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**United Nations Economic Commission for Europe  
Statistical Division**

# **International Developments in Quality Management**

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# Contents

- ❖ Defining Quality
- ❖ International Developments
  - National Quality Assurance Framework
  - GSBPM
  - Standards-based modernisation
- ❖ The importance of measuring quality



# Definition of Quality

International Standard

ISO 9000/2005 defines quality as:

**“The degree to which a set of inherent characteristics fulfils requirements”**

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# What Does This Mean?

- ❖ Whose requirements?
  - The user of the goods or services
- ❖ A set of inherent characteristics?
  - Users judge quality against a set of criteria reflecting the different characteristics of the goods or services
- ❖ So quality is all about providing goods and services that meet the needs of users



# Quality = Perfection?

**Quality = Perf~~X~~ction**

**Quality = Good enough**



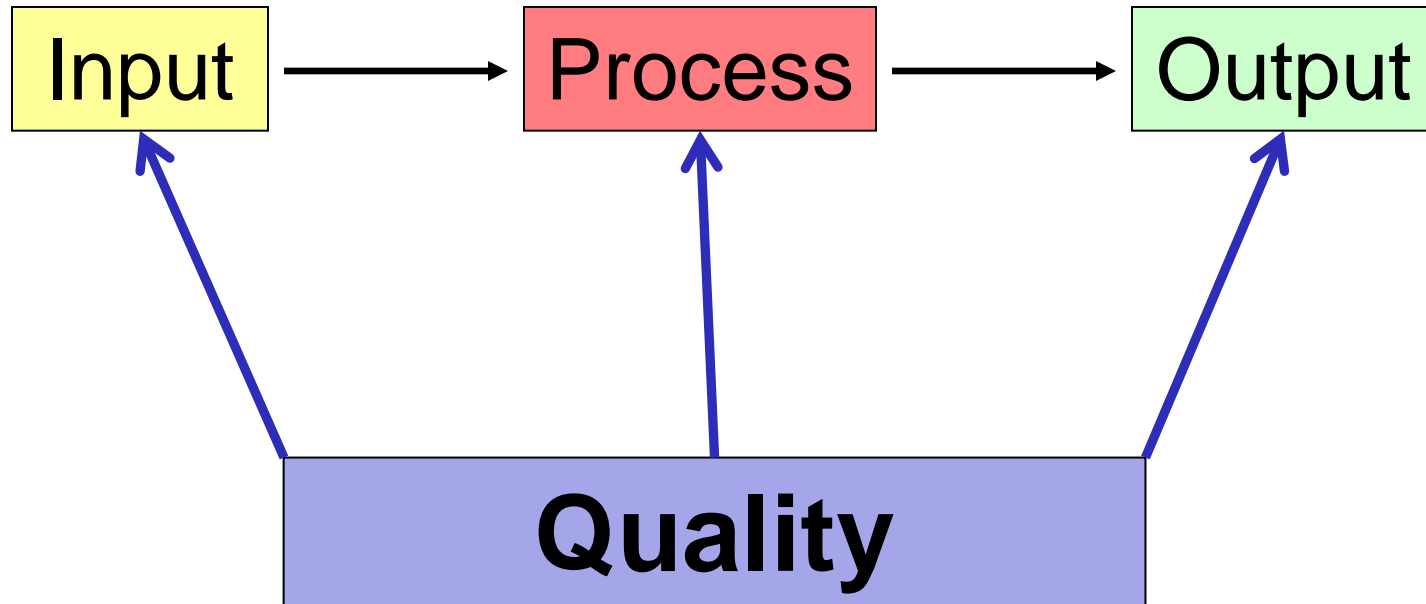
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# So which is the best quality?





# Quality is not just about outputs





# Some international developments

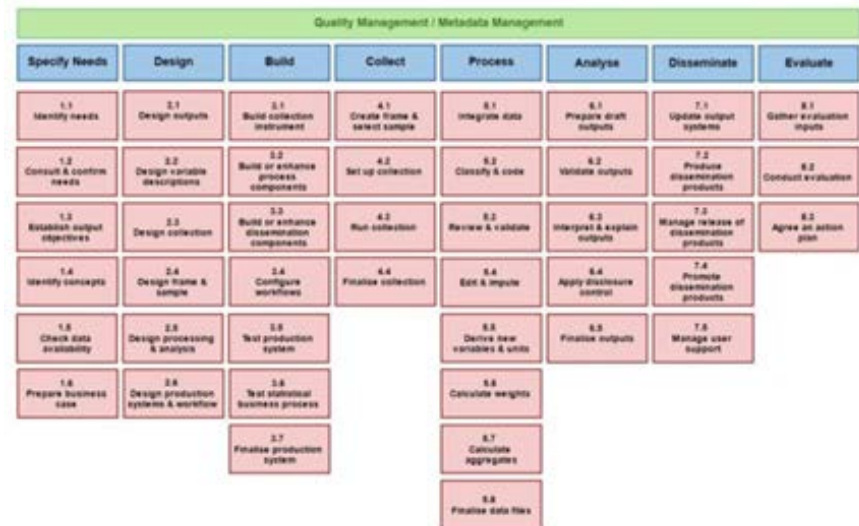
# NQAF

- ❖ National Quality Assurance Framework
- ❖ Developed by a UN Expert Group
- ❖ Endorsed by Statistical Commission (2012)

Template providing the general structure for countries to formulate national quality frameworks

# GSBPM

- ❖ Generic Statistical Business Process Model
- ❖ New version released in December 2013
- ❖ Many statistical organisations use it to document and quality assure their processes
- ❖ Current work to define quality indicators for each sub-process





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# Standards-based Modernisation

- ❖ International collaboration under the High-Level Group for the Modernisation of Statistical Production and Services
  - Promoting common standards, frameworks and tools
  - Improving efficiency

**Result: Less resources needed for production; more resources for analysis and quality assurance**

# The UNECE Data Quality Model

## Quality Framework

Provides the basis for



## Quality Improvement Strategy

Manifests itself as



## Annual Quality Improvement Programmes

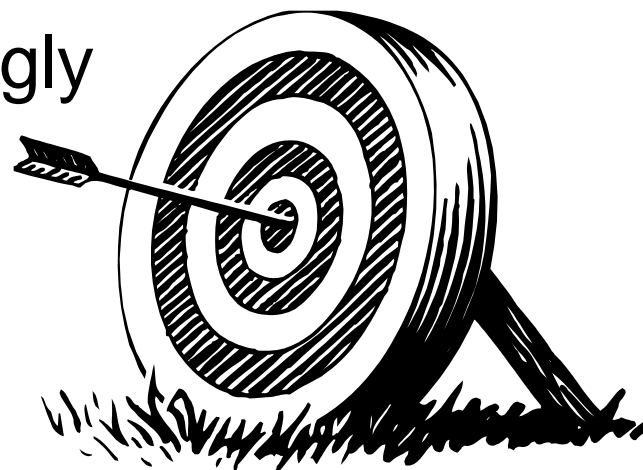
Composed of



## Quality Improvement Tasks

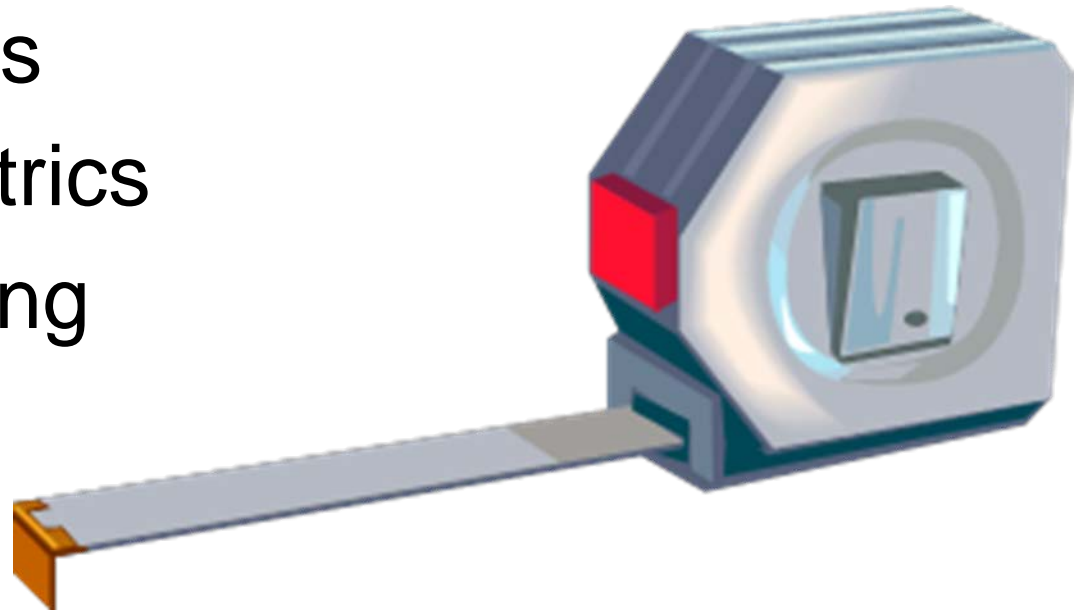
# Quality measurement is vital

- ❖ Know your starting point
- ❖ Assess costs and benefits of quality improvement activities
- ❖ Identify “quick wins”
  - Target resources accordingly



# Measurement tools

- ❖ Quality assessment frameworks
- ❖ Quality reports
- ❖ User surveys
- ❖ Process metrics
- ❖ Benchmarking





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# Metadata and quality

- ❖ “Two sides of the same coin”
  - Blagica Novkovska, Q2010 paper
- ❖ To assess quality of inputs, processes and outputs we need structured metadata
- ❖ This leads to metadata-driven quality reporting
  - E.g. Eurostat quality report standards



# Questions?