TWINNING CONTRACT

JO/13/ENP/ST/23

Strengthening the capabilities of the Department of Statistics in Jordan

MISSION REPORT

on

Activity 3.1: Assessment of quality, documentation and metadata

Mission carried out by

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6th to 9th January 2014

Version: Final

STATISTICS DENMARK

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List of Abbreviations

BC	Beneficiary Country
CoP	European Statistics Code of Practice
DoS	Department of Statistics of Jordan
DQAF	Data Quality Assessment Framework
ESS	European Statistical System
EU	European Union
IMF	International Monetary Fund
MS	Member State
PDA	Personal Digital Assistant
RTA	Resident Twinning Advisor
SD	Statistics Denmark
SDDS	Special Data Dissemination Standard
ToR	Terms of Reference
UN	United Nations

Executive Summary

This was the first activity in component 3 and the actions were carried out as scheduled.

It is noted that this component would benefit if some of the objectives could be made more operational and be communicated to all relevant stakeholders in order to adjust expectations – e.g. in relation to the work with more comprehensive and standardised checklists, common templates for documentation of quality assurance procedures, selection of common quality indicators and reuse of exiting metadata information.

With regard to the organization of quality management work in DoS, a more concrete plan for the actual activities of the Quality Division seems needed. Also, strong and visible support from the top management is a key success factor which could be further strengthened.

The new Quality Team seems a good way forward for the involvement of survey divisions and cross-cutting cooperation and coordination, but perceptions and expectations as to "who does what?" and "who is actually responsible?" differ between the members of the team. It is recommended that the central quality function should be responsible for *provision of quality management tools*, procedures, training, support and *coordination,* and the survey divisions should be responsible for the *application of these tools* and procedures and responsible for the quality of 'their' data and metadata. This implies that the central quality function has a *supporting* role and not a *controlling* role. It is noted that the Quality Team does not comprise IT, statistical methodology and field work, which are all important for the quality work.

Based on the discussions and the presentations made by DoS staff, the survey processes seem to be well under control, stable and with a high degree of standardization. However, it seems that internal documentation (checklists, coding rules, validation/editing rules etc.) could be more comprehensive, up-to-date and standardized according to 'best practice' in DoS. Also, it is strongly recommended to add *quality measurement* to the processes.

DoS' self-assessment against the CoP actually showed a quite good level of compliance. The interpretation and assessment against certain indicators could be reconsidered when the consequences of applying the CoP are discussed.

A fair amount of metadata exists in DoS, but there is no clear strategic direction for the work. DoS does not have metadata systems with full coverage of all surveys/indicators, current systems are not really integrated with dissemination platforms and the user oriented metadata mainly consists of textual descriptions in paper publications which comprise basic information about statistical concepts/definitions, data sources, production process, methodology, classifications used and (to a limited extent) quality. Most metadata is stored and maintained locally in the systems of each survey division, whilst some cross-cutting coordination is provided by the Directorate of Information Technology.

Perceptions about which metadata are needed (scope and detail) and how the needs could be met for different purposes vary in DoS. This needs to be addressed before the preparation of a new metadata strategy. It is recommended that DoS - as part of the development of the metadata strategy – decides on the scope, structure and detail for a standardised quality declaration where existing information can be re-used as much as possible.

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 *assessment of quality, documentation and metadata* within Component 3 - *Quality and metadata* - of the project.

The purposes of the mission were:

- Assessment and review on the current status of quality management, documentation of statistics and metadata system incl.:
  - Quality assurance, quality systems, quality declaration
  - Quality audit
  - Documentation system
- Metadata system, strategy and software
- Discussions on and identification of DoS' needs and ideas regarding quality management, documentation of statistics and metadata system
- Identification of challenges and areas to improve based on international and EU requirements
- Presentation of the European Statistics Code of Practice (EU) and Data Quality Assessment Framework (IMF)

The consultants would like to express their sincere thanks to all officials and individuals met for the kind support and valuable information which we received during the stay in Jordan and which highly facilitated our work.

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

2. Assessment and results

2.1. Introduction

In accordance with the ToR and the work programme (see annex 1), the first part of this activity was spent on 1) acquiring a general overview of the current status with regard to quality management in DoS and 2) discussing DoS' expectations and wishes for the work and outcome from this component. Meetings were held, firstly, with BC project leader, Mr AbedWadood Matouk, secondly with the Quality Division (consisting of Mr Mohammad Khalaf (head of division and component leader) and Mr Duraid Al-Shawawreh), and thirdly with Mr. Mohammad Khalaf, Mr. Basem Shannek, Development & Strategic Planning Unit, Mr Amir Jamal, Household Surveys Directorate, Mr Mohammad Damra, Economic Surveys Directorate, and Mr Bassam Al-Zain, Agricultural Surveys Directorate.

The participants of the third meeting form the so-called 'Quality Team', which is essentially a working group which brings together the views and competences from the central Quality division, who is responsible for providing methods/tools and guidelines for quality management and the survey departments who are responsible for the application of these tools and guidelines.

In the absence of general assessments of the Jordanian statistical system, the preparations of this activity had partly been based on the document 'National Statistical Strategy 2008 – 2013' in which a series of objectives and ambitions for DoS is described – including the creation of a Quality Division. The meeting with Mr AbedWadood Matouk revealed that a new permanent statistical law for Jordan

was enacted in 2012 – replacing the previous law from 1950 and granting among others DoS political independence, access to administrative records, high level user involvement in the form of the 'Statistical Council' and a coordinating role for DoS in relation to production and dissemination of statistics produced in other government institutions.

Also, it was confirmed that Jordan – with a few derogations – now complies with IMFs SDDS requirements for data and metadata. This means among others that a lot of metadata for key economic statistics are already available (in English as well as in Arab language). Furthermore, the consultants received a copy of DoS' recent self-assessment in relation to the CoP.

Asked directly about which issues were considered the most important quality challenges for DoS Mr AbedWadood Matouk mentioned three issues: 1) Unit non-response from large establishments (this relates among others to the absence of a business register); 2) the balance between statistical information needs and the burden on respondents (and thereby the risk of non-response) and 3) data quality (poor accuracy and missing items) in administrative registers.

Mr Khalafs reply to the same question was that the biggest challenges are: 1) Support from the top management; 2) Awareness and understanding of quality issues (including documentation) among the staff.

2.2. Organisation of the quality management work

With regard to the current situation regarding quality management, the Quality division (consisting of two persons) has now been in place in the Directorate for Internal Auditing for approximately three years. The tasks of the Quality Division are detailed in annex 3. With the approach taken – i.e. having a small coordinating quality function centrally in DoS and the majority of the actual work being the responsibility of the survey departments – progress largely depends on the survey divisions and clear requirements and support from the top management. So far initiatives to strengthen quality management activities have been scattered and progress limited.

2.3. Quality assurance of surveys

The Quality Team described the overall process for conduction of surveys in DoS and the main characteristics of how quality assurance of surveys is currently performed. More concrete explanations and examples were given by staff working with construction statistics, industrial statistics, transport statistics and finance & services statistics:

- Especially regarding the business surveys, the most important user needs are those related to national accounts. Data needs/requirements to be covered by surveys are as much as possible related to national accounts and questionnaires are developed in cooperation between the survey directorate and national accounts directorate.
- A proactive involvement of external users of the various primary statistics is only seen in relation to agricultural statistics, but the other survey departments are also frequently contacted by external users and deal with their requests on an ad-hoc basis.
- Field test of new questionnaires/forms are conducted prior to their implementation. Generally, the questionnaires are very stable over time (although quite a number of changes will occur in the near future due to the change from NSA93 to NSA2008).
- Most surveys are stratified sample surveys and data are collected by the regional offices via direct interviewing of either households (social/demographic surveys), establishments (business surveys) or holdings (agricultural surveys). Prior to data collection the interviewers/enumerators in DOS'

Field Service are trained and equipped with written instructions. New interviewers/enumerators are supervised.

- Following collection of the data a first validation check of the completed forms is performed by the regional offices prior to delivery of data to DoS. Also, 'after-checking' (i.e. re-interviewing of a random sample) is performed in some cases.
- Most social survey data are registered directly on PDAs, whilst business and agricultural survey data are registered on papers forms i.e. where data are subsequently typed manually by DoS for further electronic processing. In one case OCR ('scanning') is used.
- The typing of data is performed by the Data Entry Division in DoS' Directorate of Information Technology. Some quality assurance is performed automatically via the registration systems (e.g. avoidance/rejection of false values) and via 're-entry' on a sample check basis. The amount of sample checking depends on the complexity of the survey.
- Following registration/reception of data a second validation and editing (for logical mistakes, implausible values compared with values from previous periods etc.) is performed in connection to the classification of data in accordance with statistical nomenclatures. Editing is done directly to the input/micro data without version control (no history). In some cases supplementary information (e.g. companies' balance sheets) is used for this purpose. In one domain (transport statistics and traffic accidents) aggregate administrative data were used. Errors in administrative data are communicated back to the data owner who then makes the necessary corrections and resends the data to DoS.
- These validation and editing procedures in the survey divisions are generally documented in brief 'coding books' and 'guidelines for data cleaning', but the existence, actuality and content seem to vary considerably and much knowledge about procedures rules etc. seems not to exist in written form at all. Two examples are shown in annex 4.
- Following the data validation and editing in the survey divisions the micro data and the weights are sent back to the IT directorate for further processing (estimation and tabulation) according to specifications from the respective survey divisions. Draft tables are sent to the survey division for plausibility checking.
- For households a numbering system developed for the census is being used, but – due to the absence of a business register - a general problem relates to the absence of unique and stable identifiers for the establishments. (Previous attempts by DoS to facilitate cooperation in order to establish a business register for Jordan was not supported by other relevant government authorities. Although there is no business register component in this twinning project it could be considered to make a presentation during the twinning project about how the challenges regarding legislation, data sharing, updating/maintenance and cost sharing was solved in Denmark.)
- Statistical publications are prepared by the survey divisions themselves and only the actual release is managed by the Directorate of Public Relations and Information.
- Quality declarations are not produced, but definitions of the statistical concepts, descriptions of the methods and production process is included in the publications according to common guidelines. According to the information provided such descriptions are available for all statistical domains/products, but there are diverging views on whether they are actually up-to-date and useful. For more information see section 2.6 below regarding metadata.

The presentation revealed a quite good level of process control and process standardisation in DoS, including quality assurance of (especially) the tasks related to data collection and that DoS generally have many assets to build on in this area. However, the presentation and discussion also revealed some quite different views and perceptions among the DoS participants regarding the state of affairs for quality management (i.e. the actual/'real' level of 'maturity') and the need for further improvements (in particular the existence of sufficient documentation). In summary, it could be said that much is already being done with regard to *application of quality assurance*, but very little seems to be done with regard to *quality measurement* and *quality documentation/declarations*.

2.4. Quality management regarding IT

All IT work in DoS is performed centrally (and in-house), although there is also close contact between specific programmers and specific survey divisions enabling good understanding of user needs and current maintenance when new requirements (e.g. new variables/questions/fields) occur.

Development of new IT systems must follow common written guidelines for standardised implementation, testing and documentation of data bases, data processes and user interfaces. This enables systems to be of a more uniform nature.

Quality assurance of IT development currently takes place in different steps in order to ensure that testing in all becomes comprehensive and exhaustive. There is a common process for this, but this process is not available in a written form. However, it is the intention of the IT Directorate to gradually strengthen and modernise their quality assurance practice.

2.5. The European Statistics Code of Practice

The CoP is the basis for European standards regarding quality management in official statistics. Thus, a workshop was held with the Quality Team (see above), where the consultants presented the principles and indicators of the CoP and the background for its existence (the presentation is a separate annex to this mission report). For each indicator the result from DoS' recent self-assessment against the CoP (i.e. full-, partial- or non-compliance) was shown. For some indicators Jordanian practice/circumstances was compared with those of SD or the ESS in general.

The workshop gave rise to useful discussions about interpretation of some of the indicators and also discussions among DoS' participants about the actual status/compliance regarding some indicators. Without attempting a CoP assessment the consultants have noted the following (for the full self assessment we refer to the separate document):

- Indicator 1.5 regarding statistical work programmes: The self-assessment states that DoS is non-compliant, but it may be the case that DoS is actually partly compliant.
- Indicator 2.2 regarding access to administrative data: Unfortunately, the new statistical law does not grant access to data in other government authorities. Access needs to be agreed in each case, meaning that if other authorities are not willing to agree there will be no re-use of administrative data which could be useful for statistics. Also, there can be issues with regard to whether DoS can be granted access to micro data or only tabular data.
- Indicator 7.4 regarding concordance between national and European/international classification systems: It may the case that lack of concordance is mostly an issue at rather detailed level and that DoS may actually be partly compliant.
- Indicator 9.6 regarding linking of data in order to reduce response burden: It seems questionable as to whether DoS is in fact compliant.
- Indicator 12.1 regarding validation and assessment of data: Based on the explanations about the existing validation procedures it could be argued that DoS is partly compliant instead of non-compliant.
- Indicator 13.2 regarding daily release time: In Jordan release of statistics takes place at a certain pre-determined working day, but not at a certain time during the day. It could be argued that DoS is partly compliant.
- Indicator 15.4 regarding researchers' access to micro data: It could be argued that DoS is compliant.

- Indicator 15.6 regarding information to users about methodology: Based on the information available in the current publication it could be argued that DoS is partly compliant.

2.6. Metadata

A workshop was held with members of the Quality Team and some additional participants from the System Analysis & Programming Division (Mrs. Rania Abu Dhaim) and the Electronic Dissemination Division (Mr. Husam Abu Ashukor) from the Directorate of Information Technology and Abeer Irhayel from Social and Population Statistical Directorate. The purpose of the workshop was primarily to gather information about DoS' current situation with regard to metadata.

The overall situation is that there are parallel projects regarding different aspects of metadata with different degree of realisation, but there is no clear strategic direction for the work. DoS does not have metadata systems with full coverage of all surveys/indicators, current systems are not really integrated with dissemination platforms and the user oriented metadata mainly consists of textual descriptions, which - according to structures defined in certain templates - comprise basic information about contact-info, statistical concepts/definitions, data sources, production process, methodology, classifications used and (to limited extent) quality. It seems that most of the 'raw' metadata is maintained locally in the systems of each survey division, whilst some cross-cutting coordination (provision of templates, gathering of information, upload to website etc.) is provided by the Directorate of Information Technology.

DoS distinguishes between metadata for *surveys* and *indicators*, respectively, and between metadata for external users and internal users, respectively, cf. the matrix below.

METADATA	External needs/usage	Internal needs/usage
Indicators	JorInfo Socio-Economic Indicators Documentation notes	Local systems/files in the survey divisions
Surveys	NADA (although the project stopped before data were made publicly available)	Customised version of the system 'Metadata'

With regard to *metadata about statistical indicators* a demonstration was first made of *JorInfo* (http://jorinfo.dos.gov.jo/jordaninfo7.0/libraries/aspx/Home.aspx), where a large number of DoS' indicators are disseminated to the public on a current basis together with some basic metadata descriptions. For those indicators, which are also among the UN *Millennium Development Indicators*, the metadata is available in both Arabic and English (because it is also reported to the UN) – for the remaining it is available in Arabic. The descriptions are made per indicator even if some indicators are highly related meaning that some descriptions are very much alike. These metadata descriptions are not yet produced for all indicators produced by DoS, but the work is in progress and the coverage is gradually improving.

Obviously, most indicators/tables are also disseminated via *DoS' own website* (http://www.dos.gov.jo/dos_home_e/main/), which was also demonstrated, but there are no metadata for the indicators/tables directly on DoS' website. This means that external users of indicators on DoS' website can access *JorInfo* for metadata, but apparently there is not always a 1:1 relation between indicators on the two websites.

Subsequently, a short demonstration was made of the *Socio-Economic Indicators*, which is an intergovernmental information system where around 300 statistical indicators produced by various authorities, including DoS and the Central Bank of Jordan, is publicly available via the internet. For

each indicator very brief methodological information is provided. For those indicators originating from DoS this information is in concordance with the corresponding information in *JorInfo*.

Finally, examples were shown of how more comprehensive meta-information is sometimes (e.g. for larger statistical projects like censuses and statistical analytical reports (in Arabic)) provided to external users in the form of 'documentation notes' on DoS' website.

With regard to *metadata about surveys* the consultants were informed about *NADA* (tool for publishing of raw data and metadata) and *Metadata* (metadata tool), which DoS had acquired from Paris21 in 2010. *NADA* was applied to a number of surveys as an internal development project and contact persons in each survey division had been assigned for providing the necessary information. However, the project was later suspended and so far no data or metadata have been made available to external users with the use of *NADA*. It is not known at this stage if the work (i.e. application to the rest of the surveys) will be restarted sometime in the future.

In relation to *internal needs/usage* of metadata about surveys it is, however, noteworthy that the System Analysis & Programming Division have customised Paris21's *Metadata* tool, cf. above, in order to fulfil the internal needs for standardised metadata about the surveys (primarily) from an IT perspective. The new customised tool, which was briefly demonstrated, is now applied to all surveys in DoS, which ensures continuity of the statistics production. The reason for this initiative was that, unfortunately, a large number of survey data sets from periods prior to this procedure are not usable to DoS simply because no metadata about their content and structure exists.

At the end of the workshop, an introductory presentation was made of SDs current development project which will integrate and improve the on-line metadata service to the users, the drivers behind the project (user requests for better metadata and emergence of new international standards and tools). Examples were demonstrated of how tables in SDs StatBank (www.statbank.dk) are made and how the StatBank links to the quality declarations (the presentation is a separate annex to this mission report). This will be covered in detail in component 4.

Finally, in addition to the lack of a clear strategy and direction, it seems that there are varying perceptions about what is actually meant with 'metadata', and which metadata are needed (scope and detail) and how the needs could/should be met. These differences in perceptions needs to be thoroughly addressed in the development of a new metadata strategy for DoS, cf. the mandatory result mentioned above.

2.8. SDDS, DQAF and quality declarations

A workshop about the IMF SDDS and the associated DQAF and overlapping international standards for statistical quality reporting was held with members of the Quality Team and participants from the Quarterly National Accounts Division, Prices & Cost of Living Division and the External Trade Division. Jordan has complied with IMF SDDS since 2010. DoS delivers economic data and metadata for many of the SDDS indicators to the Central Bank of Jordan which forwards this to IMF, meaning that relatively comprehensive metadata exist in DoS for a range of key economic indicators. However, the metadata is not published nationally due to the absence of internal procedures and templates (although the dates of publishing (SDDS) exist (in Arabic) on DoS' website through the Department Annual Book). A monthly evaluation of the data is sent from IMF back to the Central Bank of Jordan who sends a copy to DoS.

The consultants presented the SDDS metadata structure (levels and fields) and compared them with the structure and principles of the CoP and recent additional EU requirements for quality declarations (the presentation is a separate annex to this mission report). Although structures for metadata and quality reporting differ among different international organisations, then the basic point is that if a

statistical agency fulfils IMFs requirements then it also fulfils most of the EU requirements for data and metadata.

Following the presentation a good discussion took place about how one metadata system can support documentation of different statistics production systems (e.g. survey based vs. register based) and about the influence of requirements from international organisations on national statistical systems. Again the discussion revealed that much metadata already exist in DoS – the challenge is to have it stored in shared systems in a standardised way and kept up to date.

2.9. Cooperation and communication regarding quality management

The consultants note that the opportunities for success in this component to a very large extent will depend on:

1. Clear/visible support from DoS' top management.
2. That the participants from the Quality division and the survey divisions respectively (i.e. the Quality Team) will be able to establish and communicate a shared assessment of the current situation and DoS' needs, priorities and objectives for strengthening the quality management.
3. A realistic and balanced level of ambition which within a reasonably short period of time will enable the realisation of tangible added value for users as well as for staff.

During the activity a number of discussions in the Quality Team revealed that these prerequisites are not fulfilled. It is recommended that DoS addresses this before the next activity in this component.

3. Conclusions and recommendations

The actions planned for this activity were carried out according to the programme in the ToR. The consultants' conclusions and recommendations are:

Re objectives for this project component

It is the assessment of the consultants that the project would benefit if some of the objectives for this component could be made a bit more clear and concrete – and be communicated to all relevant stakeholders in order to adjust expectations.

The general aim is seen to be "develop and put in place the methods and tools that will enable DoS to perform a quality assurance of the statistics production which is comprehensive, systematic and reflects the principles of the EU requirements". This is seen to include:

- Common structures for more comprehensive standardised checklists for conduction of surveys and statistics production
- Common templates for written documentation of quality assurance procedures
- Selection of common quality- and process indicators to be used in quality declarations
- Standard format for quality declarations of the statistical products
- Metadata strategy based on reuse and sharing of information

This should be discussed and clarified by DoS before activity 3.2

Re organization of the quality management work

The consultants note that the tasks of the Quality Division are comprehensive – including quality strategy, involvement of users, review of statistical methods and strengthening quality awareness and competence among DoS staff, cf. annex 3. However, a more concrete plan for the actual activities of the Quality Division seems needed. Also, strong and visible support from the top management is a key success factor which could be further strengthened.

The recent forming of the Quality Team seems a good way forward for the involvement of survey divisions and cross-cutting cooperation and coordination. However, it seems that the perceptions and expectations as to "who does what?" and "who is actually responsible?" differ between the members from the Quality Division and the survey divisions and this would need to be aligned in order to find common objectives commensurate with DoS' needs.

The consultants recommend that the distribution of responsibilities is that the central quality function should be responsible for *provision of quality management tools*, procedures, training, support and *coordination,* and the survey divisions should be responsible for the *application of these tools* and procedures and responsible for the quality of 'their' data and metadata. This implies that the central quality function primarily has a *supporting* role and not a *controlling* role – i.e. that the responsibility for the quality of data, metadata and continuity of business remains with the organizational hierarchy.

Also, the consultants note that the Quality Team does not have members from IT, statistical methodology and field work / data collection, which was surprising considering their importance and interest in the quality work.

These issues should be addressed before activity 3.2 in February 2014, i.e. as soon as possible.

Re quality assurance of surveys

Based on the discussions and the presentations made by DoS staff the survey processes seem to be well under control, stable and with a high degree of standardization. However, it seems that internal documentation (checklists, coding rules, validation/editing rules etc.) could be more comprehensive and up-to-date. Also, it is strongly recommended to consider how *quality measurement* could be added to the processes. It could be a task for the Quality Team (who already has a mandate from the top management) to 1) identify and refine examples of 'best practice' with a view to implement that throughout DoS and 2) select a few common quality indicators to calculate and communicate for all/many surveys/indicators in standardized quality declarations, cf. below.

This should discussed internally by DoS with a view to further work in activity 3.3 (April 2014) and 3.4 (May 2014).

Re quality management of IT

As in the survey divisions there seems a good level of quality awareness in the IT Directorate. However, there is a need for defining this quality assurance processes in written form also.

This should be further discussion in the context of activity 4.

Re European Statistics Code of Practice

DoS' recent self-assessment against the CoP actually showed a quite good level of compliance. The interpretation and assessment against certain indicators of the CoP could be reconsidered when the consequences of applying the CoP are discussed, cf. the mandatory results.

This should be done prior to activity 3.2 in February 2014.

Re metadata

A fair amount of metadata exists in DoS in different projects and systems, but there is no clear strategic direction for the work. DoS does not have metadata systems with full coverage of all surveys/indicators, current systems are not really integrated with dissemination platforms and the user oriented metadata mainly consists of textual descriptions in paper publications which comprise basic information about statistical concepts/definitions, data sources, production process, methodology, classifications used and (to a limited extent) quality. Most metadata is stored and maintained locally in the systems of each survey division, whilst some cross-cutting coordination is provided by the Directorate of Information Technology.

In addition to the lack of a strategy there are varying perceptions about what is actually meant with 'metadata', and which metadata are needed (scope and detail) and how the needs could/should be met – and met by re-using exiting information for different purposes. These differences in perceptions needs to be thoroughly addressed and discussed internally in DoS before the preparation of a new metadata strategy for DoS, cf. the mandatory result mentioned above.

It is recommended that DoS - as part of the development of the metadata strategy – decides on the scope, structure and detail for a standardised quality declaration where existing information can be re-used as much as possible, cf. the mandatory results. This work should be coordinated with component 4 of the twinning project.

Finally, since metadata, unfortunately, is "something everybody wants to *have*, but nobody wants to *produce*" the ability of the management to take the necessary decisions and follow them up is vital. Otherwise metadata projects will most likely fail.

This should be done before activity 3.7, i.e. before the end of June 2014.

Annex 1. Terms of Reference

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 and review on the current status of quality management, documentation of statistics and metadata system incl.:
  - Quality assurance, quality systems, quality declaration
  - Quality audit
  - Documentation system
- Metadata system, strategy and software
- Discussions on and identification of DoS' needs and ideas regarding quality management, documentation of statistics and metadata system
- Identification of challenges and areas to improve based on international and EU requirements
- Presentation of the European Statistics Code of Practice (EU) and Data Quality Assessment Framework (IMF)

2. Expected output of the activity

- Overview of current status of quality management
- Overview of current documentation of statistics
- Overview of current metadata system
- Presentation and introduction to the European Statistics Code of Practice
- Presentation and introduction to the IMF's Data Quality Assessment Framework
- Transfer of the Danish and in general the European Union, experience in quality and metadata
- A lining up of work programme for the next activity (3.2, scheduled to 23th - 27th February 2014)

3. Participants

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

MS experts
Mr Søren Schiønning Andersen, Head of Division, External Economy, Statistics Denmark
Mrs Karin Blix, Senior Adviser, External Economy, Statistics Denmark

External Stakeholders taking part in the activity
None

Programme for the mission

Time	Place	Event	Purpose / detail
Monday, morning	Hotel / DoS	Meeting with RTA	To discuss the programme of the week
Monday, morning	DoS	Meeting with BC Component Leader and BC Experts	Overview of current status of quality management
Monday, afternoon	DoS	Meeting with BC Component Leader and BC Experts	Overview of current status of quality management
Tuesday, morning	DoS	Meeting with BC Component Leader and BC Experts	Overview of current documentation of statistics
Tuesday, afternoon	DoS	Meeting with BC Component Leader and BC Experts	Presentation and introduction to the European Statistics Code of Practice
Wednesday, morning	DoS	Meeting with BC Component Leader and BC Experts	Overview of current metadata system
Wednesday, afternoon	DoS	Meeting with BC Component Leader and BC Experts	Presentation and introduction to the IMF's Data Quality Assessment Framework
Thursday, morning	DoS	Meeting with BC Component Leader	Presentation of MS Experts' findings and agreement on the reached conclusions. Discussion of the work programme for the next mission.
Thursday, morning	DoS	Ad-hoc meetings	Final clarifications with BC Experts, preparation of report and presentation for BC Project Leader
Thursday, afternoon	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:

Abed Wadood Matouk; BC project leader
Abeer Al-raheal; Population and Social Statistics Directorate
Ahmad Al-Masri; Foreign Trade Statistics Division
Ahmad Mowafi; RTA counterpart
Alaa Khasawneh; Foreign Trade Statistics Division
Amer Al-Jammal; Household Surveys Directorate
Basem Shannek; Development & Strategic Planning Unit
Bassam Al-Zain; Agricultural Surveys Directorate
Dergam Obeidat; Price and Consumer Division
Duraid Al-Shawawreh; Internal auditing Directorate
Hussam Abu Shokur; IT Directorate
Jaber Al-Fazza'a; National Accounts Directorate
Mohammad Abed Al-Razzaq; Price and Consumer Division
Mohammad Damra; Economic Surveys Directorate.
Mohammad Khalaf; Quality Division
Rania abu Dheam; IT Directorate
Wasfi Al-Ali; Price and Consumer Division

RTA Team:

Amal Aliah, RTA Assistant
Dina Moghrabi, Interpreter
Thomas Olsen, RTA

Annex 3. Tasks of the Quality Division

1. Reviewing applicable methodologies at DOS, which reflect the quality of input and output.
2. Setting quality assurance methodologies for all stages of statistical work at DOS.
3. Setting methodologies to measure the quality of statistical work output from the end user perspective.
4. Boosting awareness among DOS employees regarding the integrated quality management system and ways to implement it.
5. Setting a strategy that specifies integrated quality assurance procedures in all stages of statistic work.
6. Measuring data users' satisfaction and knowing their needs, with an attempt to improve confidence in official statistics.
7. Holding seminars and workshops with competent departments and stakeholders using statistical data, in order to create communication channels with such parties and receive their feedback on statistical data and ways to improve, as well as boost user confidence in official statistics.
8. Evaluating conferences, workshops and celebrations held by DOS.
9. Evaluation of individuals' visits to other countries, their preparations and the value and knowledge transfer achieved for the benefit of DOS.

Annex 4. Data quality assurance in statistical surveys

Evaluating quality of DOS publications:

No	Process	Yes	No	Attach evidence
1	Questionnaire review			
2	Researcher training			
3	Testing researchers' ability to fill questionnaire			
4	Testing trainer's ability to train			
5	Monitoring the accuracy of filling questionnaires in the field			
6	Training auditors and encoding staff			
7	Training data entry staff			
8	Checking data entry software			
9	Auditing data entry			
10	Obtaining survey results within the division			
11	Matching calculated results with computer results			
12	Preparing reports			
13	Compliance with reporting procedures (technical criteria)			
14	Meeting deadline for publishing			

1	Compliance with technical specifications applicable for technical reporting at DOS.
2	Meeting deadlines
3	Soundness and logicality of figures in the report
4	Repeated information from previous publications or news items
5	Improved quality compared to the last report published in the same field.

Annex 5. Internal metadata system for surveys