

TRAINING COURSE IN COORDINATION AND QUALITY MANAGEMENT OF OFFICIAL STATISTICS

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Istat Quality Policy

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Istat

Istat's Commitment to Quality

- Some background

Long tradition. Started back in early '90 with work on non-sampling errors, standardising process measurements and designing Istat information system to support quality work

- Leadership commitment

- The Italian Code of Official Statistics

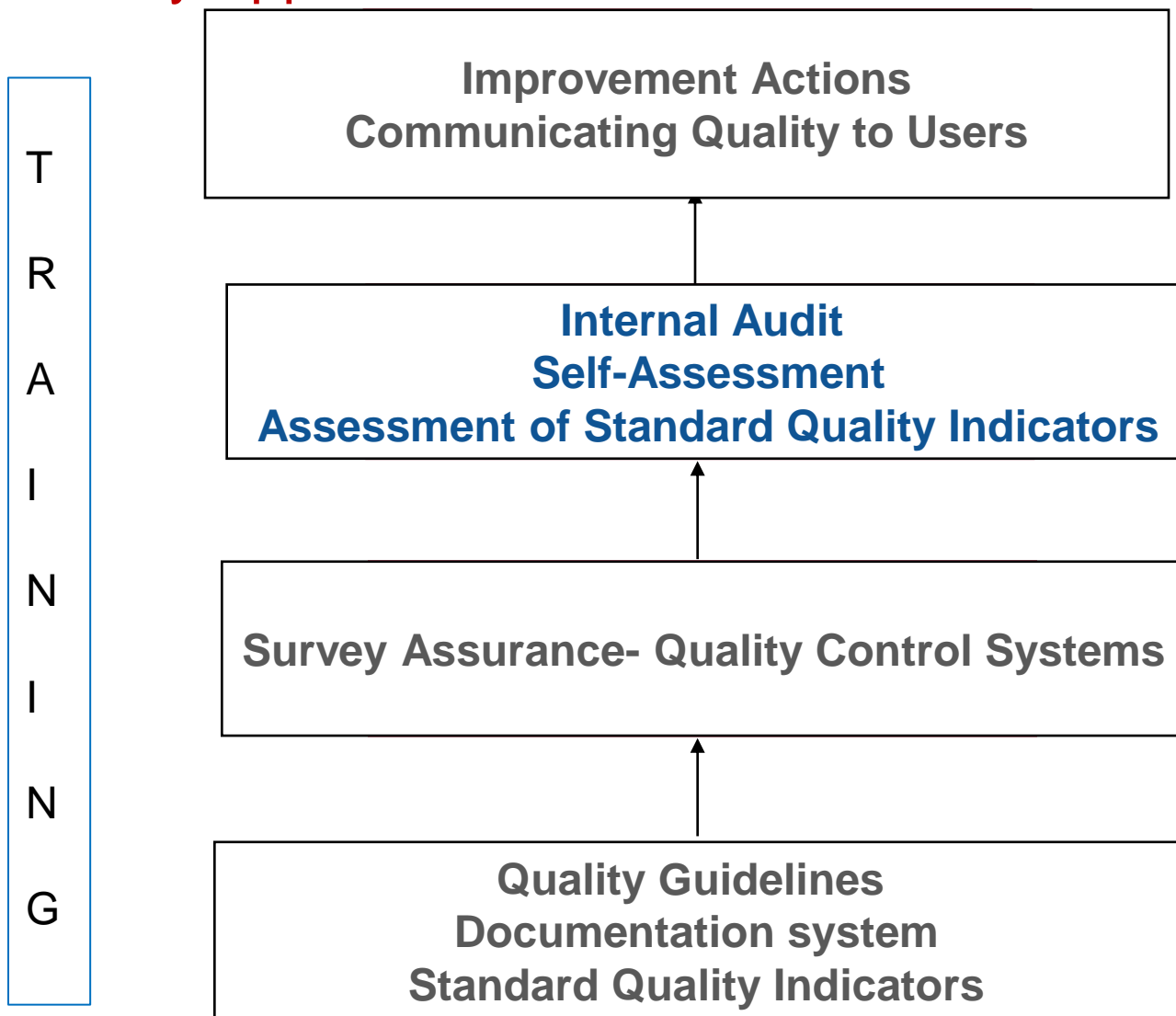
Adopted in 2010, it is based on the principle of the European Code of Practice and is statutory for the Italian National Statistical System.

- Flexibility

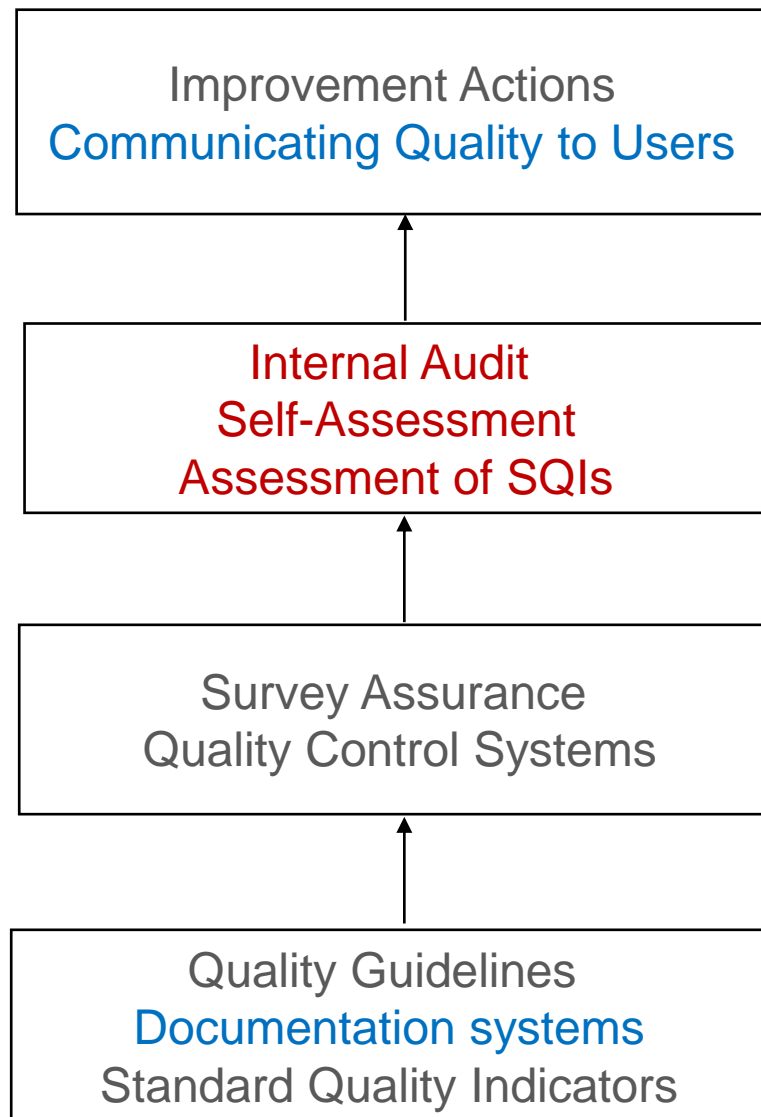
- Systematic approach

- Impetus from International and European collaboration

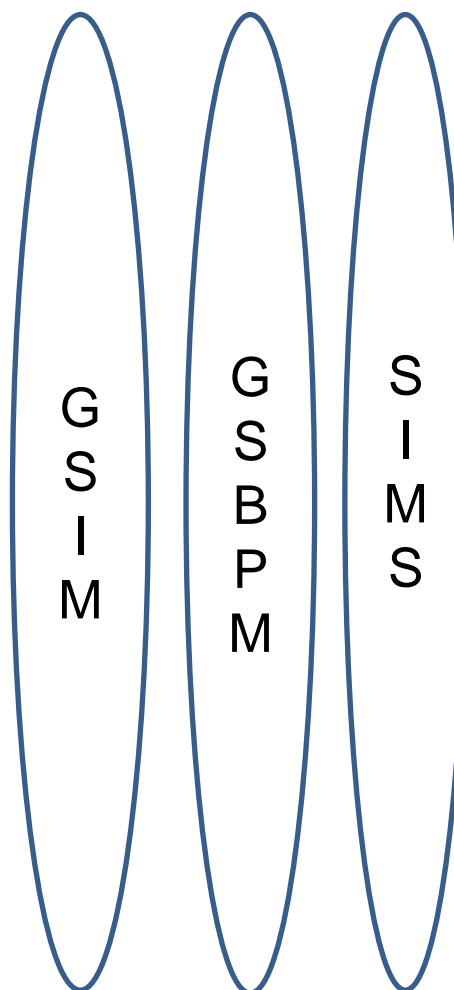
Istat Quality Approach



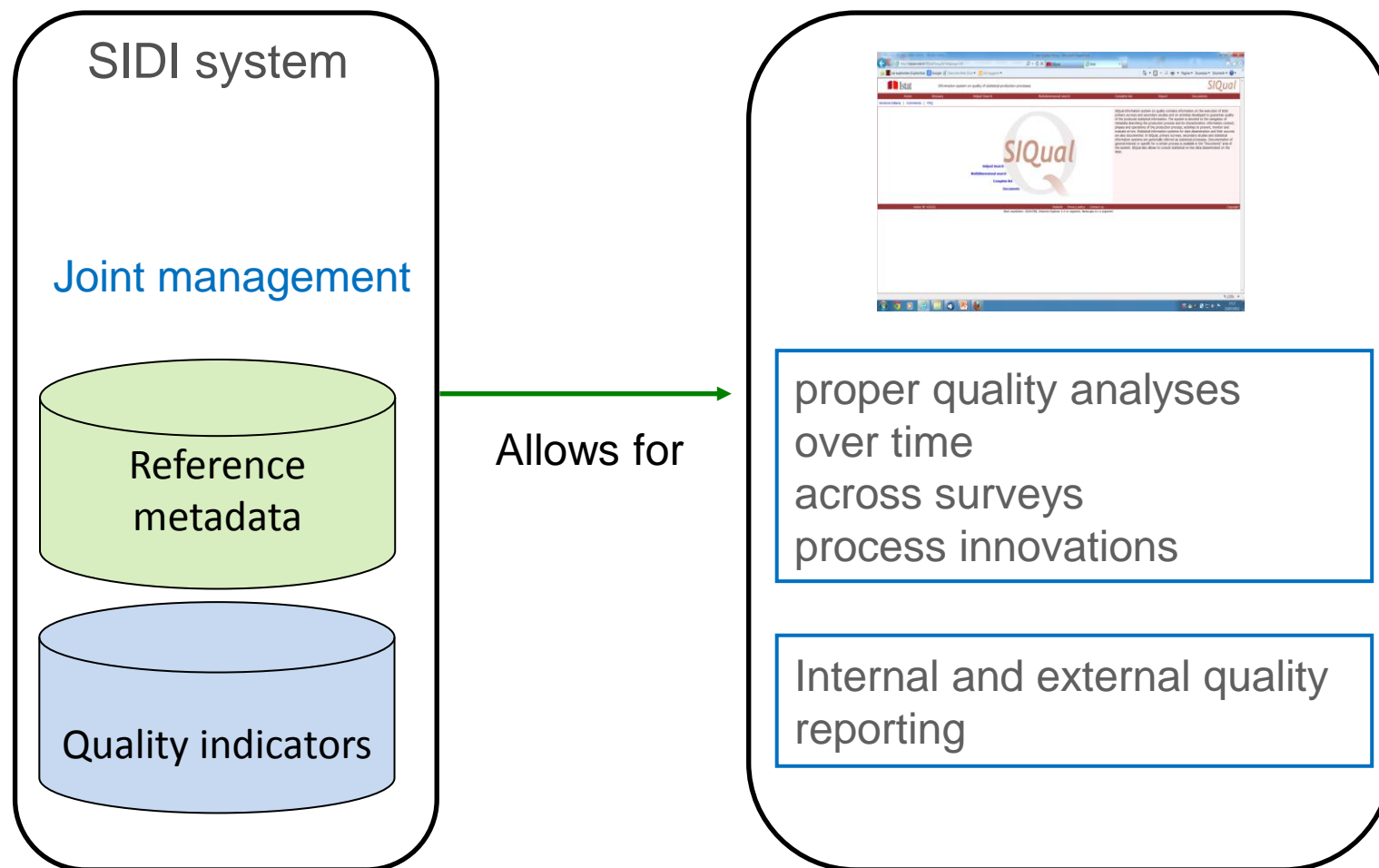
Istat Quality Approach



International Standards



SIDI-SIQual system



Quality Assessment Policy

Policy for systematic quality assessment

- Indirect quality assessment: Analyses of Standard Quality Indicators
- Direct quality assessment: Auditing and Self-assessment

Assessment is aimed at improving process and product quality

Some achievements

- committed leadership
- office-wide quality culture
 - **Quality Training:** *introductory course 9 ed. since 2007; advanced course 6 ed. since 2005; both with a focus on CoP and QAF*
 - **Specific expertise:** *about 300 quality pilots trained since 2001; about 80 quality reviewers trained since 2010)*
- improvement actions based on facts and decisions based on evidence
- both qualitative and quantitative assessment are important
- transferring of know-how, methods and tools to Sistan
- awareness of the importance of keeping up the path and being flexible to adapt to emerging needs and demands for users

Implementation of Quality Management: Auditing and self-Assessment

Quality Assessment Policy

The policy for systematic quality assessment started in 2010 and was implemented on a regular basis.

This policy comprises:

direct assessment of quality

- aimed at verifying the compliance of statistical processes to standards and Quality Guidelines

indirect assessment of quality

- regular monitoring of the quality of all the processes and products based on the analysis of metadata and standard quality indicators stored in the SIDI-SIQual system
- part of internal quality reporting activity addressed to top management

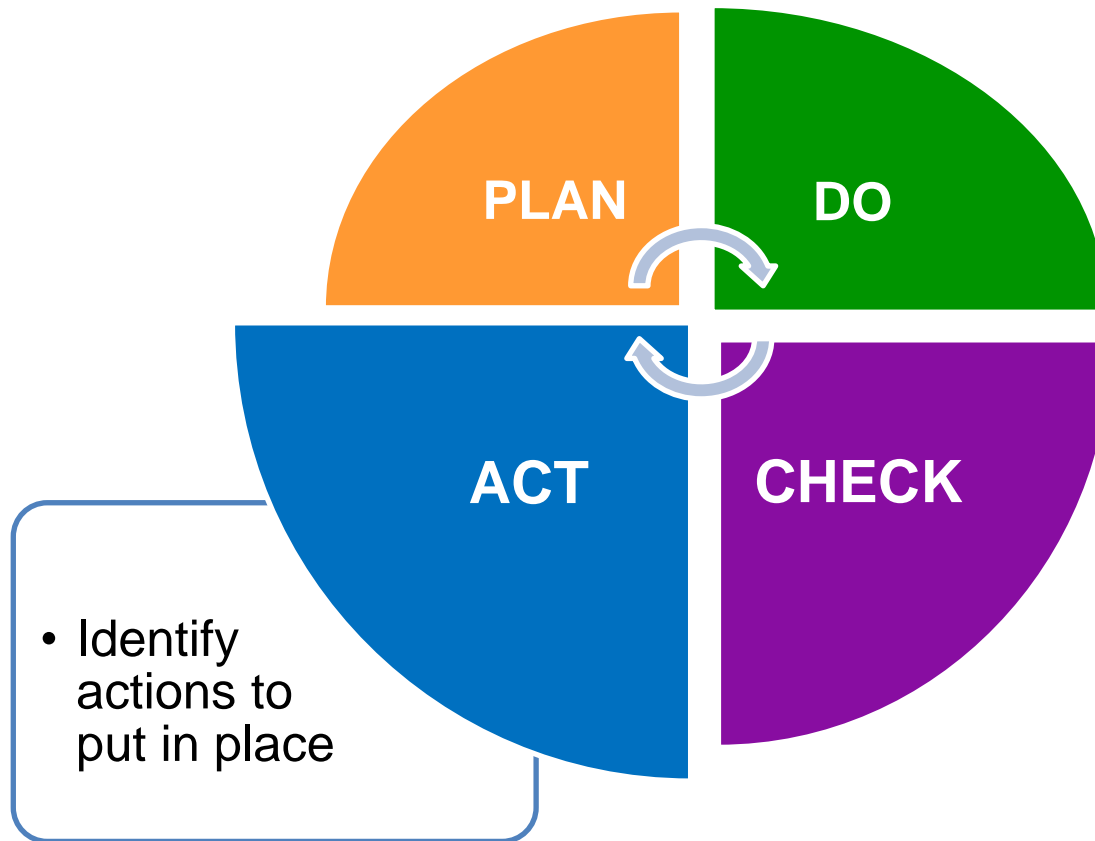
The policy for quality assessment strongly relies on past activities

The background we built on:

- a **documentation system** (whose implementation started in 2001) managing metadata and quality indicators in a standard way
- a wide-spread **quality control systems** at process level to prevent, monitor and assess quality
- an office-wide **quality culture** (built over ten years of regular training courses, networking, training of more than 300 quality pilots, seminars,...)
- the **commitment of the leadership** which represents, as known, a key factor in keeping up the path of quality management implementation

Why the focus on assessment?

to actively support quality improvement



Direct quality assessment

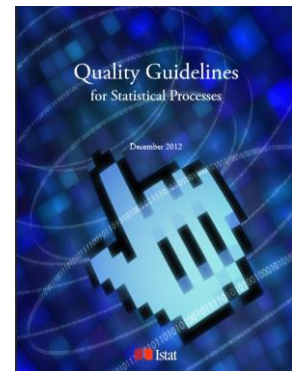
Based on a combination of:

- internal audits
- self-assessments

Detailed investigation of statistical processes and their products

Verify compliance to principles stated in the **Istat's Quality Guidelines** (June 2011)

Identify **improvement actions** and **good practices**



<http://www.istat.it/en/tools/data-quality/guidelines>

Key dates

year	activity
2010 - 2011	2 testing rounds Fine tuning of the tools: <ul style="list-style-type: none">• Questionnaires• Quality Guidelines• Operational Manual
2012	On a regular basis 14 processes: <ul style="list-style-type: none">• 5/6 audits• 9/8 self-assessments Audit team: 3-4 experts 1 reviewer for self-assessment
2013	Improvement actions flagged in Annual Work Program (PAA)
2014	Good practices added in the evaluation report template Harmonisation of evaluation report templates

The actors and the tools

ACTORS

- Quality Committee
- Unit on Auditing, Quality and Harmonisation (SQC/B)
- Auditors and Reviewers
- Survey Managers and main collaborators
- Directors
- Board of Directors

TOOLS

- Quality Guidelines for statistical processes
- Auditing and self-assessment questionnaires
- Template for the evaluation report
- Operational Manual

The auditors and reviewers

Permanent staff with higher education (researchers or technicians)
with at least 3 year experience in Istat

Ad hoc internal training course

The experts are appointed for two years

Anno	N. Experts in the pool	entries	exits	N. Experts employed	N. Experts trained
2012	36	36	0	27	36
2013	43	9	2	24	9
2014	41	28	30	25	22
2015	43	10	8	27	8

The Procedure

	Audit	Self-assessment
Who	Team of 3-4 experts (auditors)	Survey manager
How	<ul style="list-style-type: none">- Study of preliminary documentation- Auditors interview the survey manager using the audit questionnaire	<ul style="list-style-type: none">- The survey manager fills-in the self-assessment questionnaire
Output	Final report (3-5 pages): Part A: Results of the audit (team of auditors) Part B: Improvement actions (survey manager)	Final report (3-5 pages): Part A: Results of the self-assessment (survey manager) Part B: Improvement actions (survey manager) revised by 1 reviewer

Activities and Scheduling

Activity	Description	Timetable
Step 1	Auditors pool and Processes selection (Quality Committee)	January,10 – February,15
Step 2	Communication and training	February,15 – March,15
Step 3	Study of material. Preparation of documents (for audit)	March,15 – April,15
Step 4	Auditing Interview	May,1 – May,15
Step 5	Drafting of the final evaluation report	May,1 – May,15 (audit) April,1 – May,10 (self-ass.)
Step 6	Hierarchical approval (subject matter directors)	May, 31 – June, 20 (audit) May,10 – May, 31 (self-ass.)
	Hierarchical approval (Quality Committee)	June,15 – July,15
Step 7	Communication to Board of Directors	September,1-30
Step 8	Improvement actions in Annual Work Program	October, 1-31

Improvement actions

- Are listed in the Evaluation Report (they are suggested by the survey manager and the Director commits herself/himself to allocate resources for implementation)
- Approved by the Quality Committee
- Are flagged in the Annual Work Program
- Quality unit monitored the implementation status of the actions

Audits and self-assessments so far

Year	Audit	Self-Assessment	Tot.
2010 and 2011 (<i>Test</i>)	7	7	14
2012	5	9	14
2013	5	9	14
2014	6	8	14
2015	5	9	14
Tot.	28	42	70

Improvement actions

*From 2010 to 2014: 56 Processes underwent quality review
179 Improvement actions were identified*

N. of improvement actions by process phase in 2014 round

	Survey design	Frame	Data collection	Data treatment	Storing, documenting and disseminating	Other	Total improvement actions
audits (6)	2	1	4	2	6	6	22
self-assessments (8)	2	0	9	2	5	7	24
Total improvement actions	4	1	13	4	11	13	46

Combining direct and indirect quality assessment

Direct assessment of quality

- ☺ goes in depth into processes
- ☺ permits to identify best practices
- ☺ permits to improve the single process
- ☹ Workload of actors involved is substantial
- ☹ Limited number of processes can be evaluated annually

Indirect assessment of quality

- ☺ regular monitoring of processes and products
- ☺ raises awareness of quality issues and targets
- ☺ provides comparable information at low cost
- ☹ does not allow to go in depth
- ☹ Depends on the information in SIDI

Combination of the approaches permits to overcome the drawbacks of a single approach but at the price of a higher effort.

Lessons learned

- Both metadata and quality indicators are important to assess and improve quality
- Documentation systems are of great support for assessment (both direct and indirect)
- Involvement and motivation of all the actors is vital to keeping up the path of systematic quality activity
- Committed leadership is of great support