

## Terms of Reference

EU Twinning Project IL/12 CRIS 2015/370-467

Date: 11 to 15 March 2018

### Component A: Quality Management of Official Statistics

#### Activity A.8: Training course in Coordination and Quality Management of Official Statistics

#### 0. Mandatory results and benchmarks for the component

Mandatory results:

- *The establishment of an organizational system (organizational unit and work processes) responsible for the Quality Management of official statistics in ICBS and in the NSS (August 2018)*

Benchmarks:

- **IA1:** Working procedures, scope of statistical products, methods and tools defined for all interfaces by 3rd project quarter;
- **IA2:** Formal organizational structure including a designated unit, referents in ICBS, task forces and committees (with well-defined mandates) proposed to the ICBS Management by 5th project quarter;
- **IA3:** Staff trained to evaluate the quality of processes and statistical outputs generated in ICBS by 6th project quarter
- **IA4:** Members of the NSS producing official statistics in Israel defined and mapped by 7th project quarter;
- **IA5:** *Report to the Public Council for Statistics describing the processes of adaptation of the Israeli quality standards, along with an organizational structure and instruments for quality assurance within the NSS by the 9th quarter;*
- **IA6:** *Pilot with selected units in the NSS in evaluating the quality of processes and generated statistical outputs completed by 9th project quarter;*
- **IA7:** Multi-year national work plan for the implementation of the quality principles in the NSS elaborated by 10th project quarter;

#### 1. Purpose of the activity

The purpose of this activity has two tracks:

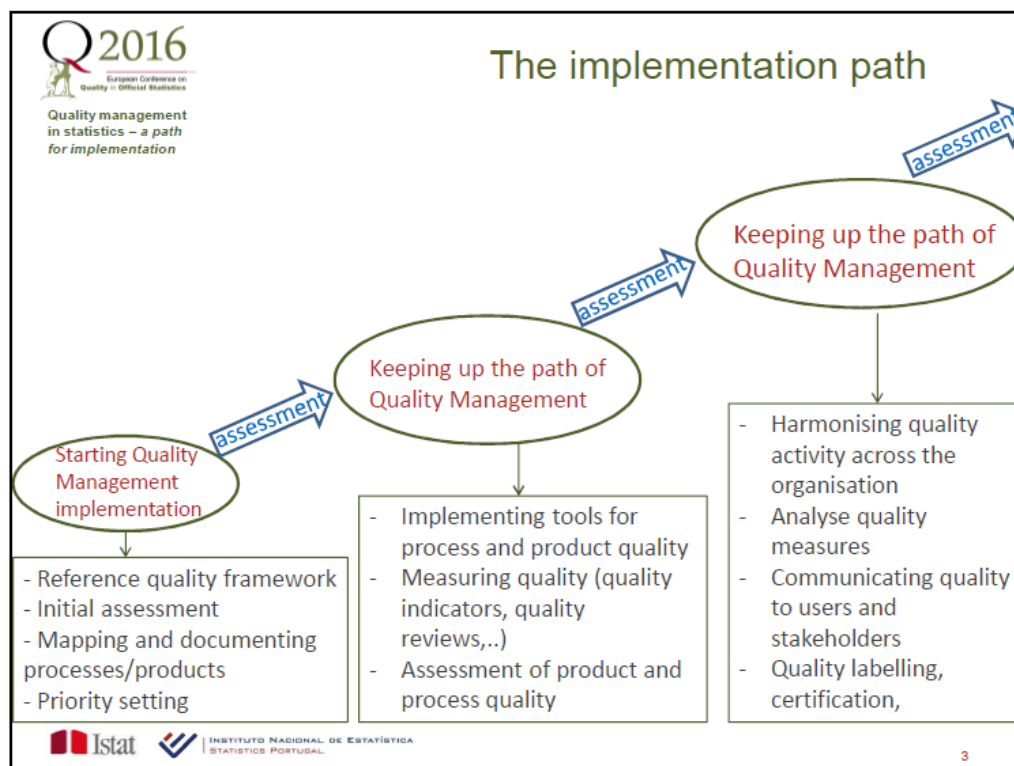
- i. To introduce the ICBS to implementation path applied at ISTAT for quality management of statistics to selected ICBS staff members including practical challenges of implementation in ISTAT, how they were overcome, and which persist. Which tools are essential at the initial implementation stages?
- ii. To introduce the quality assurance framework and its components and tools to staff members from Other National Authorities (ONA's) engaged in planning and production of official national statistics in Israel as well as to selected ICBS staff members.

#### ***Implementation path of quality management within the National Statistical Institute (NSI):***

In view of Marina Signore's scheme for the implementation path (Fig 1) the ICBS would like to be introduced to the practical challenges of implementation in ISTAT, how they were overcome, and which persist. Which tools are essential at the initial implementation stage?

The ICBS are feeling their way to a quality management system with limited resources and small number of staff allocated to the task. Most importantly currently the ICBS lack a central IT infrastructure supporting metadata repository, backed by organization-wide metadata management.

Since the commitment of subject matter units is a crucial element in quality management, the ICBS would like to learn from ISTAT experience in mobilising and in sustaining subject-matter unit's commitment. What, in the experience in ISTAT, are the costs and benefits to the subject matter units in the initial stages of implementation? Which benefits were most important to them? What tools and methods used in quality management were adopted more easily, and which were more difficult to implement?



**Fig 1: Quality management in statistics – a path for implementation**

#### **Training course in Coordination and Quality Management of Official Statistics**

Among the key tools is the Statistics Code of Practice (COP), the Quality Assurance Framework (QAF), the General Statistical Business Process model (GSBPM) as well as quality reporting tools suitable for ONA's.

The activity will draw on the extensive experience in Italian National Statistical Institute (ISTAT) as one of the leaders of the quality assurance methodology within the European system, and in establishing quality assurance methods within the Italian National Statistical System through SISTAN (Annex A). Thus experience in “translating” the quality assurance framework to ONA contexts will be particularly valuable to ICBS.

The experience gained in this course by the ONA's should be exposure to Statistical Quality Management concepts and tools as practical methodologies, as well as practical instruction in application of quality management tools and measures. The course will allow for participation of relatively senior ONA staff who may only attend the sessions aimed at introducing the European approach (the quality concepts, framework and tools), as well as participation of staff directly engaged in production who will also attend the sessions aimed at instruction in the application of these tools in survey-based and in administrative data-based statistical production.

The experience gained in this course by ICBS staff will serve as the basis for future courses that will be conducted by the ICBS to other members of the NSS, and will be followed up with pilot projects to monitor and promote statistical quality of NSS products.

It should be taken into account that although the European approach is taken as a model and that the ICBS itself has adopted the CoP, Israel is not formally obligated to EU legislation. Participants from ONAs will only have limited knowledge at best of quality management concepts and will not be familiar with European tools. However, some ONA's do report data to international organizations such as WHO, the IMF and the OECD and are aware of these organizations quality frameworks.

The course will be divided into two parts:

***Day 1 – For senior ONA staff, ONA staff engaged in the production of statistics, and select ICBS staff***

- Introduction to the European quality framework. Attention should be given to challenges in extending the framework beyond NSIs to ONAs, and to a non-European setting.

***Day 2 and 3 – For ONA staff engaged in the production of statistics and select ICBS staff***

- Practical implementation of the quality framework, especially in ONA's. The sessions during these two days should link the framework presented in the first day to practical applications and examples, and provide opportunities to share experience and problems. The applications and examples should be relevant to both survey-based statistics as well as statistics based on administrative data.

**2. Expected output of the activity**

- *Activity report*
- *ONA staff exposed to Statistical Quality Management concepts and tools as a functioning practical methodology.*
- *Practical experience in application of quality management tools and measures*
- *ICBS staff exposed to an example on which to base future quality management instruction to non-NSI staff.*

**3. Participants**

ICBS Committee for Quality Management (Please consult Annex B) and senior ONA and ICBS staff (10-30 individuals) as well as ONA staff engaged in the production of statistics producing official statistics (~10 individuals).

***MS experts from ISTAT***

- **Ms. Marina Signore**, ISTAT, Director of Research, Advisor to the Director, Data Collection Directorate. Project Manager of “European project "MIMOD-Mixed Mode Designs for Social Surveys, performance indicators, transparency and communication to respondents”. Chair of the UNECE Supporting Standards Group. E-mail: [signore@istat.it](mailto:signore@istat.it)
- **Ms. Giovanna Brancato**, ISTAT, Senior Researcher, Directorate for Methodology and Design of Statistical Processes. Project manager of “Models and tools for quality measurement and assessment”. Member of Eurostat Steering Committee QUAL and UN Expert Group on NQAF revision. E-mail: [brancato@istat.it](mailto:brancato@istat.it)
- **Ms. Giorgia Simeoni**, ISTAT, Researcher, Directorate for Methodology and Design of Statistical Processes, Project Manager of "Methods and tools for reference metadata documentation and communication". Trainer of ESTP “Advanced course on Quality Reporting”. E-mail: [simeoni@istat.it](mailto:simeoni@istat.it)

**4. Background**

This activity will be conducted within the Twinning Project component devoted to Quality Management of Official Statistics. The project has also furthered current ICBS efforts to strengthen coordination of the Israeli NSS, since quality assurance and quality reporting are central components of coordination. As part of ICBS efforts at furthering coordination, the sessions should allow for exchange of ideas and experience among trainees. A separate comprehensive report describing the background for ICBS plans and their current status will be sent to ISTAT, in order for the MS experts to be able to adjust their syllabus to Israeli conditions.

## DETAILED SCHEDULE PROGRAM 11 to 15 MARCH 2018

*Implementation path of quality management with in the National Statistical Institute (NSI):*

<b>SUNDAY</b>	<b>11 MARCH 2018</b>
09:00 – 09:10	Welcome and presentation of participants
09:10 – 10:30	<b>MS:</b> Key Tools and methods used in quality management in ISTAT (topics which interest ICBS as background for discussion) <ul style="list-style-type: none"> <li>• <i>Description of tools, methods, procedures which implement use of GSBPM on an organizational wide basis</i></li> <li>• <i>Description of tools, methods procedures which implement organization-wide metadata management.</i></li> <li>• <i>In so far as possible, practical demonstration of tools and procedures used for process documentation and metatdata management in ISTAT</i></li> <li>• <i>Was there a necessary order for implementation of quality management tools and methods? Which tools proved essential? Which needed to be changed?</i></li> <li>• <i>Costs, benefits and challenges to implementing quality management tools at the subject matter unit level</i></li> <li>• <i>Mobilising and sustaining subject-matter unit's commitment</i></li> <li>• <i>Present state of develeopment of quality management with modernization requirements (integration and harmonization).</i></li> </ul>
10:30 – 11:00	<b>BC:</b> Present status of quality management in the ICBS and challenges
11:00 – 11:15	Coffee break
11:15 – 13:00	<b>BC-MS:</b> Discussion and "brainstorming" on how to benefit from ISTATs experiences in quality management in planning Israel's implementation path.
13:00 – 14:00	Lunch break
14:00 – 14:45	<b>BC-MS:</b> Discussion and "brainstorming" continued and rounding up
14:45 – 15:15	Next msiion
<b>MONDAY</b>	<b>12 MARCH 2018</b>
	Preparation of training course

TRAINING COURSE IN COORDINATION AND QUALITY MANAGEMENT OF OFFICIAL STATISTICS	
DATE	Tuesday 13 March – Thursday 15 March 2018
LECTURER(S)	<ul style="list-style-type: none"> <li>• <b>Ms. Marina Signore</b>, ISTAT, Director of Research, Advisor to the Director, Data Collection Directorate. Project Manager of “European project "MIMOD-Mixed Mode Designs for Social Surveys, performance indicators, transparency and communication to respondents”. Chair of the UNECE Supporting Standards Group.</li> <li>• <b>Ms. Giovanna Brancato</b>, ISTAT, Senior Researcher, Directorate for Methodology and Design of Statistical Processes. Project manager of “Models and tools for quality measurement and assessment”. Member of Eurostat Steering Committee QUAL and UN Expert Group on NQAF revision.</li> <li>• <b>Ms. Giorgia Simeoni</b>, ISTAT, Researcher, Directorate for Methodology and Design of Statistical Processes, Project Manager of "Methods and tools for reference metadata documentation and communication". Trainer of ESTP “Advanced course on Quality Reporting”.</li> </ul>
TARGET GROUP	<p><b>Tuesday:</b> Managers and producers of official statistics in Israel</p> <p><b>Wednesday and Thursday:</b> Producers of official statistics in Israel</p>
OBJECTIVE, CONTENT AND EXPECTED OUTCOME	<p>To introduce executives and professionals of a National Statistical System (NSS) to internationally accepted approaches to Quality Management and Coordination of Official Statistics and to provide them with practical tools to implement them.</p> <p><b>The first day</b> of the course is designed to provide an overview of the principles and primary tools used in quality management and coordination for members of the NSS who are not in the National Statistical Institution (The Israeli Central Bureau of Statistics). Participants on this day will be able to understand and assess how these principles and tools apply to their own work and can help improve it. They will be able to understand how the international tools were developed to meet real needs in agencies producing official statistics for decision making purposes.</p> <p><b>The second and third day</b> will deepen the understanding gained on the first day by focusing on method and tools at process level, showing how to use them in greater detail. The applications and examples will be relevant to both survey-based statistics as well as statistics based on administrative data. Participants will have acquired a practical grounding in international quality management and coordination tools, based on direct experience, as well as a broader understanding of how they can be used in an Israeli context.</p>
ADDITIONAL EXPECTED OUTCOME	A strong network among colleagues for future cooperation and exchange of experiences.
COURSE FORMAT	First day for overview and principles; second and third day for hands-on tools and practical experience.
LANGUAGE	The course will be thought in English.
PREPARATION	None
USEFUL LINKS	<p>Statistics Code of Practice for the European Neighbourhood South countries  <a href="http://ec.europa.eu/eurostat/documents/4031688/7946023/KS-32-11-955-A8-N.pdf">http://ec.europa.eu/eurostat/documents/4031688/7946023/KS-32-11-955-A8-N.pdf</a>  The UNECE modernization models  <a href="https://www.unece.org/stats/mos.html">https://www.unece.org/stats/mos.html</a>  Generic Statistical Business Process Model (GSBPM)  <a href="https://statswiki.unece.org/display/GSBPM/GSBPM+v5.0">https://statswiki.unece.org/display/GSBPM/GSBPM+v5.0</a>  Quality Assurance Framework  <a href="http://ec.europa.eu/eurostat/documents/64157/4392716/ESS-QAF-V1-2final.pdf/bbf5970c-1adf-46c8-afc3-58ce177a0646">http://ec.europa.eu/eurostat/documents/64157/4392716/ESS-QAF-V1-2final.pdf/bbf5970c-1adf-46c8-afc3-58ce177a0646</a></p>

<b>TUESDAY</b>	<b>13 MARCH 2018</b>
09:00 – 09:30	Welcome, Course description and presentation of participants
09:30 – 10:45	Quality management and the Code of Practice <ul style="list-style-type: none"> <li>• <i>Quality Management principles and quality definition</i></li> <li>• <i>Statistics Code of Practice (CoP) for non EU countries</i></li> <li>• <i>Quality Assurance Framework (QAF) for non EU countries</i></li> </ul>
10:45-11:00	Coffee break
11:00 – 12:00	Quality and coordination in the National Statistical System <ul style="list-style-type: none"> <li>• <i>Managing the quality</i></li> <li>• <i>Statistical coordination</i></li> <li>• <i>ISTAT recent experiences</i></li> </ul>
12:00 – 13:00	Lunch break
13:00 – 14:15	International standards and quality frameworks <ul style="list-style-type: none"> <li>• <i>The OECD and the UN Statistical Divisions frameworks</i></li> <li>• <i>The UNECE modernization models: The Generic Statistical Business Process Model (GSBPM)</i></li> </ul>
14:15 – 15:00	Discussion, feedback from participants, wrap up and conclusions

<b>WEDNESDAY</b>	<b>14 MARCH 2018</b>
09:00 – 10:45	Ensuring process and product quality <ul style="list-style-type: none"> <li>• <i>Error sources in statistics based on administrative data and survey data</i></li> <li>• <i>Activities to improve the quality of statistical production in NSS</i></li> </ul>
10:45 - 11:00	Coffee break
11:00 – 12:00	Group work
12:00 – 13:00	Lunch break
13:00 – 13:45	Discussion on group work results
13:45 – 15:00	Quality indicators <ul style="list-style-type: none"> <li>• <i>Defining and analyzing quality indicators</i></li> <li>• <i>Examples from SIMS</i></li> <li>• <i>Examples from GSBPM</i></li> </ul>

<b>THURSDAY</b>	<b>15 MARCH 2018</b>
09:00 – 09:15	Summary and discussion from day 2
09:15 – 10:15	Documentation of official statistics and Quality reporting
10:15 – 10:30	Coffee break
10:30 – 11:30	Implementing Quality Management in NSS <ul style="list-style-type: none"> <li>• <i>Structured discussion with participants</i></li> </ul>
11:30 – 12:00	Discussion, feedback from participants and course assessment

12:00 – 13:00	Lunch break
13:00 – 14:00	Summing up and recommendations <ul style="list-style-type: none"> <li>• <i>Discussions with ICBS staff summing up experience</i></li> <li>• <i>Recommendations and the next mission</i></li> </ul>

## ANNEX A - ISTAT QUALITY POLICY

Since the 1990s ISTAT has adopted a systematic approach to ensure quality in both statistical information and service to the community. For this purpose the Institute has defined a quality policy providing itself with appropriate tools as well as management changes to carry it out.

Istat quality policy is coherent with the European framework developed by Eurostat, taking up its main principles and definitions. In 2005, the [European Statistics Code of Practice](#) (revised in 2011) established the principles to follow in order to ensure and strengthen both accountability and governance of the European Statistical System and the National Statistical Systems inside it.

Essential points of ISTAT quality policy are:

- **Process quality:** consisting in the production of accurate statistical information efficiently and effectively;
- **Product quality:** consisting in the dissemination of high-quality timely statistical data which are relevant for the users, also the potential ones;
- **Documentation:** consisting in the storage and availability of information necessary not only for a proper use of data but also to ensure transparency in all the production activities of statistical data;
- **Respect for respondents:** consisting in the reduction of response burden and in the respect of respondent's privacy;
- **Strengthening of statistical literacy:** consisting in promoting a proper use of statistical information in policy-making to better support decisions and policies;
- **Users' orientation:** consisting in making statistical information easily accessible and understandable and in satisfying user needs as much as possible.

Istat quality policy is aimed at a systematic improvement of statistical outputs and processes through the development of appropriate methodologies and tools as well as an appropriate scientific and technical support provided to the personnel directly involved in the production and dissemination of statistical information. Moreover, a set of standard quality indicators are regularly analysed and quality assessment is performed based on both internal audit and self-assessment of compliance between the production processes and Istat quality guidelines.

The Quality Committee is the governing body for the implementation of quality policy: it is responsible for coordinating statistical-methodological audits and developing procedures for monitoring the quality of current statistical processes. Another task of the Quality Committee is acting as supervisor in all quality related activities carried out in the Italian National Statistical System (Sistan). Finally, it will foster the use of the Italian Statistics Code of Practice as well as other activities carried out to enhance quality literacy within the SISTAN.

A centralised unit is in charge of performing the following tasks:

- Promote the development and use of methodologies and techniques to improve the statistical quality within Istat and the National Statistical System as well, in accordance with the European and international principles and standards.
- Encourage the systematic improvement of the quality of statistical products and processes through:  
a) the definition and dissemination of Guidelines, b) the management of quality audit; c) the process documentation and analysis of standard quality indicators.

This unit is supported by a network of more than 100 quality pilots, trained on quality issues and documentation, in charge of monitoring the quality of production processes they are involved in, calculating quality indicators as well as keeping updated the documentation for their own production process.



## ANNEX B - Short Bio-information for the ICBS implementation Team

### Project leader:

- Mr. Yoel Finkel, Associate National Statistician, ICBS.

### Members of the Committee for Quality Management:

- Prof. Moshe Pollak, Chief Scientist, Office of the National Statistician, ICBS. Prof. Pollak has served in the Department of Statistics at the Hebrew University of Jerusalem for over 40 years in research, teaching and various administrative functions. His main line of research is in sequential analysis, with an emphasis on process quality control. He joined the Israel Central Bureau of Statistics in July 2016 as its Chief Scientist. Email: [moshep@cbs.gov.il](mailto:moshep@cbs.gov.il)
- Ms. Sigalit Mazeh (Shmueli), BC Project Leader Deputy of the Twinning Project and Director of International Relations and Statistical Coordination Department, ICBS. Since 2009 employed in the International Relations and Statistical Coordination Department as Director of the ICBS Annual Statistical Abstract, and Head of the department since 2015. The department is responsible for coordination with the NSS, international relations and management of international and bi-lateral activities (including the Twinning projects) as well as for micro data access to researchers. Ms. Sigalit Mazeh (Shmueli) has been employed at ICBS since 1995. In the period 1995 to 2009 she worked in the Census Department - from 2000 as the Head of Sector for Concepts, Questioners and Dissemination. Ms. Sigalit Mazeh (Shmueli) has a MA in Demography and Sociology. Email: [sigalit@cbs.gov.il](mailto:sigalit@cbs.gov.il)
- Mr. Ari M. Paltiel, Director of the Statistical Quality Management Department, Office of the National Statistician, ICBS. For the last two years he has been leading ICBS efforts to create the policies and organizational structures needed to implement the ICBS's statutory role in leading the National Statistical System and promoting its quality standards. Mr. Paltiel has been employed in the ICBS since 1983. Over the course of his career he has held several senior positions in the population, demography, health and social statistics fields. He teaches demography at the Hebrew University of Jerusalem's School of Public Health. Email: [ari@cbs.gov.il](mailto:ari@cbs.gov.il)
- Mrs. Elana Dror, Since February 2016 Head of the Quality and Excellence Sector in the ICBS. Mrs. Elana Dror has worked in the ICBS for the past 20 years. Over the course of her career she held several positions in the numerous palaces: Head of the Agriculture division, Head of the population census, founded the Job Vacancy Survey and the Survey of Business Tendency Survey. Elana Dror has a Master's degree in Economics' and Agriculture from the Hebrew University the Faculty of Agriculture. Email: [elana@cbs.gov.il](mailto:elana@cbs.gov.il)
- Mr. Oz Shimony, Senior Director of the Macro Economic Division and member of the Higher Management of the ICBS since 2012. The division has three senior Departments. Among the responsibilities of the division are some of the main indicators used in the fields of economy such as the GDP, foreign trade, balance of payments, transportation, industry, construction, tourism, road accidents etc. In the last 25 years he has held several senior jobs in the ICBS such as Director of the Macro Economic Senior Department, Director of National Accounts, and Director of the DB and Internet Sector of the ICBS. Mr. Oz Shimony took part in some of the main processes leading to Israel's joining the OECD and also participated and led some of the activities in the previous Twinning project. Mr. Oz Shimony holds a Master degree in Business Administration (finance) and statistics (operational research). Mr. Oz Shimony lives in Modiin with his family .Email: [ozs@cbs.gov.il](mailto:ozs@cbs.gov.il)
- Ms. Larisa Fleyshman, Head of Sector, Micro Economics, ICBS and Assistant Quality Coordinator ICBS. She is responsible for developing hedonic models in the ICBS for determining housing prices by statistical areas, and, as an adjunct to her work, helping to coordinate publication of house price data between several ministries in Israel. This work led the National Statistician to appoint her jointly to the Statistical Quality Management Department. She holds a PhD in Geography. Email: [larisaf@cbs.gov.il](mailto:larisaf@cbs.gov.il)



- Ms. Batia Attali, RTA Counterpart, BC Component Leader for a Component of Quality Management of Official Statistics, Head of Sector, International Relations and Statistical Coordination Department, ICBS. Ms. Batia Attali has worked in International Relations and statistical Coordination Department since 2011. RTA Counterpart in previous Twinning project (2012-2014), including components on the enhancement of the NSS and ICBS quality strategy. Member of the Workgroup on a Roadmap for Implementing Standards (of the Modernization Committee on Standards of the UNECE High Level Group on Modernization of Official Statistics). Ms. Batia Attali has been employed in ICBS since 1988, formerly as analyst in IT department and as ICBS Security Officer for 13 years. Master's degree in Computer Sciences. Email: [batia@cbs.gov.il](mailto:batia@cbs.gov.il)