Component Leader and BC Experts	Continued.
	03.30 – 04.00		Preparations / Report writing	Preparations / Report writing
Wednesday, morning	08.30 – 09.00	DoS	Preparations / Report writing	Preparations / Report writing
	09.00 – 12.00		Meeting with BC Component Leader and BC Experts	Discussion on the best options for DoS regarding quality audit
	12.00 – 01.00		Break / Preparations / Report writing	Break / Preparations / Report writing
Wednesday, afternoon	01.00 – 03.30	DoS	Meeting with BC Component Leader and BC Experts	Continued.
	03.30 – 04.00		Preparations / Report writing	Preparations / Report writing
Thursday, morning	08.30 – 09.00	DoS	Preparations / Report writing	Preparations / Report writing
	09.00 – 12.00		Meeting with BC Component Leader and BC Experts	Continued.
	12.00 – 01.00		Break / Preparations / Report writing	Break / Preparations / Report writing
Thursday, afternoon	01.00 – 02.30	DoS	Meeting with BC Component Leader and BC Experts	
			Ad-hoc meetings	Final clarifications with BC Experts, preparation of report and presentation for BC Project Leader
Thursday, afternoon	02.30 – 03.00	DoS	Meeting with BC Component Leader	Presentation for BC Project Leader
Thursday, afternoon	03.00 – 04.00	DoS	Debriefing with BC Project Leader	Conclusions and decisions and their consequences for the next activity and the implied work programme for BC Experts

Annex 2. Persons met

DoS:

Dr. Qasem Al-Zubi, Director General of DoS
Mr Abdel Wadood Matouk, BC project leader

Mr Mohammad Abdel Razzaq, Head of Price Division
Ms Manal Khuffash, Web Dissemination section/IT
Mr Walid Battah - Head of the Quarterly National Accounts Division

Quality Division:

Mr Duraïd Al-Shawawreh
Mr Abdul Nasser K.N Tahat

Quality team:

Mr Bassam Al-Zain, Agricultural Survey Directorate, member of Quality Team
Mr Basem Shannek, Development & Strategic Planning Unit, member of Quality Team
Mr Mohammad Damrah, Economic Survey Directorate, member of Quality Team

External stakeholders:

None

RTA Team:

Thomas Olsen, Resident Twinning Adviser, Hashemite Kingdom of Jordan
Christine Salman, Resident Twinning Adviser Assistant, Hashemite Kingdom of Jordan

Translator:

Mohammad Aljuneidi

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Annex 4. Template of Istat Evaluation Report

Evaluation Report

<date>

Report of Evaluation
<name of the survey>

Responsible of the process: <Name of the responsible>
<Department, direction>

Year: <year of the procedure>
Type of procedure: <audit or self-assessment>

Team of audit (only for audit):
<Name and Last name, Direction and Unit>
<Name and Last name, Direction and Unit>
<Name and Last name, Direction and Unit>

Reviewer (only for self-assessment)
<Name and Last name, Direction and Unit>

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 - B. Survey design
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 - D. Data collection
 - E. Data processing
 - F. Data storage, dissemination and documentation
 - 2.2. Part II: Product quality
 - G.1. Relevance
 - G.2. Accuracy and reliability
 - G.3. Timeliness and punctuality
 - G.4. Coherence and comparability
 - G.5. Accessibility and clarity
3. Improvement actions
4. Good practice

1. Executive summary

Short summary of the main strengths and weaknesses of the survey and the aspects requiring improvement actions (10-20 rows)

2. Results

The report should illustrate the main strengths and weaknesses and the aspects that require improvement actions making reference to the various aspects examined during the auditing and self-assessment questionnaire compilation (3-4 pages)

2.1. Part I: Process quality

- A. Survey objectives
- B. Survey design
- C. Survey frames
- D. Data collection
- E. Data processing
- F. Data storage, dissemination and documentation

2.2. Part II: Product quality

- G1. Relevance
- G2. Accuracy and reliability
- G3. Timeliness and punctuality
- G4. Coherence and comparability
- G5. Accessibility and clarity

3. Improvement action

The report should list the aspects, within the process phases (follow the points of Part I from A to F) and across product quality (follow the points of Part II from G1 to G5) that require intervention, the identified problem and the improvement action, with the specification of eventual needs for support external to the direction/department of the survey.

Requests of additional personnel are not considered improvement actions.

Some of the identified actions will be included in the operational annual plan (PAA).

Aspect	Problem	Improvement action

4. Good practices

By "good practices" it is meant the application of methodologies and/or operational procedures that had shown to be effective in preventing sampling and nonsampling error and in improving quality dimensions, or efficient for the management of the statistical production process. Additional elements that strengthen the good practice are: a systematic nature, the generalizability to other processes, the innovative nature.

Some examples of "good practices" are: the systematic involvement of the users in the statistical production and the regular assessment of users satisfaction; the computation of measures and quality indicators supporting the objective monitoring and the evaluation of the quality; significant process and product innovations.

Following the questionnaire sections, describe the adopted "good practice", underlining the observed or expected impacts on process and product quality.