Frameworks and
Standards
For
Statistical
Modernization

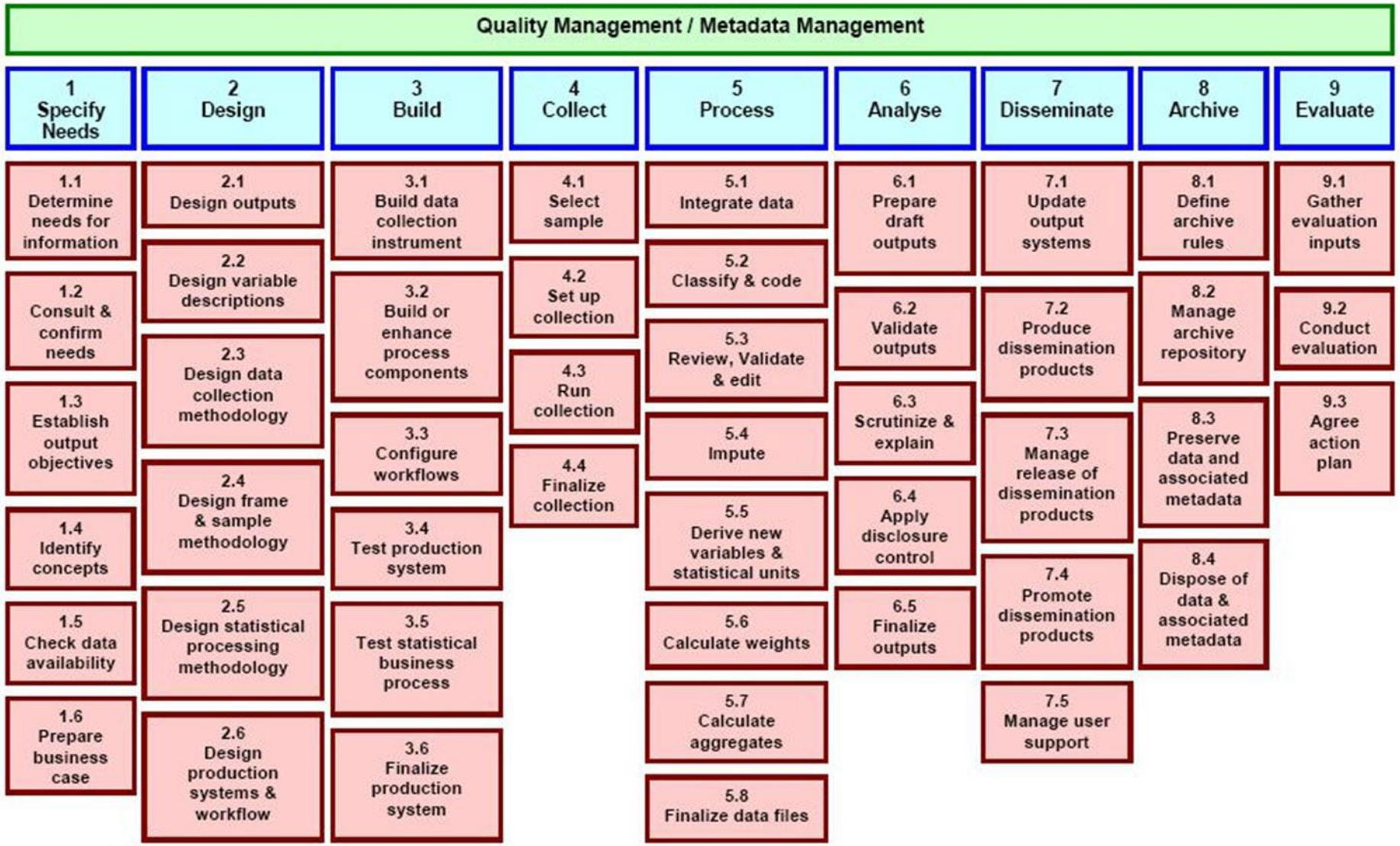
Aim:

"to support the enhancement and implementation of the standards needed for the modernisation of statistical production and services"

Objectives

- To ensure access to the standards
- To increase coherence between standards
- To provide support mechanisms for practical implementations
- To ensure promotion and maintenance of the GSBPM and the GSIM

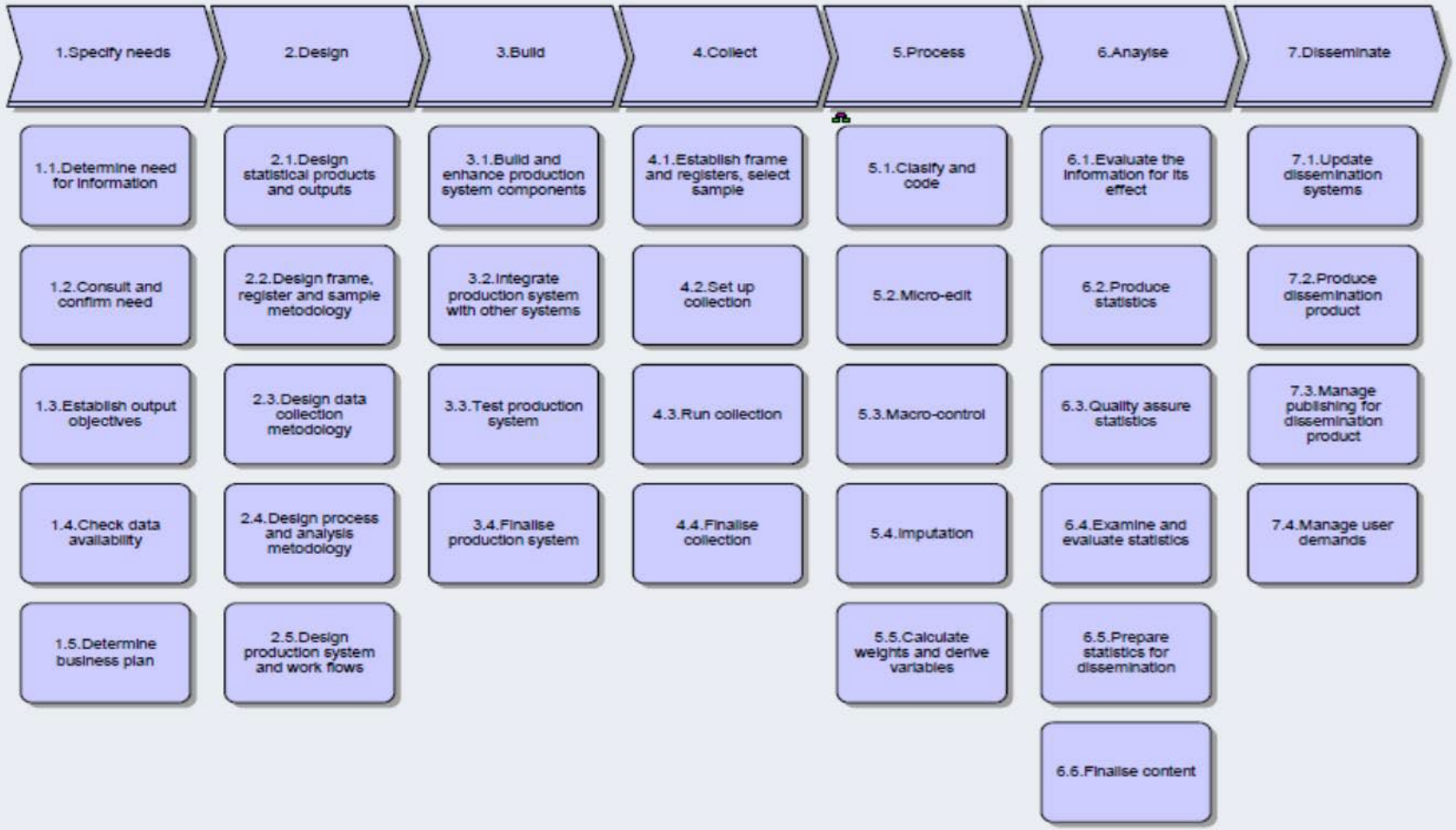
The GSBPM


Quality Management / Metadata Management
1 Specify Needs
1.1 Determine needs for information
1.2 Consult & confirm needs
1.3 Establish output objectives
1.4 Identify concepts
1.5 Check data availability
1.6 Prepare business case
2 Design
2.1 Design outputs
2.2 Design variable descriptions
2.3 Design data collection methodology
2.4 Design frame & sample methodology
2.5 Design statistical processing methodology
2.6 Design production systems & workflow
3 Build
3.1 Build data collection instrument
3.2 Build or enhance process components
3.3 Configure workflows
3.4 Test production system
3.5 Test statistical business process
3.6 Finalize production system
4 Collect
4.1 Select sample
4.2 Set up collection
4.3 Run collection
4.4 Finalize collection
5 Process
5.1 Integrate data
5.2 Classify & code
5.3 Review, Validate & edit
5.4 Impute
5.5 Derive new variables & statistical units
5.6 Calculate weights
5.7 Calculate aggregates
5.8 Finalize data files
6 Analyse
6.1 Prepare draft outputs
6.2 Validate outputs
6.3 Scrutinize & explain
6.4 Apply disclosure control
6.5 Finalize outputs
7 Disseminate
7.1 Update output systems
7.2 Produce dissemination products
7.3 Manage release of dissemination products
7.4 Promote dissemination products
7.5 Manage user support
8 Archive
8.1 Define archive rules
8.2 Manage archive repository
8.3 Preserve data and associated metadata
8.4 Dispose of data & associated metadata
9 Evaluate
9.1 Gather evaluation inputs
9.2 Conduct evaluation
9.3 Agree action plan

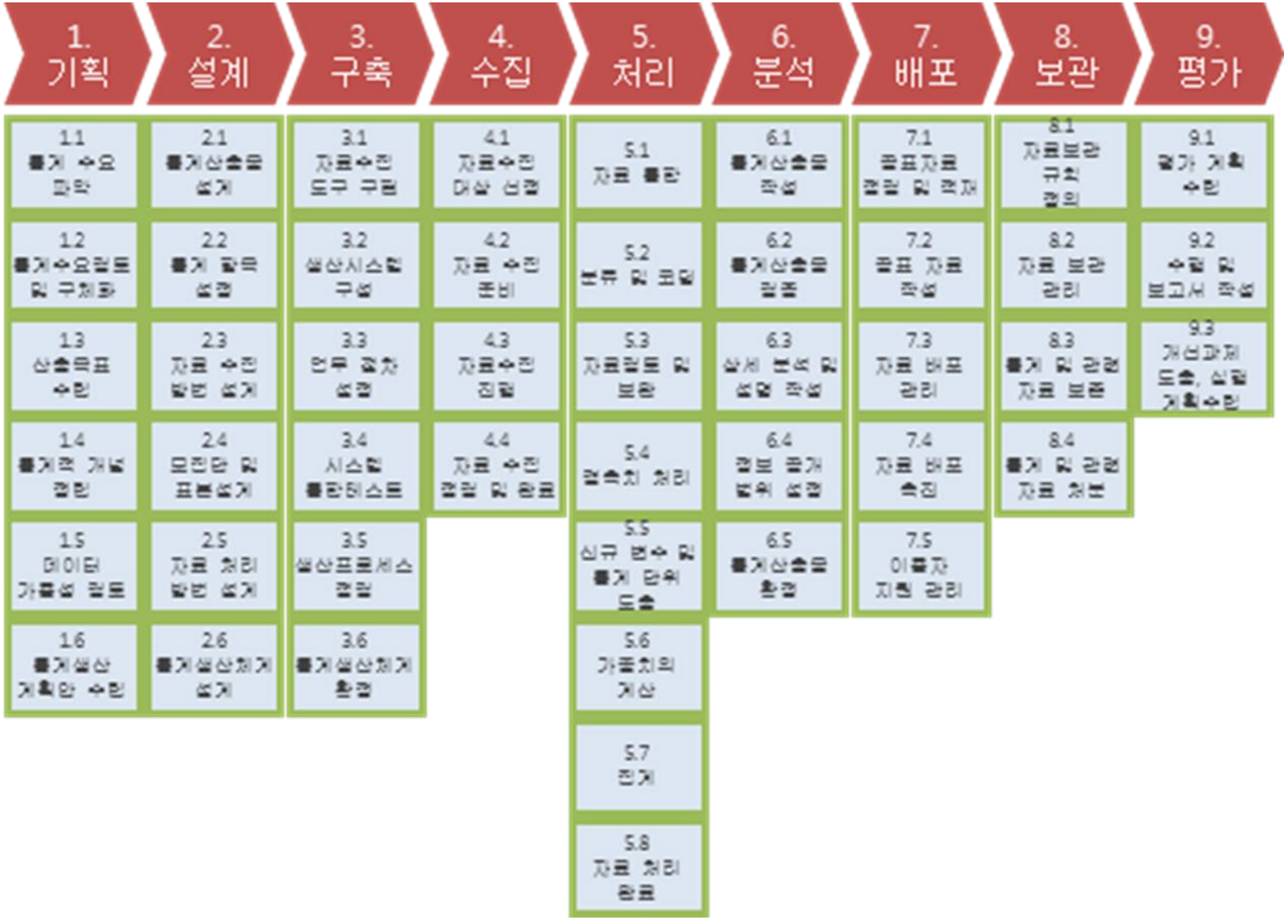
The GSBPM is used by more than 50 statistical organisations worldwide

TurkStat Draft Statistical Business Process Model

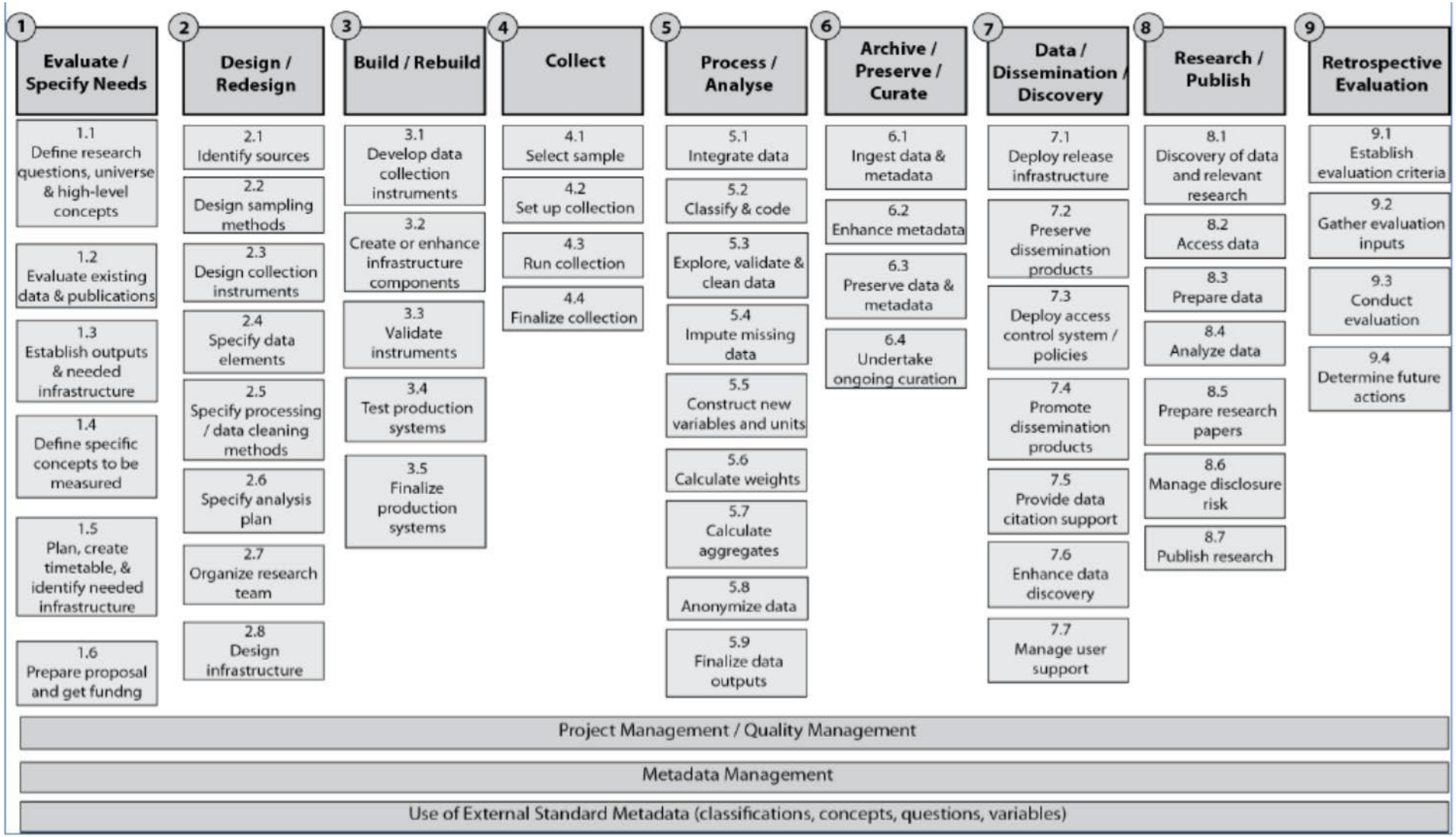
(National Implementation of GSBPM)



KSBPM – Republic of Korea



Beyond statistics: Data archives
Generic Longitudinal Business Process Model



GSBPM Review

- The GSBPM Review Process was launched at the Work Session on Statistical Metadata (METIS), Geneva, 6-8 May 2013.

- Feedback from users was sought on potential changes to the GSBPM between May and September.

- The GSBPM Review Team was formed at the beginning of September to review the proposals that were received.

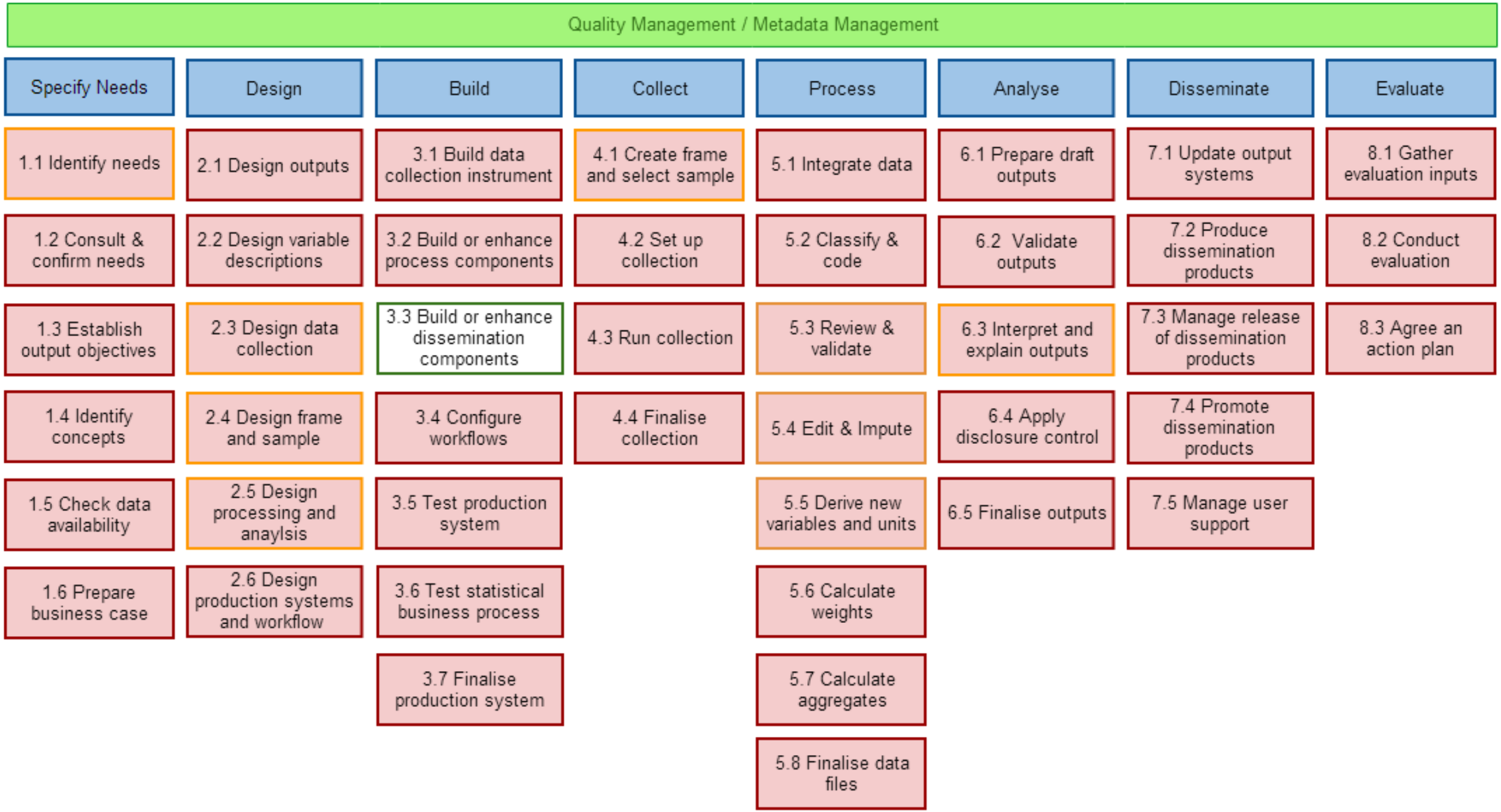
GSBPM Review

- At the start of the year, it was noted by HLG that the stability of models such as GSBPM is very important:

"Within the frameworks and standards project, it will be necessary to find the right balance between improving the relevance of standards by updating them, and providing the necessary stability to avoid excessive implementation costs"

GSBPM v5.0

- Phase 8 (Archive) has been removed, and incorporated into the over-arching process of data and metadata management
- A new sub-process: "Build or enhance dissemination components" has been added within the "Build" phase
- Several sub-processes have been re-named to improve clarity
- The descriptions of the sub-processes have been updated and expanded where necessary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Geospatial

Geospatial work

- The availability and use of geo spatial information has increased in recent years.
- The need to link statistical information to location is widely accepted and acknowledged in a range of fora.
- However, this is an area which has received less focus in the modernisation of statistical organisations until recently.

Geospatial work

- Group had some proposals:
  - Meetings between geospatial, subject matter and methodology staff
  - Further work to be done in how geospatial standards could work with statistical standards (e.g. SDMX)
  - A new framework for standardizing geographic regions
- However, a number of other initiatives looking at this topic (notably UN Statistical Geospatial Expert Group) and a number of other papers exist on the topic.

Neuchâtel

Neuchâtel (1)

- Neuchâtel model for Classifications was released in 2004.
- It is a common language and a common perception of the structure of classifications and the links between them
- Many statistical organisations are using Neuchatel.

Neuchâtel (2)

- A group of classification and metadata experts collaborated to review the model based on practical experience.

- The aim was to align Neuchâtel with GSIM and Best Practice document written by the Expert Group on international statistical classifications

- Neuchâtel model is now an annex to GSIM

GSIM

GSIM Review

- GSIM v1.0 was released in December 2012
  - First version was produced by an accelerated process.
  - Influenced by existing frameworks and standards and previous experience of participating agencies

- To reach the maturity required to support statistical modernisation practical testing against real-world applications in statistical agencies was required

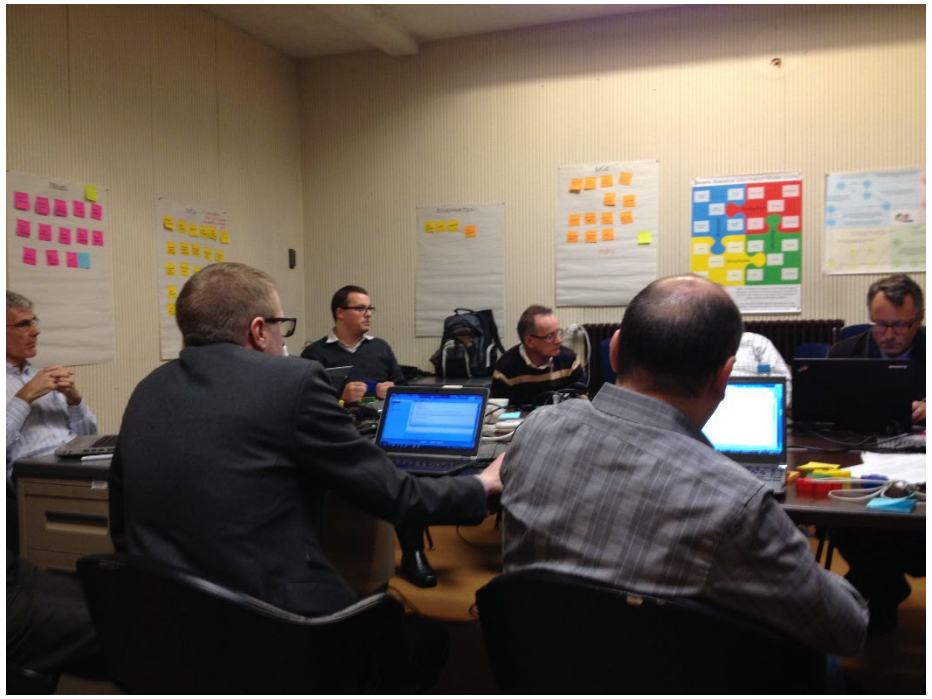
GSIM Implementation Group

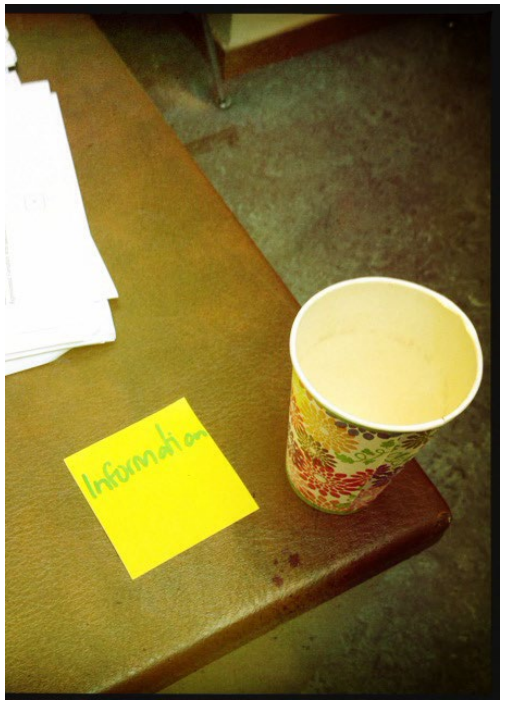
- February 2013 the GSIM Implementation Group was convened to:
  - Providing support for a community of GSIM “early adopters”
  - A forum for exchanging ideas and experiences
  - Feedback on GSIM v1.0 based on attempts at practical implementation
    - Ease of understanding
    - Lack of support for key statistical processes
    - Improvements to modelling approach

GSIM Sprint

- Geneva, 18 – 22 October
- Participants from Australia, Canada, Netherlands, New Zealand, Sweden, UK, Eurostat, IMF,
- Aim:
  - Implement the proposed changes identified by the Implementation Group

GSIM Sprint (2)





GSIM v1.1

- Easier to understand
- Clearer terminology
- Fewer objects
- Improved definitions and relationships
- Consistent and high quality documentation

GSIM v1.1 (2)

“If I had more time I would have written a shorter letter”

Anon

Implementing GSIM

GSIM implementation

- GSIM is a conceptual model, it can’t be directly implemented in a system. The industry needs to do more than align conceptual frameworks.

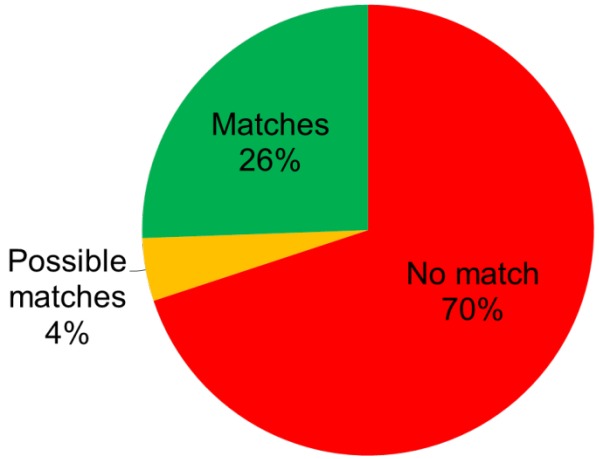
- To support modernized statistical production a technical implementation must also be standardised – e.g. XML, RDBMS, Java/.NET objects

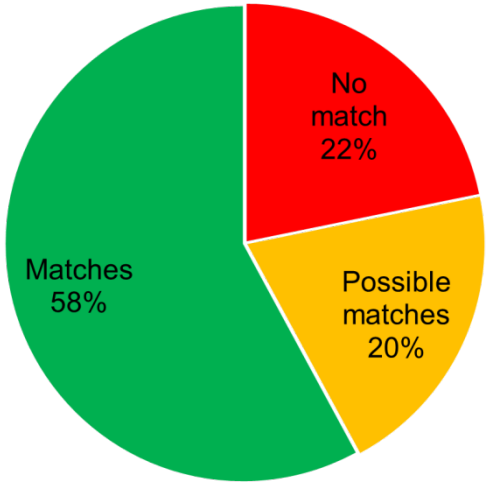
- This is required to support GSIM implementation in CSPA

Using other standards to implement GSIM

- GSIM can be implemented by using existing standards to provide technical representation

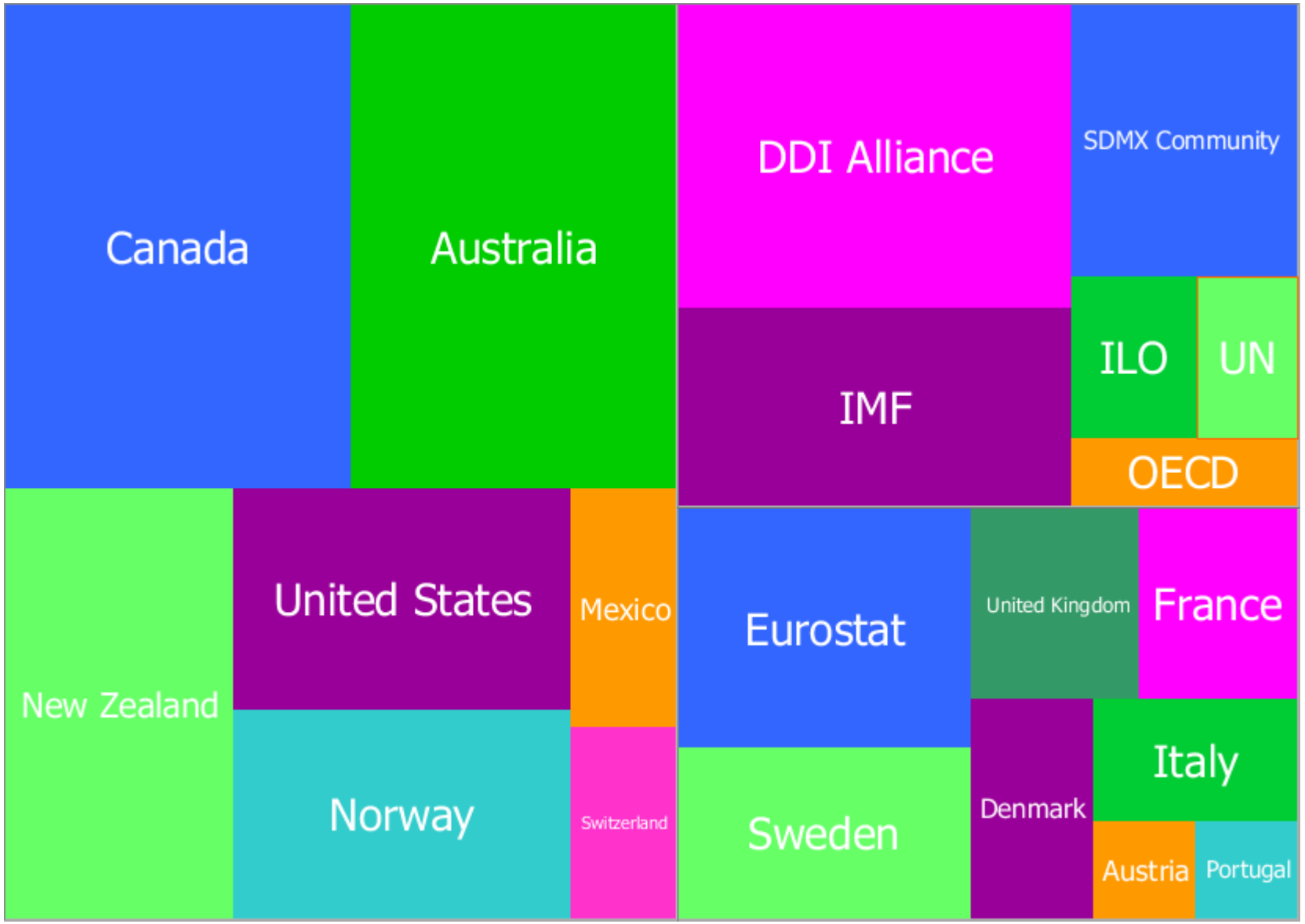
- Detailed mapping and gap analysis between GSIM and the information models of DDI and SDMX



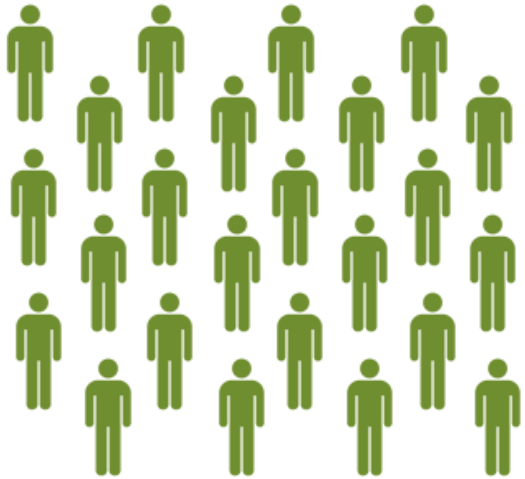


DDI Profiles

- Best practice for using DDI to represent GSIM objects
- 5 profiles have been agreed to date
  - Codelist
  - Variable
  - Represented Variable
  - Base
  - Questionnaire
- Continuing work required



7 Task Teams



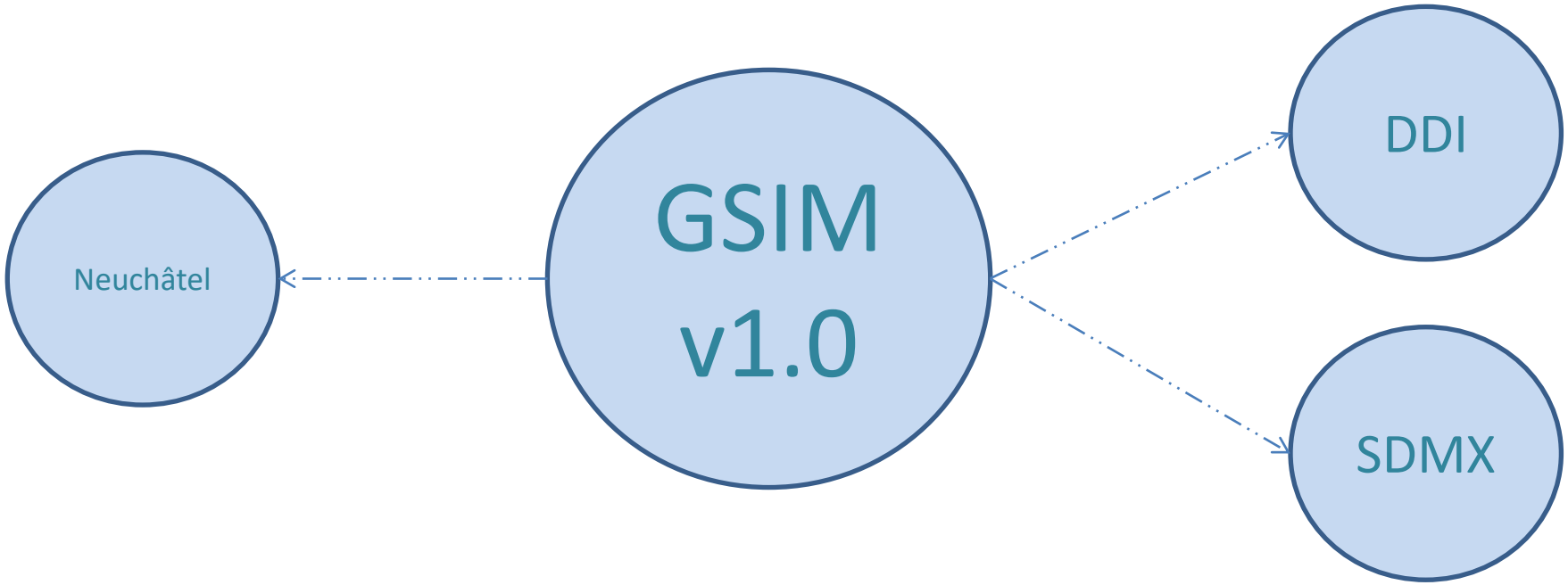
60 individuals

~960 hours of effort

GSBPM
v4.0

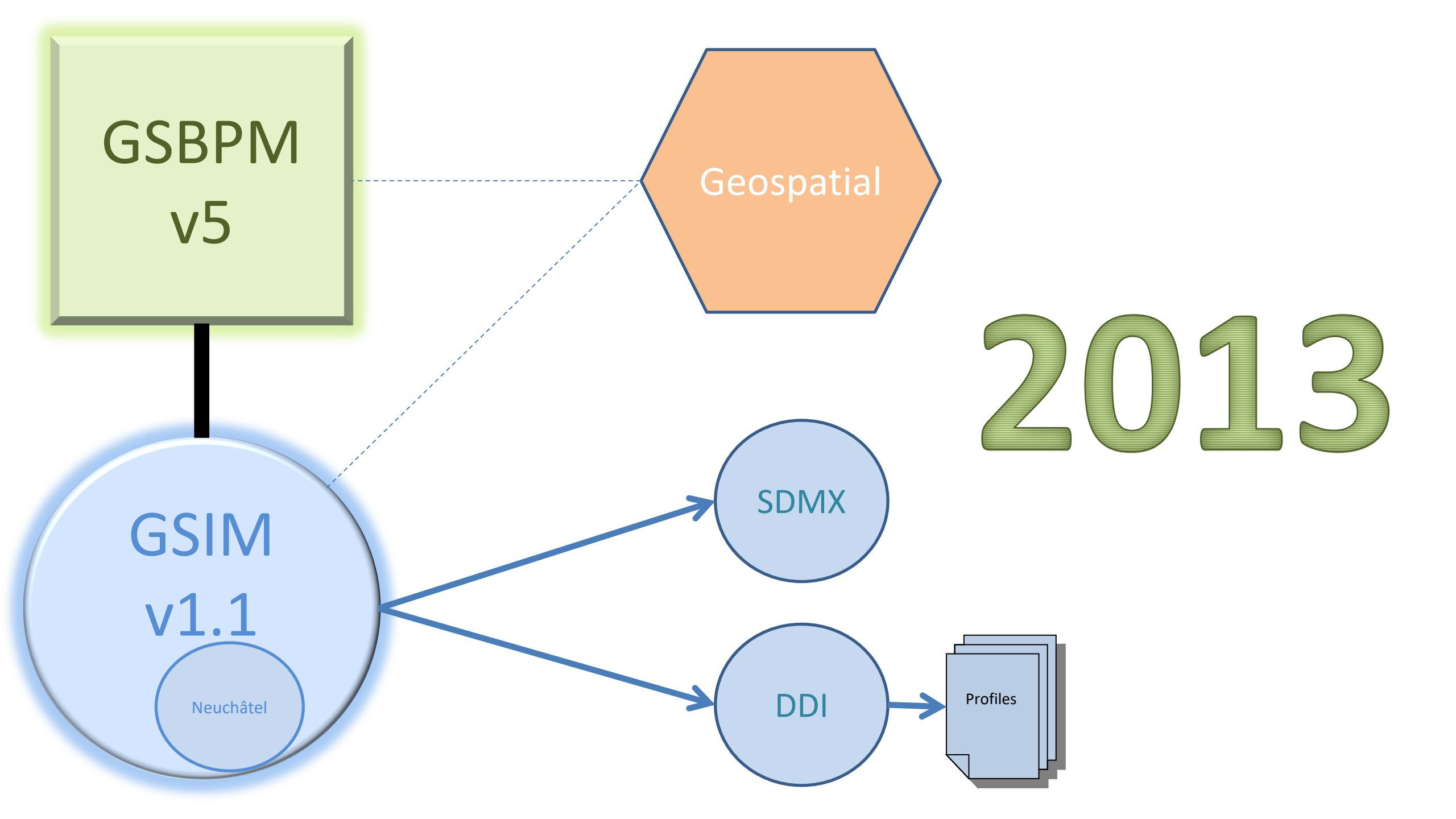
Geospatial??

2012



Project Outputs for release December 2013

- GSIM v1.1
  - Updated Brochures
  - Updated Communications paper
  - Revised Specification
  - Neuchâtel annex
  - Implementing GSIM guide
  - “Clickable” GSIM
- GSBPM V5
- Geospatial paper
- Mapping GSBPM to Fundamental Principles of Official Statistics
- Sprints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Profiles