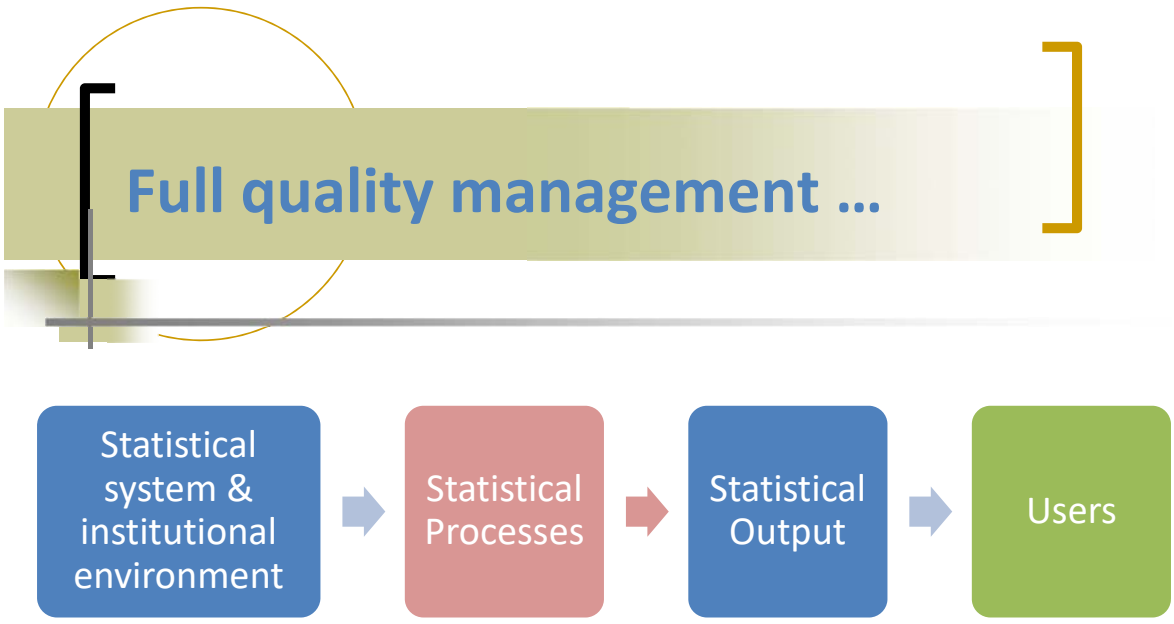
Describing the Statistical Business

Generic Statistical Business Process Model (GSBPM)

Source: Generic Statistical Business Process Model Version 5.1 (January 2019)



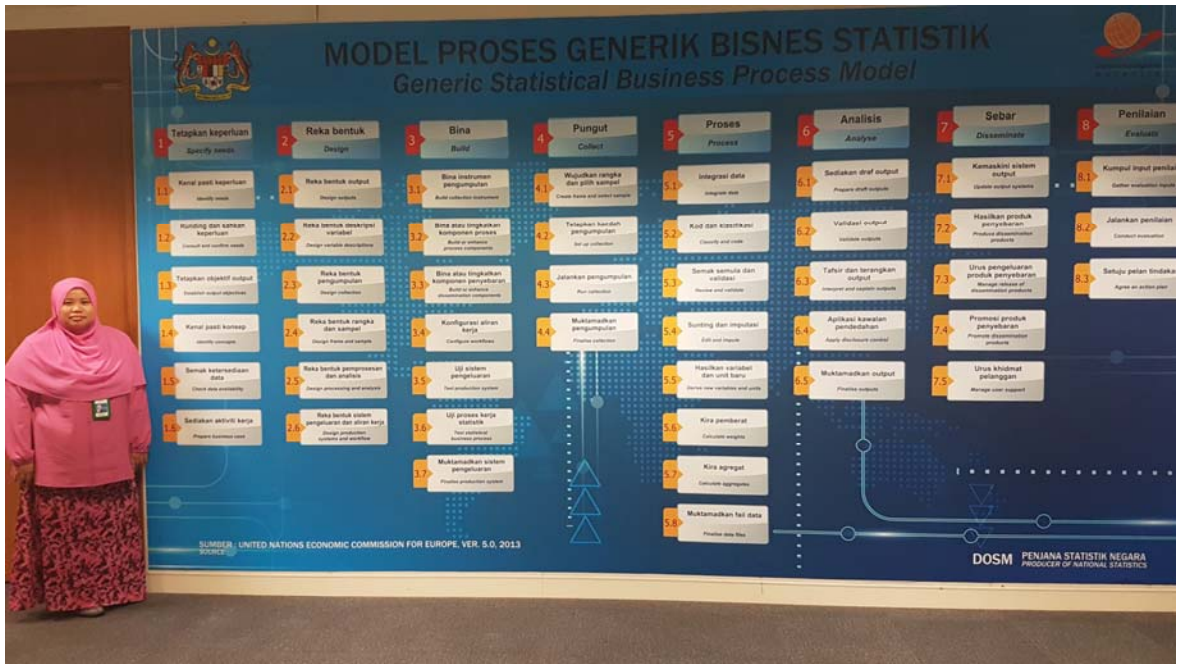
Statistical Business (Simplified)

Examples of statistical businesses?

Statistical Business (Simplified)

Examples of applications of GSPBM?

That's the spirit!



What is the GSBPM?

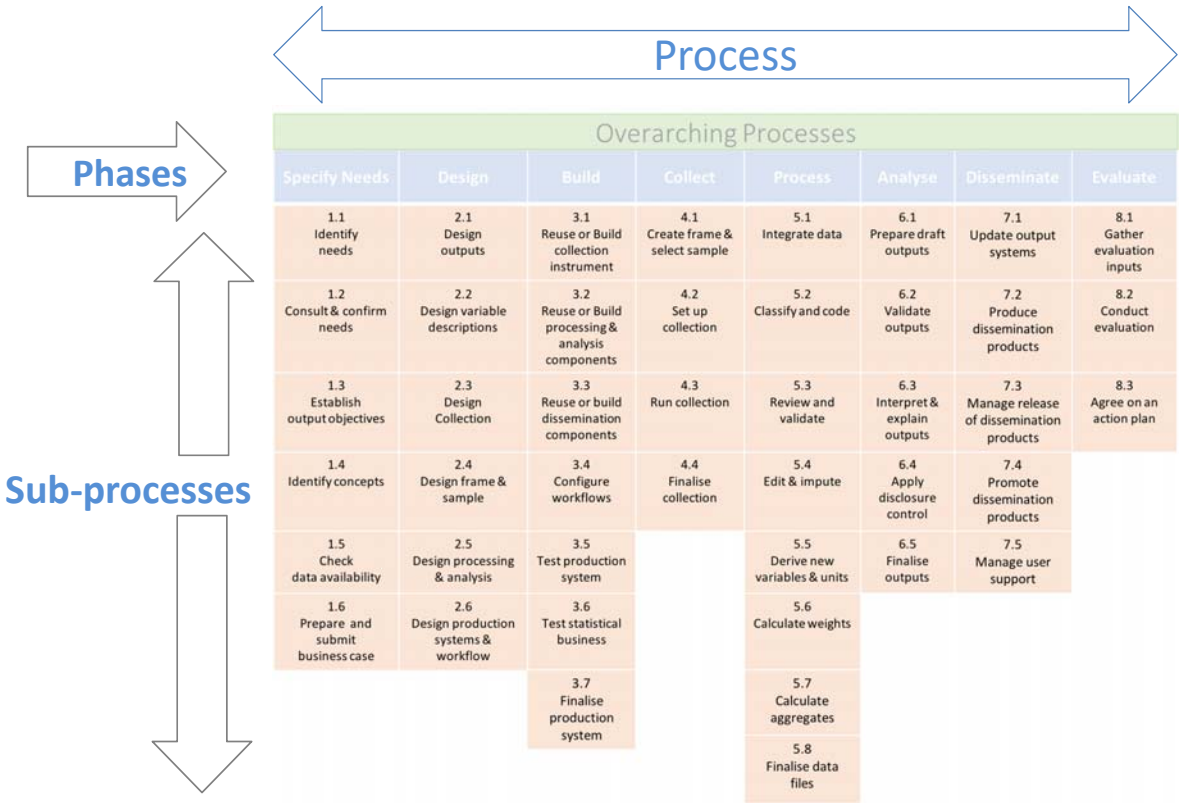
- Flexible model that *describes* and *defines* the *set of business processes* needed to *produce official statistics*
- *Standard framework* and *harmonised terminology* to help statistical organisations (internally and externally)
  - Modernise statistical production processes
  - Share methods and components

Overarching Processes

Specify Needs	Design	Build	Collect	Process	Analyse	Disseminate	Evaluate
1.1 Identify needs	2.1 Design outputs	3.1 Reuse or Build collection instrument	4.1 Create frame & select sample	5.1 Integrate data	6.1 Prepare draft outputs	7.1 Update output systems	8.1 Gather evaluation inputs
1.2 Consult & confirm needs	2.2 Design variable descriptions	3.2 Reuse or Build processing & analysis components	4.2 Set up collection	5.2 Classify and code	6.2 Validate outputs	7.2 Produce dissemination products	8.2 Conduct evaluation
1.3 Establish output objectives	2.3 Design Collection	3.3 Reuse or build dissemination components	4.3 Run collection	5.3 Review and validate	6.3 Interpret & explain outputs	7.3 Manage release of dissemination products	8.3 Agree on an action plan
1.4 Identify concepts	2.4 Design frame & sample	3.4 Configure workflows	4.4 Finalise collection	5.4 Edit & impute	6.4 Apply disclosure control	7.4 Promote dissemination products	
1.5 Check data availability	2.5 Design processing & analysis	3.5 Test production system		5.5 Derive new variables & units	6.5 Finalise outputs	7.5 Manage user support	
1.6 Prepare and submit business case	2.6 Design production systems & workflow	3.6 Test statistical business		5.6 Calculate weights			
		3.7 Finalise production system		5.7 Calculate aggregates			
				5.8 Finalise data files			

GSPBM Ver 5.1
January 2019

Structure of the Model



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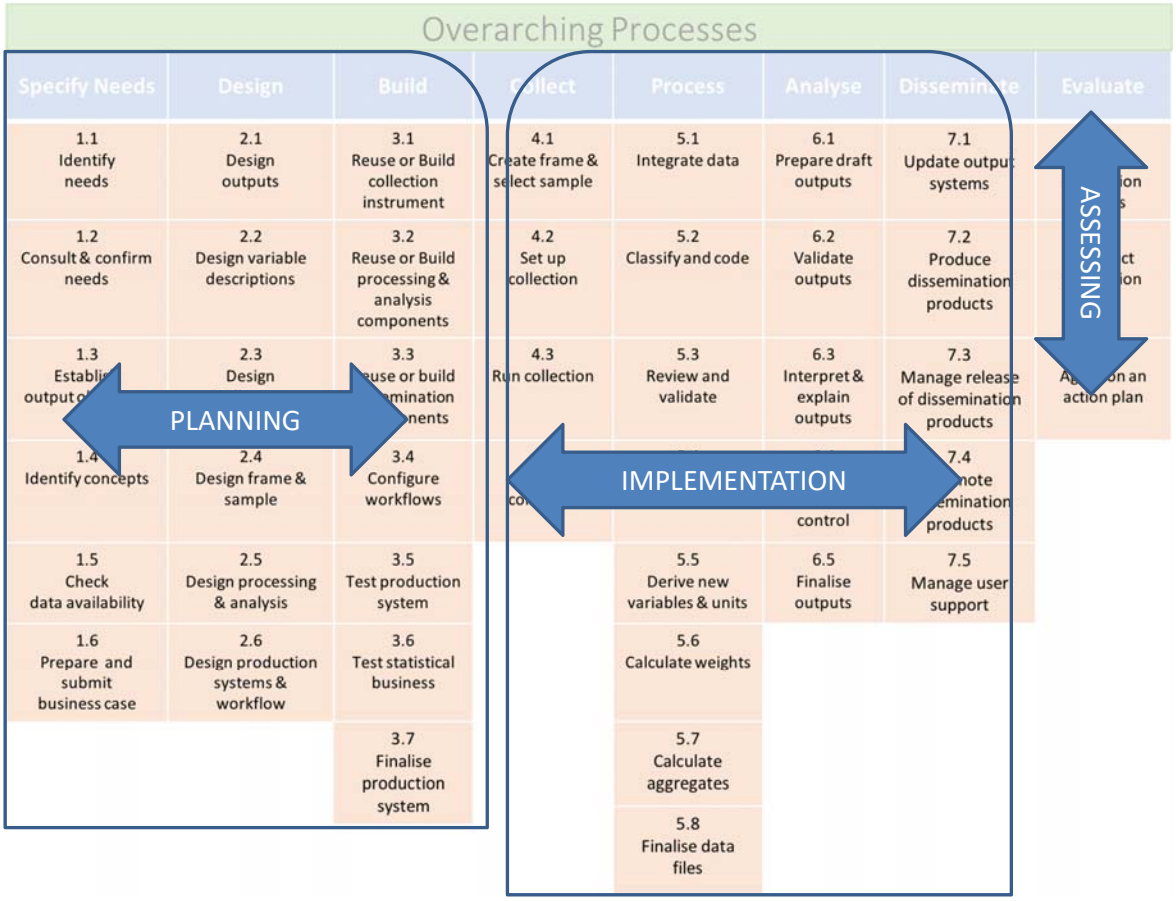
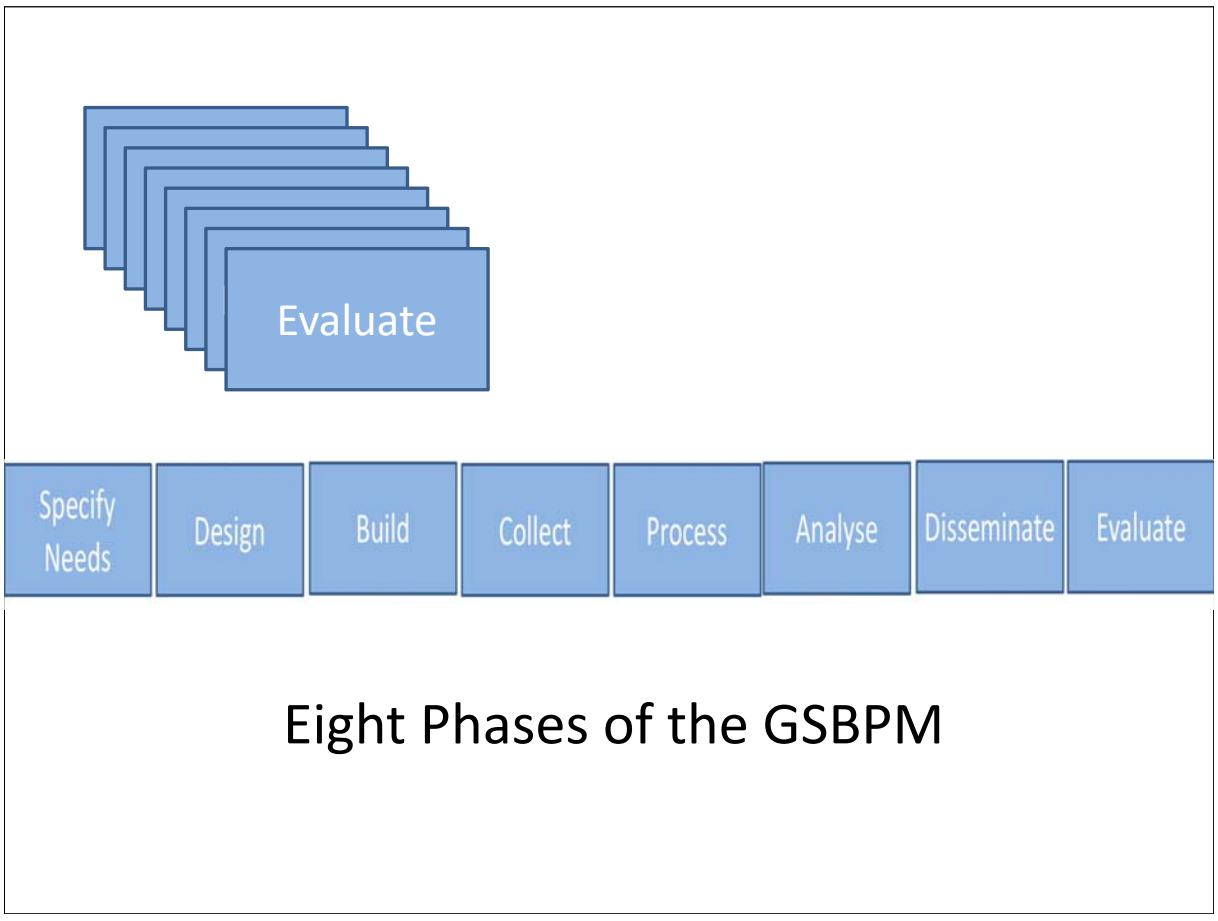
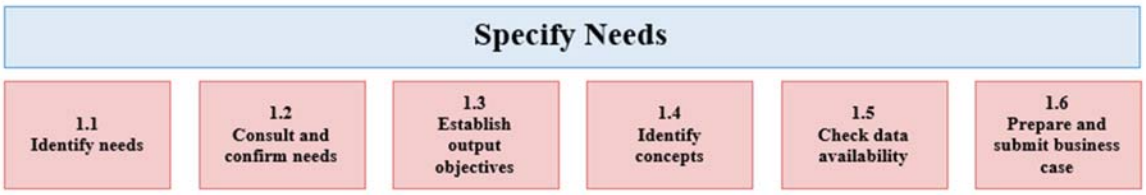




Eight Phases of the GSBPM

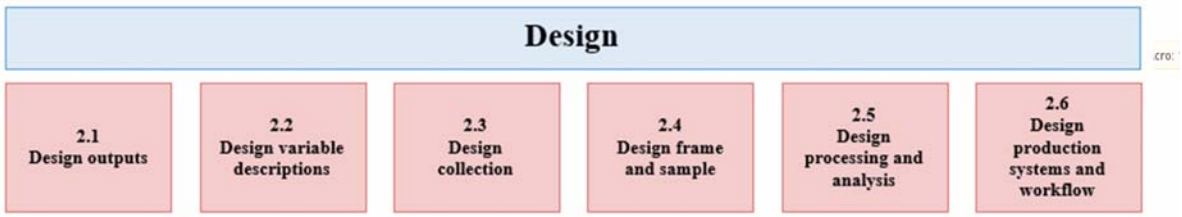


This phase is *triggered* when

- a need for new statistics is identified, or
- feedback about current statistics initiates a review.

It includes all activities associated with

- Engaging *customers* to identify their detailed statistical needs
- Proposing high level solution options
- Preparing business cases to meet these needs.

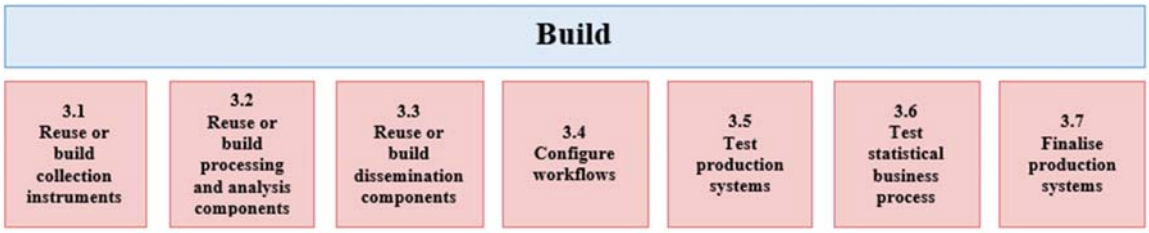


This phase describes the *development and design activities*, and any associated *practical research work* needed to define

- Statistical outputs
- Concepts and methodologies
- Collection instruments
- Operational processes.

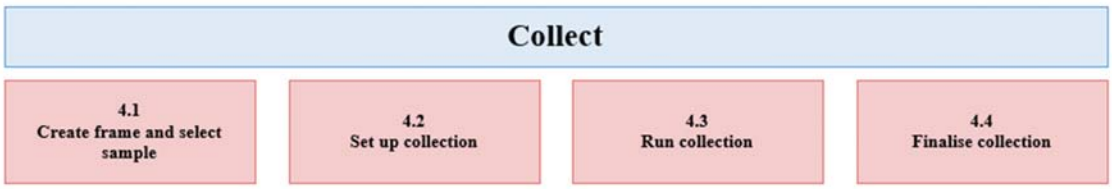
It includes all the *design elements* needed to define or refine

- Statistical products or services identified in the *business case*.



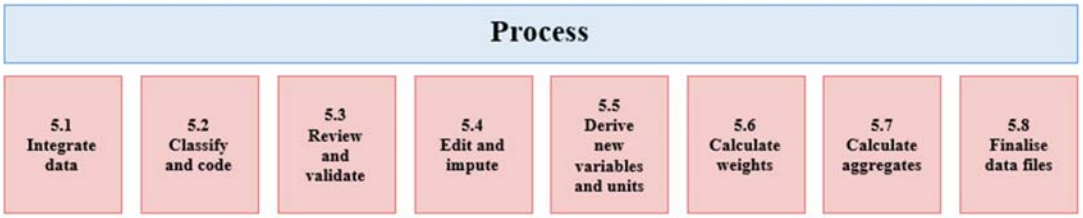
This phase *builds and tests the production solution* to the point where it is ready for use in the "live" environment.

The outputs of the "Design" phase direct the *selection* of *reusable* processes, instruments, information, and services that are *assembled and configured* to create the *complete operational environment to run the process*.



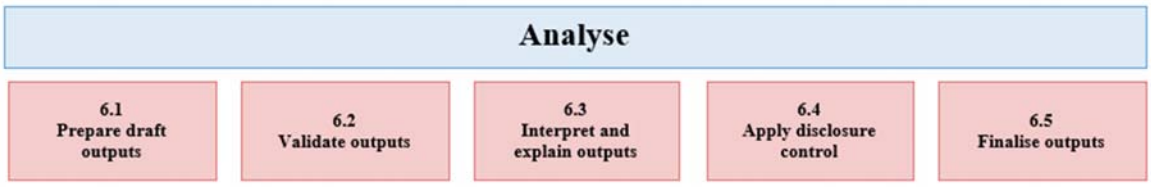
This phase *collects or gathers*

- all necessary information (*data and metadata*),
- using different *collection modes* (including extractions from statistical, administrative and other non-statistical registers and databases), and
- loads them into the appropriate environment for further processing.



This phase describes the *cleaning of data* and their *preparation for analysis*. It is made up of sub-processes that check, clean, and transform input data, so that they can be analysed and disseminated as statistical outputs.

The *integrate data subprocess* is where the results of sub-processes in the "Collect" phase are combined. The input data can be from a mixture of external or internal data sources, and a variety of collection modes, including extracts of administrative data.



In the Analyse phase, *statistical outputs* are

- produced,
- examined in detail and
- made ready for dissemination.

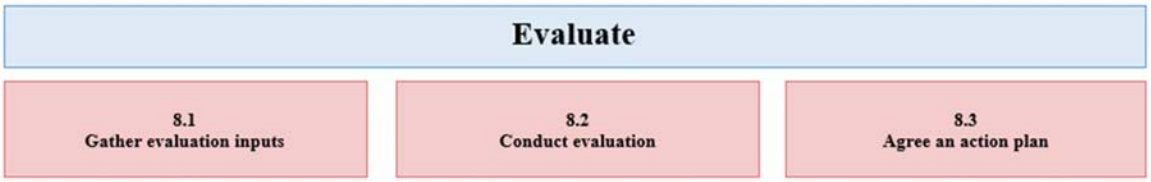
It includes

- preparing statistical *content* (including commentary, technical notes, etc.) and
- ensuring outputs are *"fit for purpose"* prior to dissemination to customers.

The Dissemination phase is about managing the *release of the statistical products to customers*.

It includes all activities associated with:

- *assembling* and *releasing* a range of static and dynamic products via a range of channels and
- providing *support to customers* to *access* and *use* the outputs released by the statistical organisation.

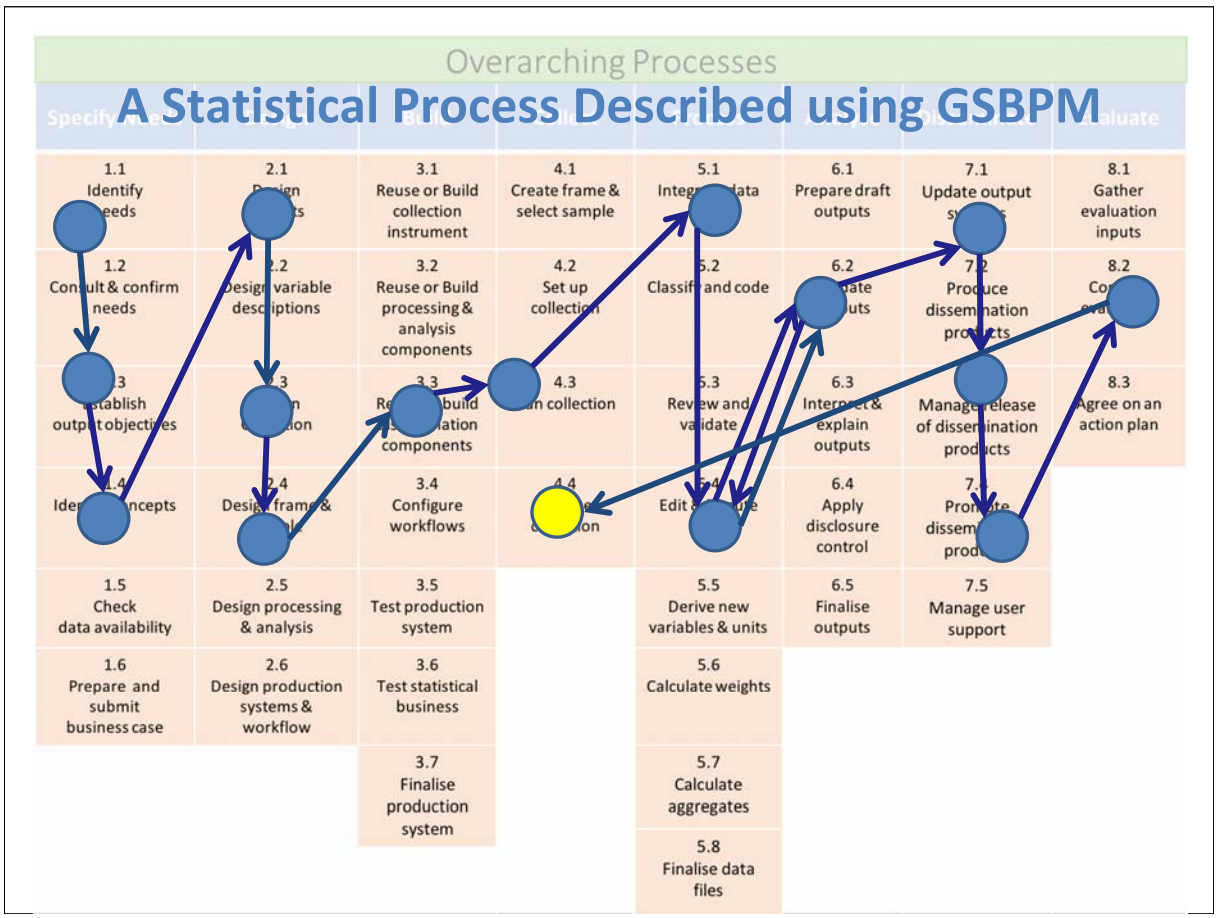


This phase manages the *evaluation of a specific instance of a statistical business process*, as opposed to the more general over-arching process of statistical quality management.

Application Notes:

The GSPBM is a “matrix” of sub-processes through which there are many paths--

1. Phases are sequential, but for some processes not all phases are essential
2. Sub-processes within a phase are ndo not necessarily have to be followed sequentially
3. Sub-processes within and across phases may have an iterative order or a loop.



Applies to …

- All *activities* undertaken by producers of official statistics which result in data outputs
- All statistical *domains*
- *National* and *international* statistical organisations

… as well as to

- Development and maintenance of statistical registers
- All types of data source:
  - Surveys / censuses
  - Administrative sources / register-based statistics
  - Mixed sources
  - “Big Data”

Uses of the GSBPM

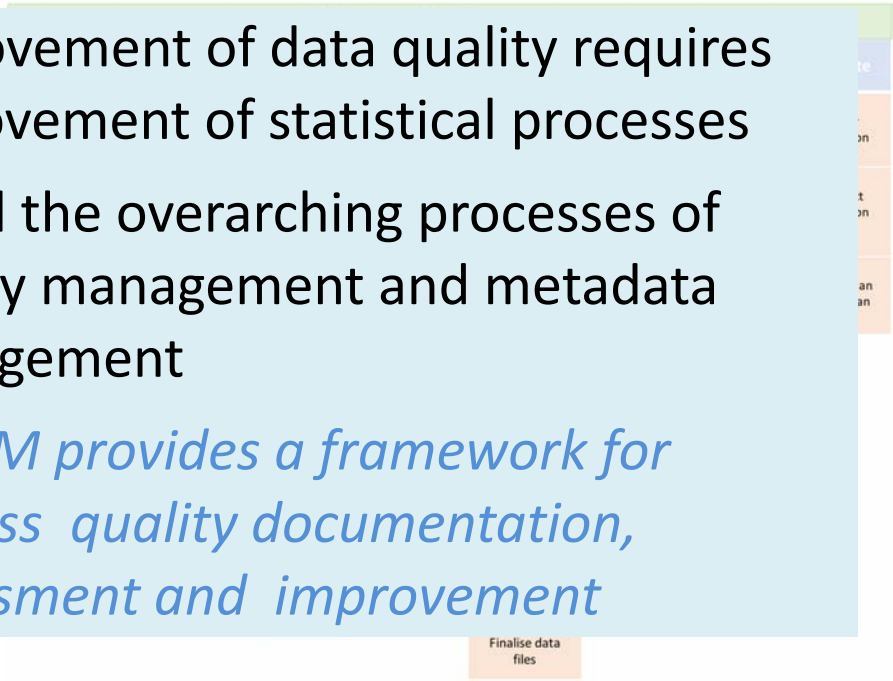
- Documenting statistical processes
- Managing statistical programmes
- Cost / resource allocation
- Sharing statistical software

- Framework for quality assessment

GBSPM (and GAMSO) in the NQAF

Role of GSPBM in NQAF

- Improvement of data quality requires improvement of statistical processes
- … and the overarching processes of quality management and metadata management
- *GSPBM provides a framework for process quality documentation, assessment and improvement*



Levels to be assured

Level	Name
A-	Coordinating the *national statistical system*
B-	Managing the *institutional environment*
C-	Managing *statistical processes*
D-	Managing *statistical outputs*

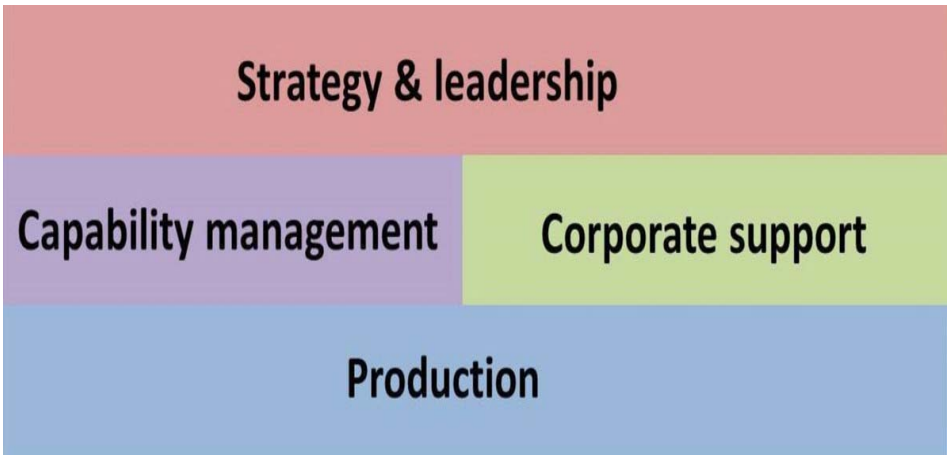
Overarching Processes: Statistical

- **Quality management**
- **Metadata management**
- Data management
- Knowledge management
- Statistical framework management
- Statistical programme management
- Provider management
- Customer management

Overarching Processes: General

- Human resource management
- Financial management
- Project management
- Legal framework management
- Organisational framework management
- Strategic planning

GAMSO



What is the GAMSO?

- **G**eneric **A**ctivity **M**odel for **S**tatistical **O**rganisations
- In the GSBPM, activities not directly part of statistical production are referred to as *over- arching processes*, and are listed, but not elaborated in detail
- GAMSO includes and extends and complements the GSBPM by adding *other activities* needed to support statistical production

Production

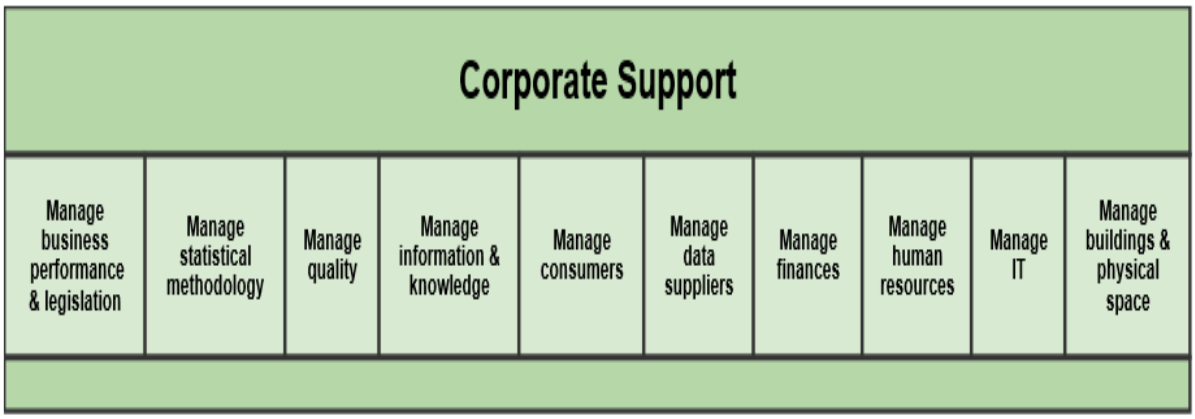
- Production activities in GAMSO are those included in the GSBPM
- Delivers the outputs *approved* under Strategy and Leadership, utilizing the *capabilities developed* under Capability Management and the *resources managed* under Corporate Support.

Capability Management

Capability Management			
Plan capability improvements	Develop capability improvements	Monitor capabilities	Support capability implementation

- Support the development and monitoring of the capabilities that underpin an organisation's ability to conduct its business.
- Promoting the re-use and sharing of infrastructure (statistical and technical), both inside the organisation and across organisations, thus facilitating harmonisation and coherence of statistical outputs.

Corporate Support



Cross-cutting functions required by the organisation to deliver its work programme efficiently and effectively

Strategy and Leadership

Strategy and Leadership		
Define vision	**Govern & lead**	**Manage strategic collaboration & cooperation**

High-level strategic activities that enable statistical organisations to deliver the products and services needed by governments and communities nationally and internationally