

**TRAINING COURSE IN COORDINATION AND QUALITY MANAGEMENT OF  
OFFICIAL STATISTICS**

**Jerusalem, 13-15 March 2018**

## The UNECE Modernisation Models: the GSBPM

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## Content

- Modernisation of statistical activity
- The GSBPM



## UNECE High-Level Group for the Modernisation of Official Statistics (HLG-MOS)



<http://www1.unece.org/stat/platform/display/hlgbas/High-Level+Group+for+the+Modernisation+of+Official+Statistics>

- To promote common standards, models, tools and methods to support the modernisation of official statistics;
- To drive new developments in the production, organisation and products of official statistics
- To ensure that there is a maximum of convergence and coordination within the statistical "industry".



## Modernisation of official statistics

### Challenges for Official Statistics

New competitors in producing statistics

New data sources available (e.g. Big data)

Increased costs and quality problems to collect data

Reduced budgets for official statistics

Emerging information needs

More  
with  
less

### Modernisation

Join efforts

Increase cooperation

Interactive and low-cost cooperation

Sharing of skilled resources

Sharing tools, methods, standards

Adopting common solutions





## Common purposes of the standards

- ✓ Improve communication by introducing a common language
- ✓ Gain efficiency (rationalise processes, information, flow, assign responsibilities,...)
- ✓ Support industrialisation process (re-use of methodologies, tool, software, sharing of solutions,...)
- ✓ Build staff competencies around the standards (enhance capabilities)



## The GSBPM



<http://www1.unece.org/stat/platform/display/GSBPM/GSBPM+v5.0>

The Generic Statistical Business Process Model (GSBPM) is an international standard that can be used to document any kind of statistical business process, from the more traditional survey to the administrative data acquisition or to the statistical compilation

- What about big data?
- Mixed-sources?



## Wording

- production process, business process, survey, statistical process
- GSBPM: generic statistical business process model

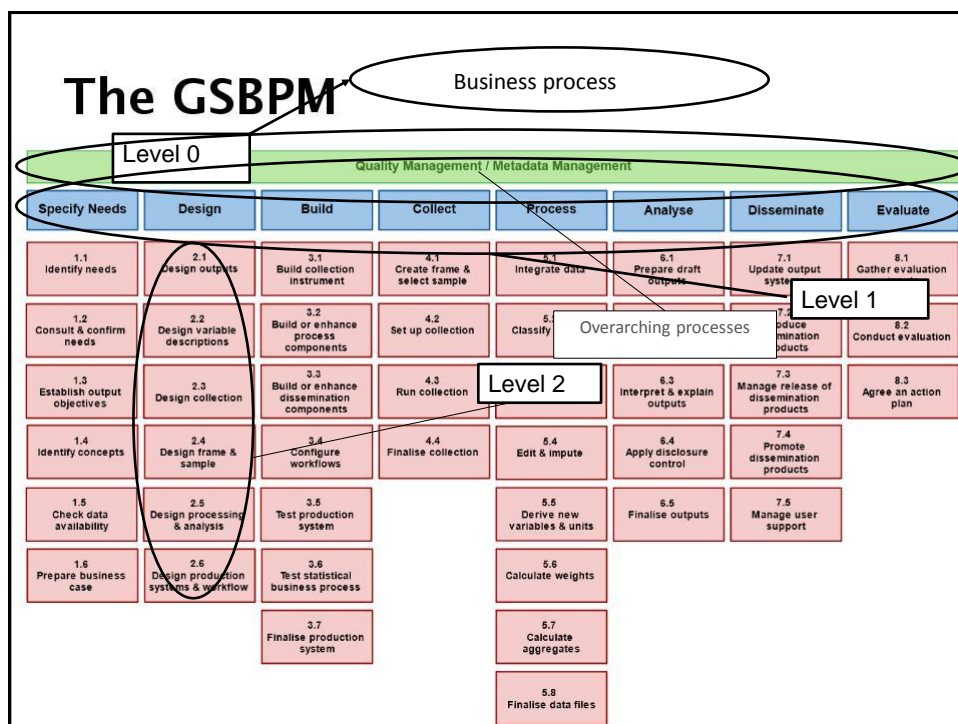
## Definitions

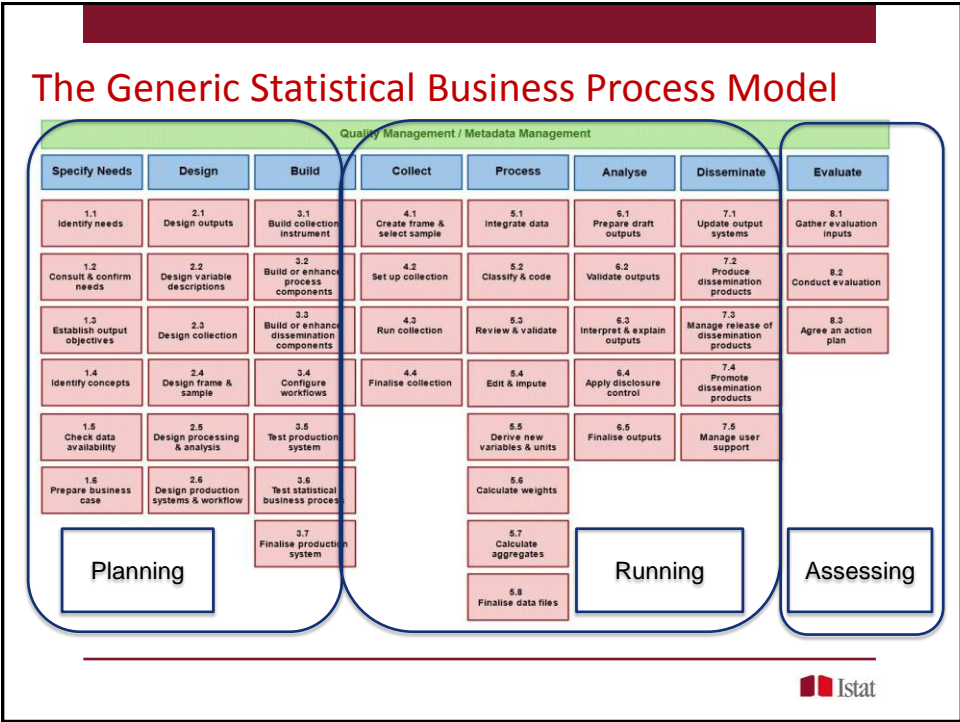
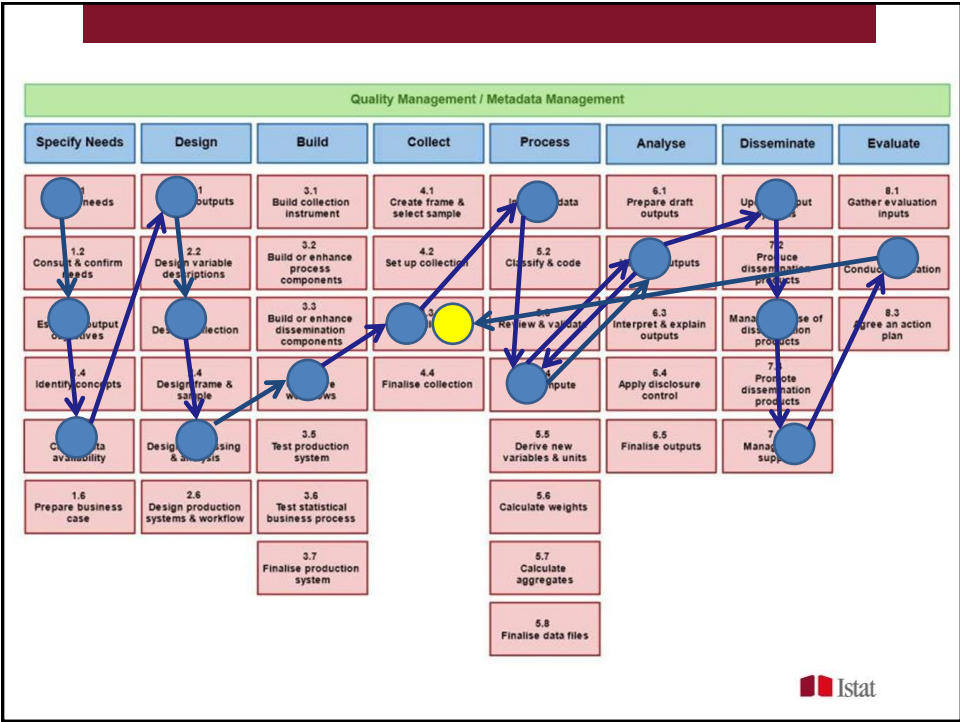
### business process

The set of Process Steps to perform one or more Business Functions to deliver a Statistical Program Cycle or Statistical Support Program (*GSIM Glossary*)

### Statistical business process

The set of activities undertaken by producers of statistics which result in data outputs (adapted from METIS GSBPM)





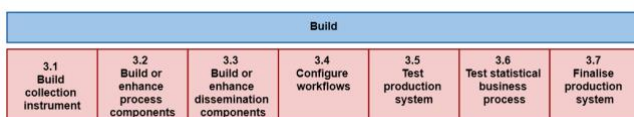
## Phases and sub-processes



- Dialog with users, Identification of needs (new or additional), Definition of high level solution

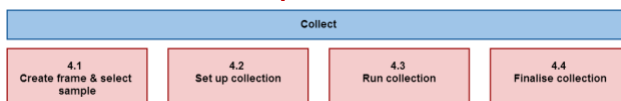


- Definition of all methods and tools that will be used in the realisation of the statistical process

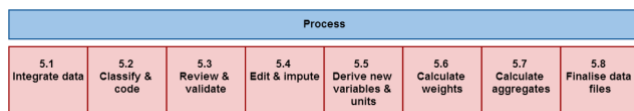


- Set up and test of all methods and tools defined in the design stage

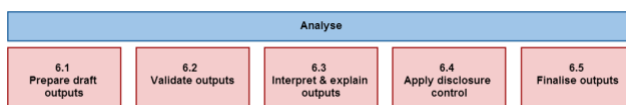
## Phases and sub-processes



- The actual data acquisition, whatever the source or the method used, including data entry

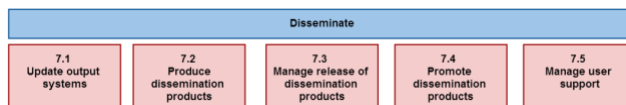


- The traditional phases of data treatment till the macrodata estimates are produced

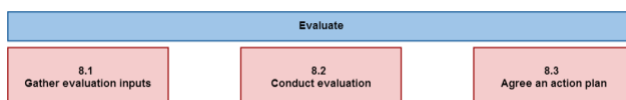


- It includes the production of complex statistics (e.g. indices), macrodata validation, confidentiality treatment

## Phases and sub-processes

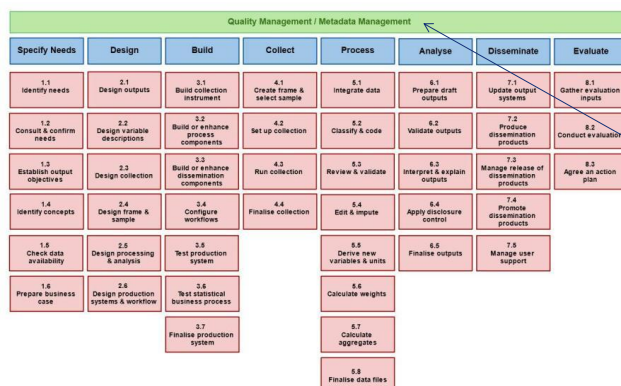


- The release of statistical outputs to users



- The quality evaluation done at the end of a specific edition of a statistical business process

## QIs for the GSBPM



Quality management overarching process

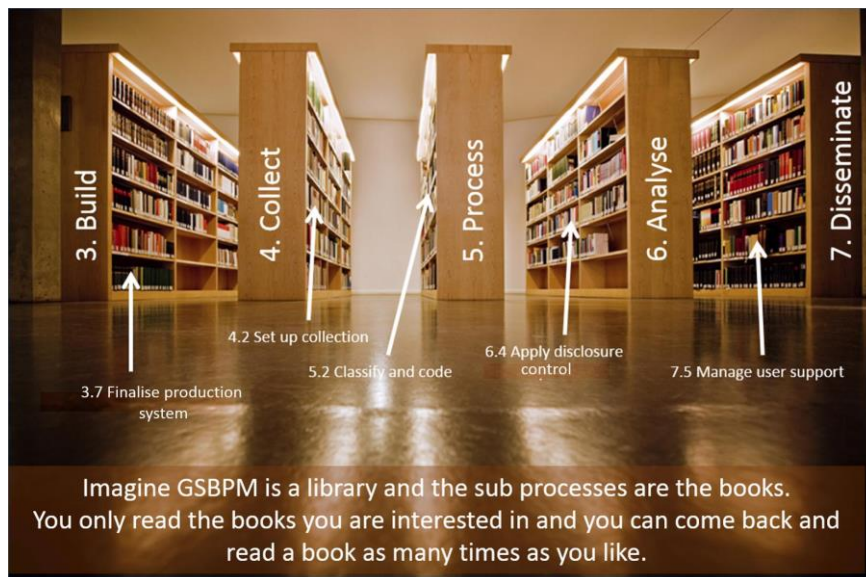
Quality indicators were developed for each phase (1 to 8) and sub-processes



## Why do we need GSBPM?

- To define and describe statistical processes in a coherent way
- To compare and benchmark processes within and between organisations
- To make better decisions on production systems and organisation of resources

## How to use the GSBPM?



## How to use the GSBPM?

- Flexible model: can be adapted to the needs of your organisation
- Personalisation can be introduced but trade-off with comparability
- As a documentation tool, to rationalise resources, to see gaps and overlapping,.....
- To integrate other standards
- Your views?

## Recent application of the GSBPM in Istat

- ✓ Mapping of activities of the recently created Directorate for Data Collection
- ✓ The Data Collection Directorate represents
  - Big change in the production process but also a big cultural change for a lot of people
  - Need to better understand who does what: responsibilities, work flows, procedures,...
- ✓ The GSBPM provides an international framework for rationalising the activities and for supporting the transition

## What has been done

### For each sub-process

- ✓ Definition of tasks
- ✓ Exploitation of the activities (within the task) for Data Collection Directorate - “who does what”
- ✓ Assigning responsibilities for each task among different directorates

## Lessons learnt

- ✓ Good exercise to clarify tasks and responsibilities within the Data Collection Directorate and between Directorates
- ✓ Way to identify potential gaps, lack of procedures,...
- ✓ Way to support the formalisation of procedures
- ✓ It has been extended to other areas
- ✓ Can be reviewed in future

## Mapping to GSBPM

### Advantages

- Identify process activities, responsibilities, resources (*Who, what, when, why, where, how many-how much, how, by which means*)
- Help to exchange services among structures in a process-oriented organisation
- Help documenting processes in a standard way
- Support data traceability along the business process
- Support to international harmonisation

### BUT

- Need to use the tool in **a consistent way** at different levels across the entire organisation
- Need to use the tool in **a consistent way** in different countries

## Summarising

- GSBPM (as well as the other standards models) represent a common language that is a precondition for harmonisation within and between statistical organisations
- National adaptations can be introduced but with a loss of comparability: need to manage the trade-off
- GSBPM is widely adopted: more than 50 countries are using it
- The development of QIs for GSBPM further enhances its usefulness

ADDITIONAL

## GSBPM and GAMSO

### When have they been developed?

## GSBPM

[illegible]

- ✓ Current version v5.0 - December 2013
- ✓ First release v1.0 – March 2008

## GAMSO



- ✓ Current version v1.1 - January 2017
- ✓ First release v1.0 - March 2015

GSIM and CSPA  
When have they been developed?



✓ Current version 1.1 - December 2013



✓ Current version v1.5 - December 2015