Istat quality policy: Auditing and self-assessment

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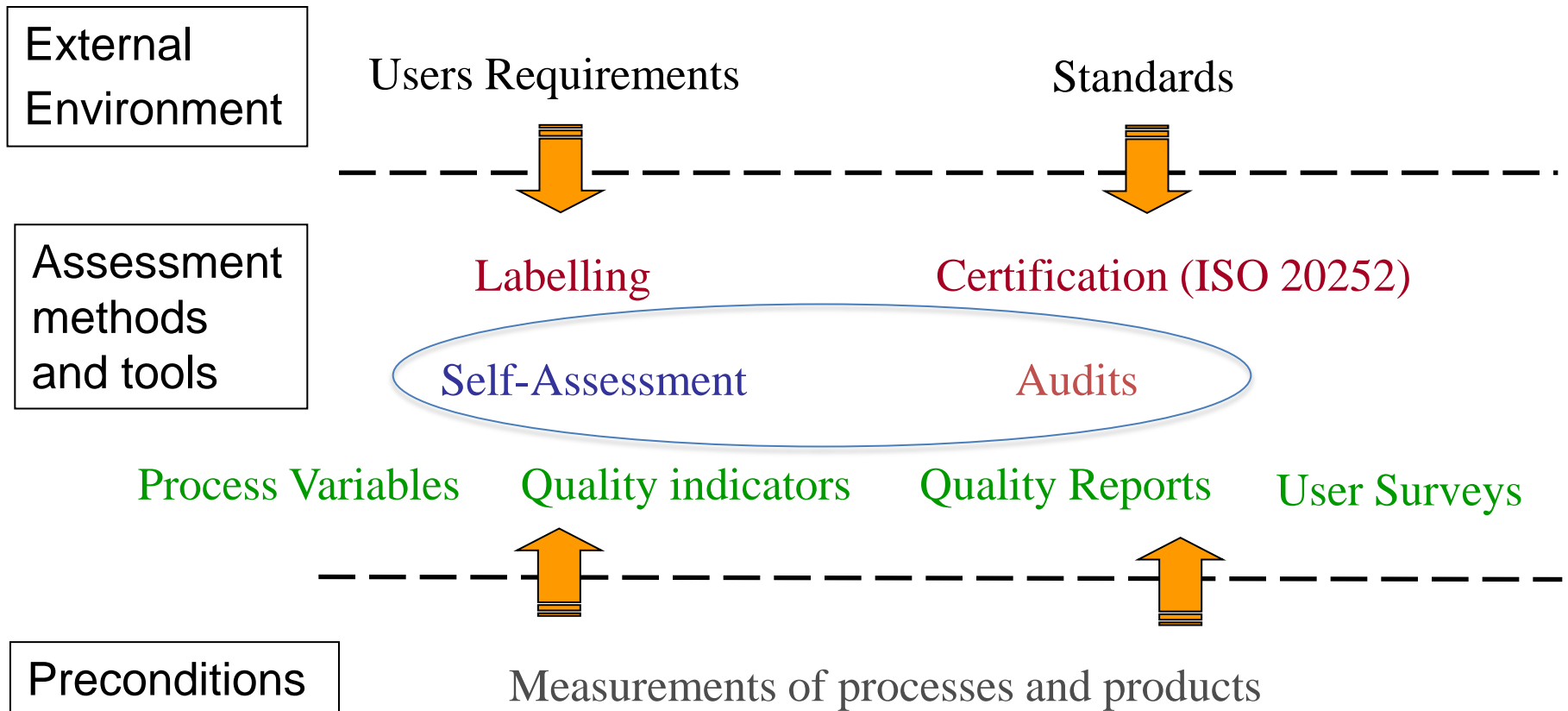**Mrs Orietta Luzi, Chief of Research,**
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Data quality assessment map*

External Environment

Users Requirements Standards

Assessment methods and tools

Labelling Certification (ISO 20252)

Self-Assessment Audits

Process Variables Quality indicators Quality Reports User Surveys

Preconditions

Measurements of processes and products

*Bergdahl et al. (2007) Handbook on DatQAM

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Auditing and self-assessment

Current surveys

➢ In-depth analyses of survey process
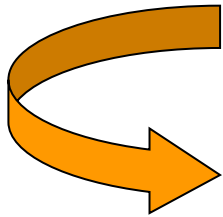
- self-assessment

- internal auditing

New Surveys

➢ Procedure for quality labeling developed and tested on 2 surveys

- adherence to few principles (relevance, questionnaire design and test, response burden reduction, quality assurance system)

- not launched so far

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Quality Assessment for current processes

Audit and self-assessment is

- a way for highlighting strengths and weaknesses
- a tool for improving weaknesses
- a tool for collecting and disseminating good practices

Concrete way of improving quality

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Quality Assessment for current processes

Beginning 2012: procedure starts on a regular basis:

- About 5 audit and 7 self-assessment procedures per year
- Some audited processes undergoes IT auditing
- Up to now, 56 surveys have been audited or self-assessed

Period	Audits	Self-assessments	Tot.
2010 and 2011	7	7	**14**
Jan-Jun 2012	5	9	**14**
Jan-Jun 2013	5	9	**14**
Jan-Jun 2014	5	9	**14**
Tot.	**22**	**34**	**56**

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Auditing and Self-assessment: key points

✓ The Audit and Self-assessment program is coordinate and sponsored by a **Quality Committee** and supported by the Quality, Auditing and Harmonization Unit **(SQC/B)**

✓ The Audit and Self-assessment procedure is aimed at evaluating adherence towards principles stated in **Quality Guidelines**

✓ The audits are carried out by **internal auditors**

✓ The audits are carried out by means of a **face-to-face interview** based on a structured questionnaire

✓ The audits are supported by documentation available in SIDI/SIQual system

✓ The Audit and Self-assessment procedures produce a **standard final evaluation report** including improvement actions, resources and timetable

✓ The Audit procedures identify **good practices**

✓ Improvement actions are monitored via the operational annual plan

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Quality Committee

Established in February 2010

Composition

- Chaired by the Head of Development of Information Systems and Corporate Products, Information Management and Quality Assessment Directorate

- Co-chaired by the Head of Service "Metadata, Quality and R&D Projects"

- Members: Representatives from subject matter directorates and cross-sectional sectors (at present: 21 members)

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Quality Committee

Mandate

✓ To coordinate audit and self-assessment activity:

- Evaluation of final reports

- Approval of improvement actions

- Monitoring of improvement actions

✓ To develop procedures for monitoring the quality of statistical processes

✓ To coordinate and sponsor quality assessment in the National Statistical System

✓ To promote the adoption of the CoP in the National Statistical System

The tools

Quality Guidelines = Reference standards

Operative manual

Audit and Self-assessment questionnaires

Templates for process and product quality reports

Final Quality Evaluation template

Quality Guidelines

Reference guide to design, carry out and control a statistical process

➢ Part I: Process quality

➢ Part II: Product quality

For each section:

• Definition of principles to be followed

• Text describing what should be done in order to fulfill the principle

• Quite general descriptions and references to technical documents

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Operative manual

It describes:

- Aims of the evaluation

- Procedures step-by-step

- Roles: who does what

- Scheduling of the activities

- Supporting tools

It includes:

- Standard template of evaluation report

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Audit and Self-assessment questionnaires

Developed from DESAP checklist and OECD questionnaires

Structure

  Part I: Process quality

  Part II: Product quality

  Part III: Process management and quality management

For each section:

- The Principle to be followed is stated
- Some questions in order to evaluate the degree of compliance to the principle
- Slight difference in the questionnaires (auditing and self-assessment)

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Process quality report

- Detailed documentation of the steps of the production process of the survey

- To be drawn by using a proper function in SIDI/SIQual re-using the metadata already available

Product quality report

- Summary documentation of product quality according to Eurostat quality dimensions, with some quality indicators

- To be drawn by using a proper function in SIDI/SIQual re-using the quality indicators already available

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Final Quality Evaluation Template

- It summarises the main strengths and weaknesses of the process

- 3/5 pages length

- It is structured in 4 parts: (written by in audit and self-assess)

1. Summary of the evidences   (auditors' team, survey manager)
   ½ page on salient evidences of the assessment

2. Results   (auditors team , survey manager)
   Description following the structure of the questionnaire

3. Improvement actions   (survey manager)
   list of the actions foreseen to overcome the critical points, according
   to the main phases of the process or to the quality dimension

4. Good practices   (survey manager)
   methodologies and/or practices that have shown to be effective for
   quality: innovations, systematic practices, generalizable practices

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Examples of improvement actions

Aspect	Critical point	Improvement action proposed
Under-reporting	Under-reporting of some spontaneous abortions	Currently the survey observes all (and only) spontaneous abortions with hospital admission. Study the possibility to include also cases of Emergency Room without hospital admission..
Data Collection	Poor timeliness	Move to web data collection that would allow to have real time data
Data Collection	Lack of complete control and monitoring on CATI data collection	Systematic organisation and regular control of all the reports provided by the company in charge of telephone interviewing
Data Processing	Great amount of data to submit to editing & imputation	Development of a new editing and imputation system based on automatic methodology
Data dissemination	No regular dissemination	To establish a dissemination program including data, methodologies, and small areas estimations
Accessibility and Clarity	Lack of documentation for the users concerning editing and imputation procedures	A document on the editing and imputation procedure is drawn including rules for data checking and correction
Accuracy and Reliability	Sampling error is not measured nor the possible bias due to frame coverage and nonresponse is evaluated.	Sampling error measurement and evaluation of the bias due to frame coverage and nonresponse. Support from methodological service is required