Introducing a Framework for Process Quality in National Statistical Institutes

16 - Quality Assessment & Audits
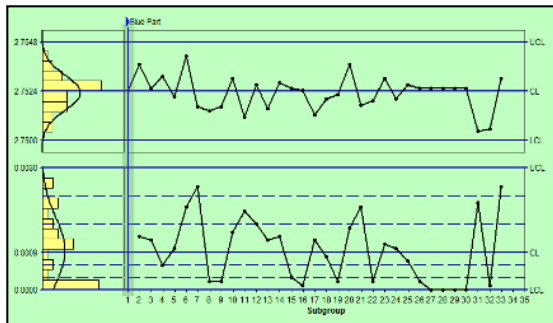
Giovanna Brancato, Marina Signore, Francesco Barbalace, Giorgia Simeoni

Istat, Italian National Statistical Institute

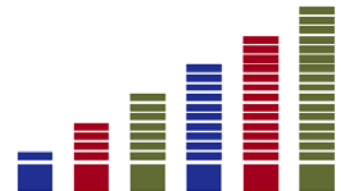Madrid, May 31 - June 3

Background

Leadership expert group (Leg) on Quality (2001)

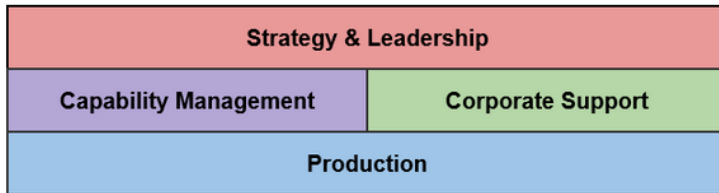Efficiency, effectiveness, robustness, flexibility, transparency and integration

Statistical Quality Control (SQC)

Maintain processes under control
by monitoring key variables

Background

GAMSO

Activities of a Statistical Organisation

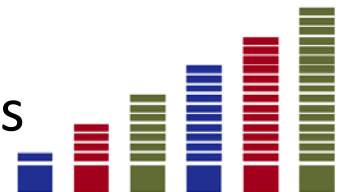| Strategy & Leadership	
Capability Management	Corporate Support
Production	

Ess Vision2020 key area

Promote efficiency and productivity gains

through

sharing methods, tools, technological infrastructures

Background

ES Code of Practice (CoP)

Area "Statistical Products" → Quality Dimensions

Area "Statistical Processes" →
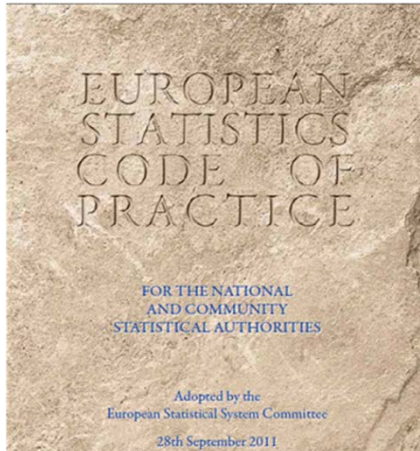 Sound methodologies
  Appropriate statistical procedures
  Non-excessive burden on respondents
  Cost-effectiveness

Ess Quality & Performance Indicators (QPIs)

- To measure and monitor quality

- To communicate quality to users
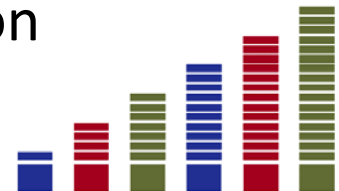
Aims & description of the work

Develop a framework for process quality

- define process quality requirements

- to extend the quality framework to other processes beyond statistical ones

Building blocks

- process definition / analysis
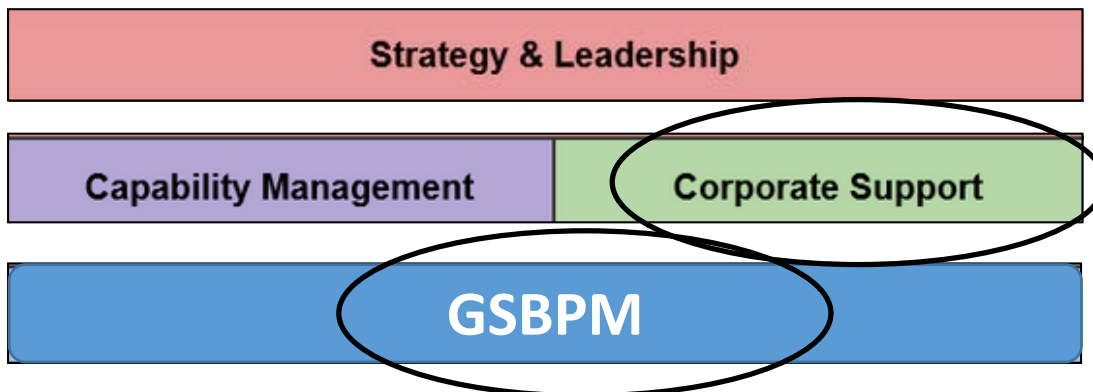
- quality dimensions identification
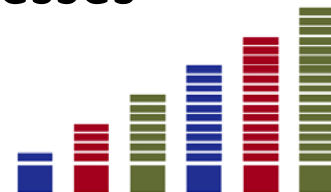
Processes in a Statistical Office

Literature

- Strategical

- Management

- Operational

GAMSO

| Strategy & Leadership |
| Capability Management | Corporate Support |
| GSBPM |

Initial considerations

- Processes have different nature: statistical, organisational

- Initial focus on business and corporate support processes

- Dimensions apply to: process/phase/sub-process

Quality dimensions

IDENTIFIED

TRANSPARENT
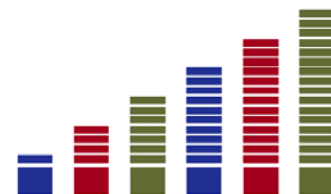
REPRODUCIBLE

RELIABLE & ROBUST

EFFECTIVE

EFFICIENT
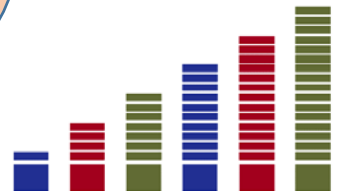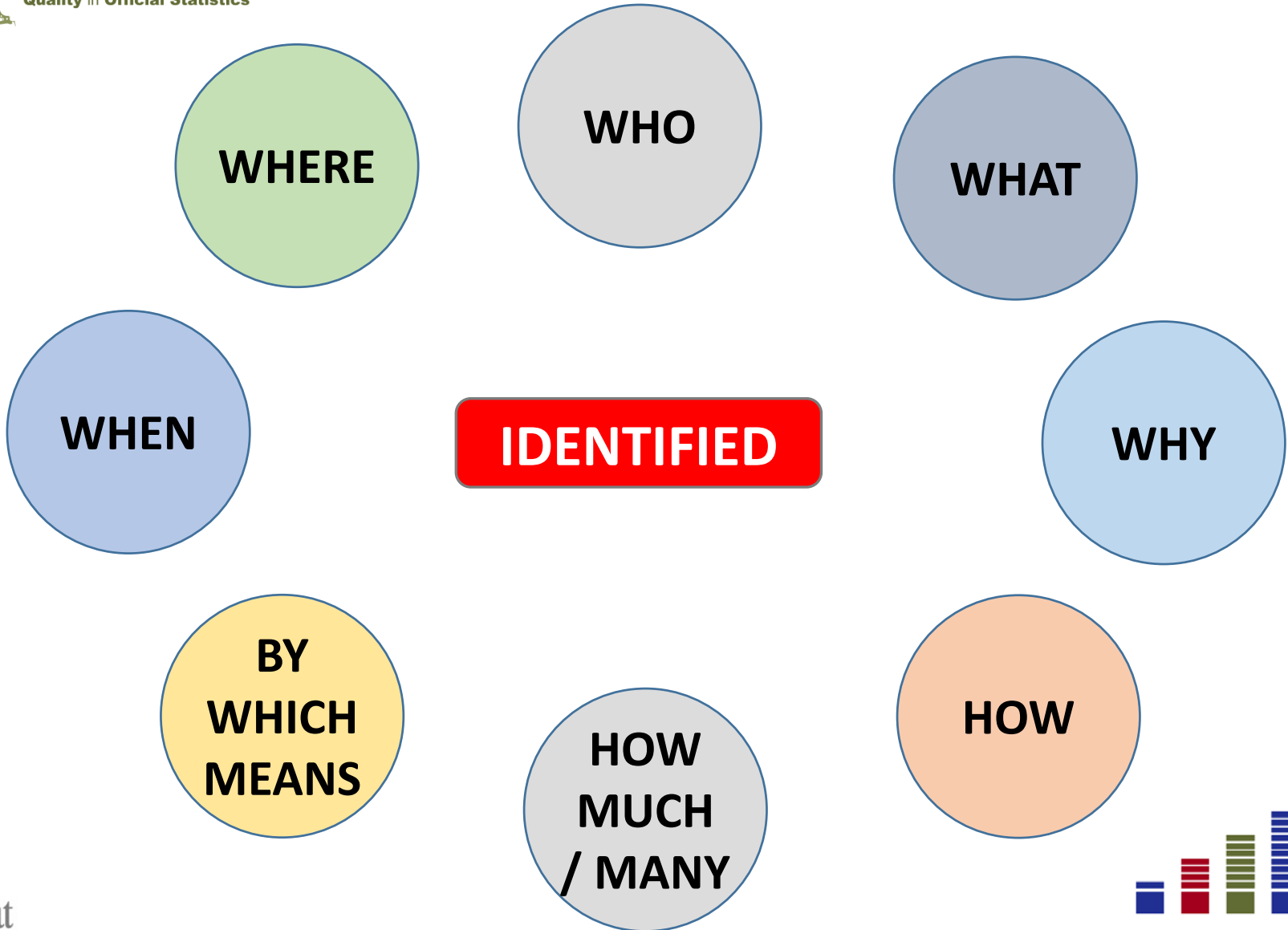
CONTROLLABLE

FLEXIBLE

INTEGRATED

SECURE
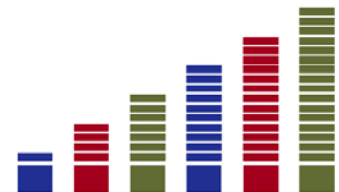
Quality dimensions: Identified

Quality dimensions:
Transparent and Reproducible

TRANSPARENT

Well documented & easily accessible to users and stakeholders

REPRODUCIBLE

Producing the same output if replicated on the same input

Quality dimensions: Reliable, Robust, Effective, Efficient

RELIABLE & ROBUST
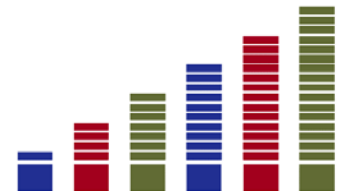
Reliable: its correct functioning is guaranteed

Robust: achieving results against unexpected situations

EFFECTIVE

Successful in delivering the desired outcomes

EFFICIENT

Producing the expected outputs cost-effectively

Quality dimensions: Controllable, Flexible, Integrated, Secure

CONTROLLABLE

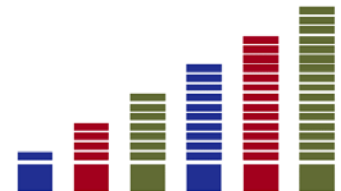Monitored and assessed against targets

FLEXIBLE

Readily adaptable to changing needs and demands

INTEGRATED

Easily combined with other processes/phases/sub-processes

SECURE

Associated risks are analysed and prevented

Final remarks and future work

Work done

- Resumed the Leg on Quality work on process quality characteristics and added some additional quality dimensions

- Widened the focus from business processes to corporate support processes

Remarks

- Some quality dimensions apply better to some processes than others

- Some quality dimensions have a twofold interpretation from an organisational and from a statistical point of view

Final remarks and future work
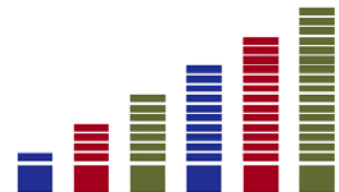
Future developments

- To identify the concrete processes underlying the corporate support activities relevant for Istat

- To equip the process quality dimensions with measurements
  - Explore if homogeneous measures in business and corporate processes can be introduced
  - Not all dimensions measurable

- To analyse other processes of the statistical organisation
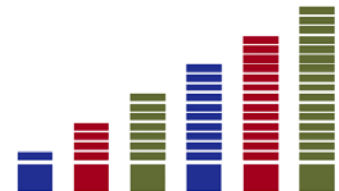
Thank you for your attention

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