

# QM Implementation

## Based on CoP, PDCA, and GSBPM

Statistics Iceland

# Statistics Iceland

- Small statistical office with ca 100 employees
  - Still it requires a substantial statistical and technical infrastructure
- No board – the Director-General is directly responsible to the relevant ministry or minister
- Statistics Iceland is the main producer and coordinator of statistics in Iceland

# Statistics Iceland

- Four divisions
  - Economic Statistics
  - Social Statistics
  - Business Statistics
  - Resources and Services
- Quality manager hired in a full time position 2012
  - First as part of Resources and Services
  - Now directly under the Director-General

# Quality Policy

## Quality Policy of Statistics Iceland

Statistics Iceland is a professionally independent institution which develops, produces and disseminates statistics about society. Statistics Iceland's policy is to work according to sound methodology and appropriate statistical procedures and with impartiality, objectivity and statistical confidentiality. The statistics are accurate and reliable, coherent and comparable.

The statistics are according to users' needs, released in a timely and punctual manner and presented in a clear and understandable form. In order to realize this, Statistics Iceland's professional independence is specified in law and it is ensured that staff has adequate training and experience to meet current statistical needs.

Statistics Iceland is responsible for official statistics in Iceland and needs to ensure that statistics are internally coherent and comparable, processing of data collecting is simplified, business and administrative sources used when possible with a sound methodology to avoid excessive burden on respondents.

Statistics Iceland puts emphasis on good service, efficiency and cost effectiveness to meet increasing domestic and international demands. Statistics Iceland takes part in international cooperation and is fully compliant with the demands of the European Statistical System.

Statistics Iceland operates within well-designed processes and according to plan. Quality indicators and other important factors regarding the operation and its outputs are well defined and results are checked accordingly. If quality indicators are not met changes will be carried out and improvements made on processes and procedures.

The quality system of Statistics Iceland is based on the 15 principles of the European Statistics Code of Practice (CoP) published by the European Statistical System (ESS):

1. Professional independence
2. Mandate for data collection
3. Adequacy of resources
4. Commitment to quality
5. Statistical confidentiality
6. Impartiality and objectivity
7. Sound methodology
8. Appropriate statistical procedures
9. Non-excessive burden on respondents
10. Cost effectiveness
11. Relevance
12. Accuracy and reliability
13. Timeliness and punctuality
14. Coherence and comparability
15. Accessibility and clarity

# Quality Policy

## Quality Policy of Statistics Iceland

Statistics Iceland is a professionally independent institution which develops, produces and disseminates statistics about society. Statistics Iceland's policy is to work according to sound methodology and appropriate statistical procedures and with impartiality, objectivity and statistical confidentiality. The statistics are accurate and reliable, coherent and comparable.

The statistics are according to users' needs, released in a timely and punctual manner and presented in a clear and understandable form.

In order to realize this, Statistics Iceland's professional independence is specified in law and it is ensured that staff has adequate training and experience to meet current statistical needs.

## CoP

Statistics Iceland is responsible for official statistics in Iceland and needs to ensure that statistics are internally coherent and comparable, processing of data collecting is simplified, business and administrative sources used when possible with a sound methodology to avoid excessive burden on respondents.

Statistics Iceland puts emphasis on good service, efficiency and cost effectiveness to meet increasing domestic and international demands. Statistics Iceland takes part in international cooperation and is fully compliant with the demands of the European Statistical System.

Statistics Iceland operates within well designed processes and according to a plan. Quality indicators and other important factors regarding the operation and its outputs are well defined and regularly checked for compliance. If quality indicators are not met changes will be carried out and improvements made on processes and procedures.

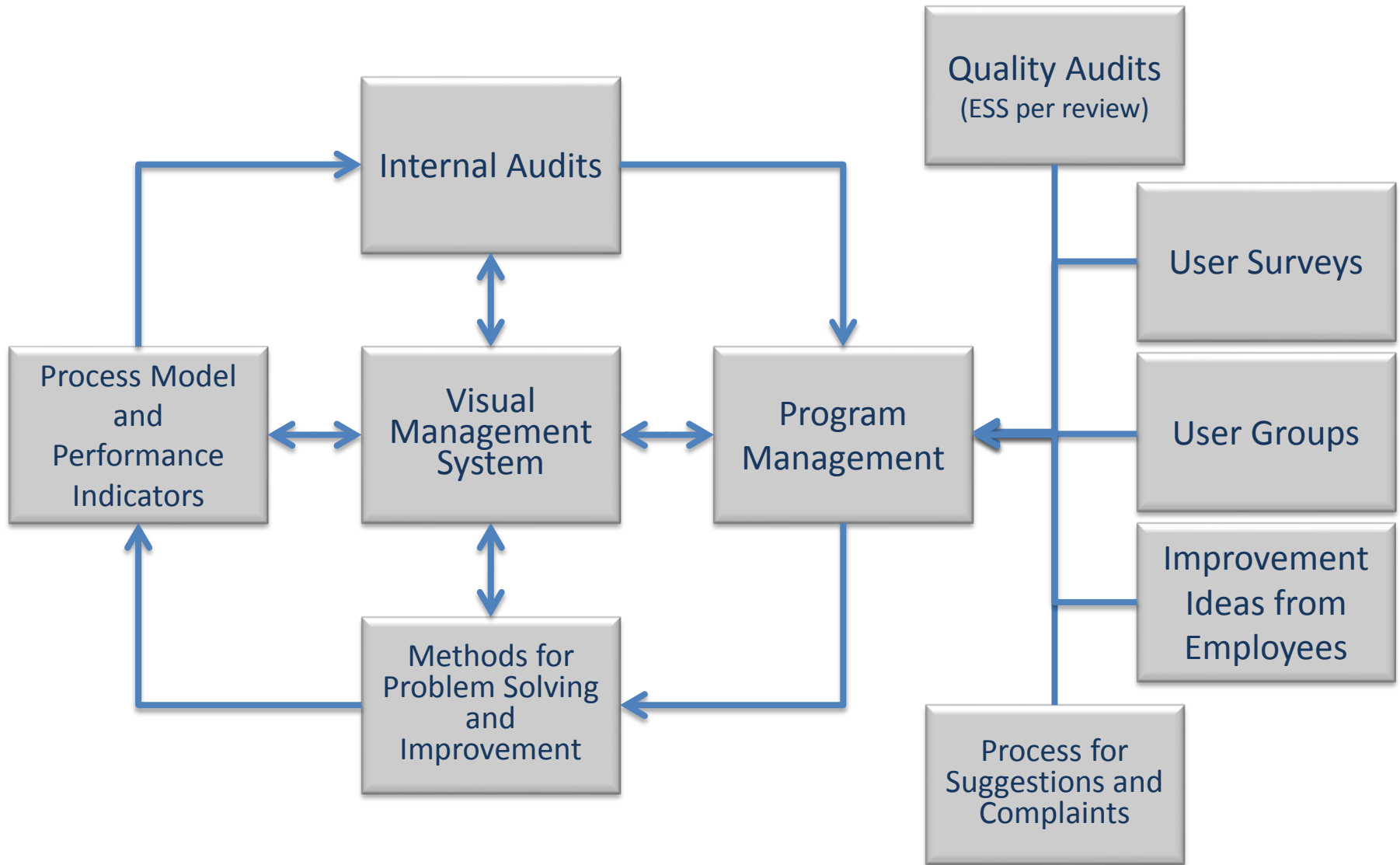
## Plan – Do – Check – Act (PDCA)

The quality system of Statistics Iceland is based on the 15 principles of the European Statistics Code of Practice (CoP) published by the European Statistical System (ESS):

1. Professional independence
2. Mandate for data collection
3. Adequacy of resources
4. Commitment to quality
5. Statistical confidentiality
6. Impartiality and objectivity
7. Sound methodology
8. Appropriate statistical procedures
9. Non-excessive burden on respondents
10. Cost effectiveness
11. Relevance
12. Accuracy and reliability
13. Timeliness and punctuality
14. Coherence and comparability
15. Accessibility and clarity

## CoP

# Improvement System



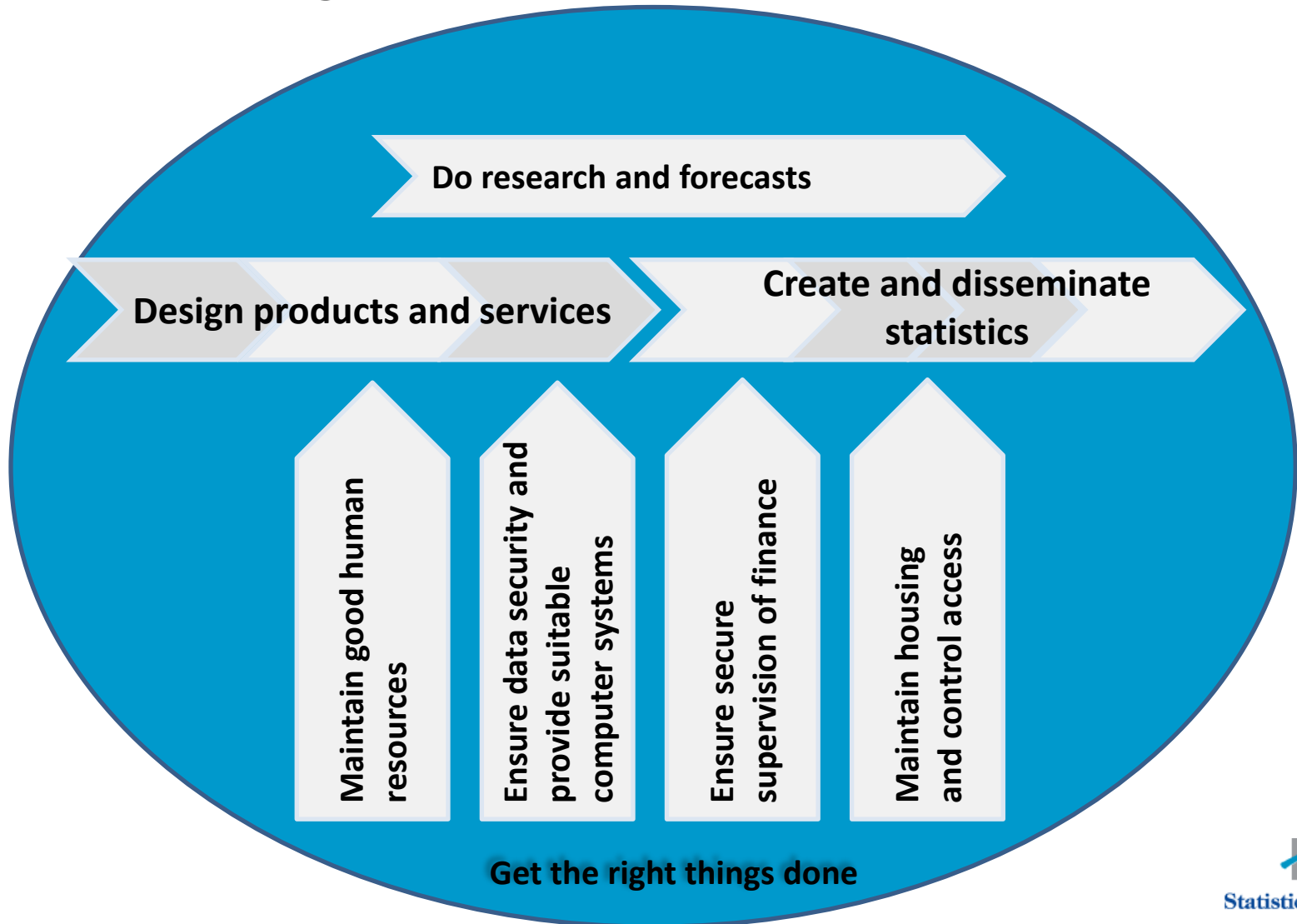
# Process Model

- Current condition
- High Level Process Map
- Three *core processes*, produce products and services for customers
- Four *enabling processes*, service the core processes (and each other)
- One *management process* called *Get the right things done*



# High Level Process Map

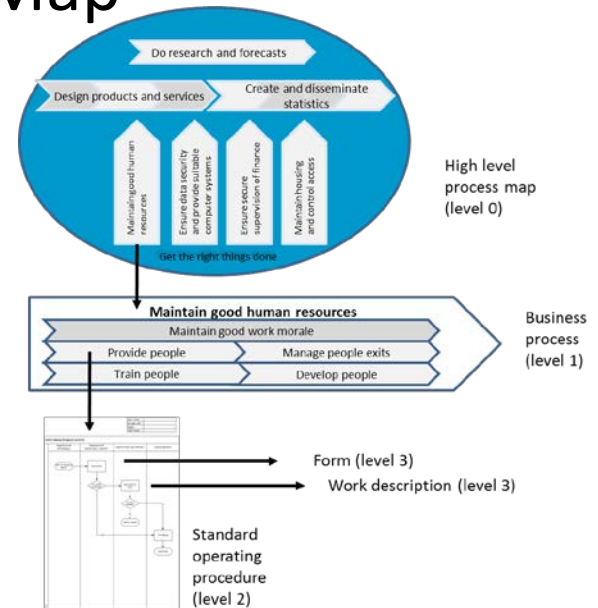
- the highest level of the Process Model -



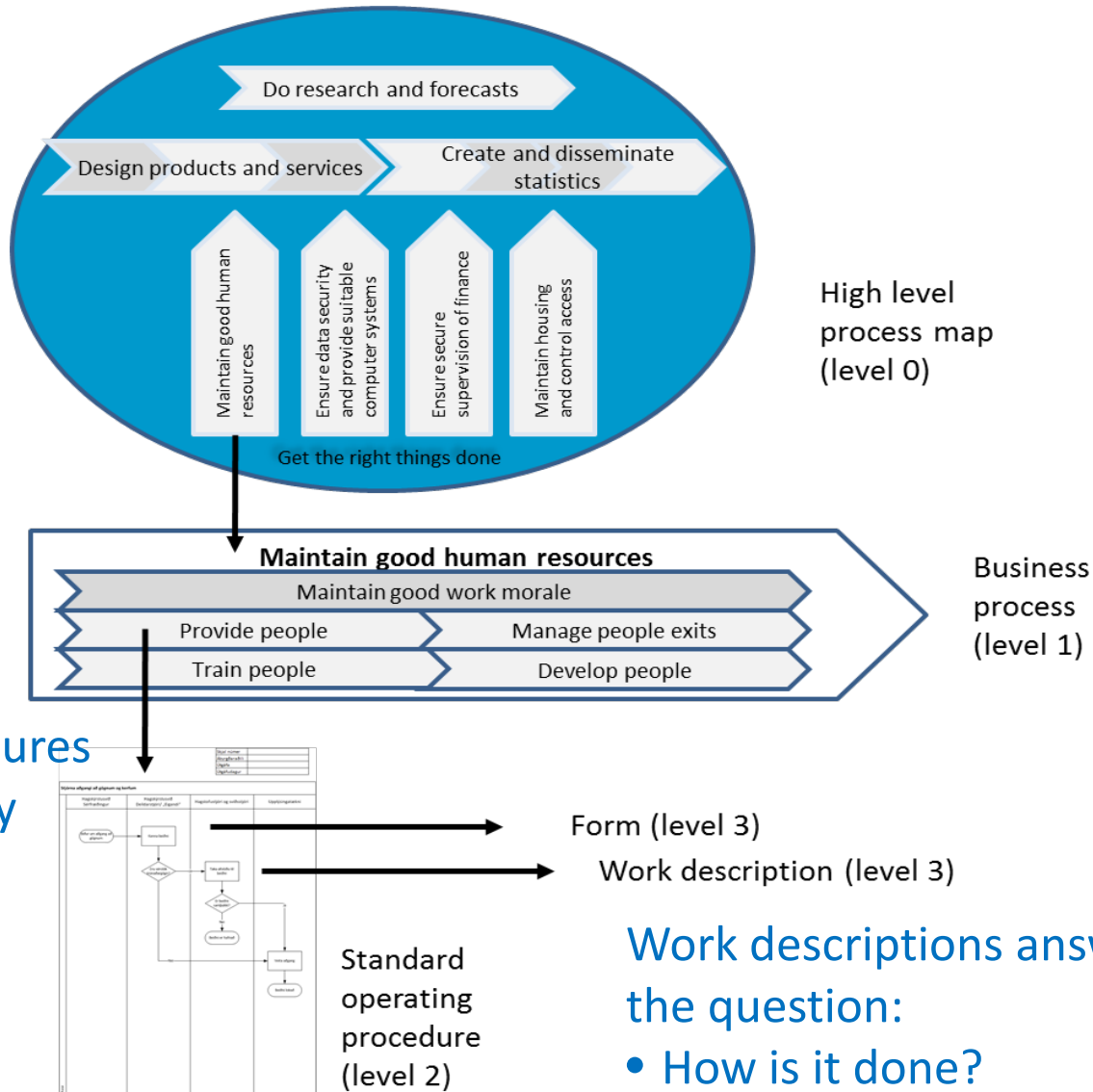


# Process Model

- Drill-down structure from each of the business processes on the High Level Process Map
- Four levels
  - High Level Process Map (Level 0)
  - Business Processes (Level 1)
  - Standard Operating Procedures (Level 2)
  - Work Descriptions, Forms, Checklists, etc. (Level 3)



# Process Model



Operating procedures answer essentially two questions:

- What is done?
- Who does it?

Work descriptions answer the question:

- How is it done?

# Statistical Business Process

- Many different products with different processes
- We started to map the statistical business processes just like all the other business processes, that is to say, on a blank piece of paper
- The same processes for different products were not comparable to each other
- We decided to start mapping the statistical business process using the GSBPM as a reference frame

# GSBPM

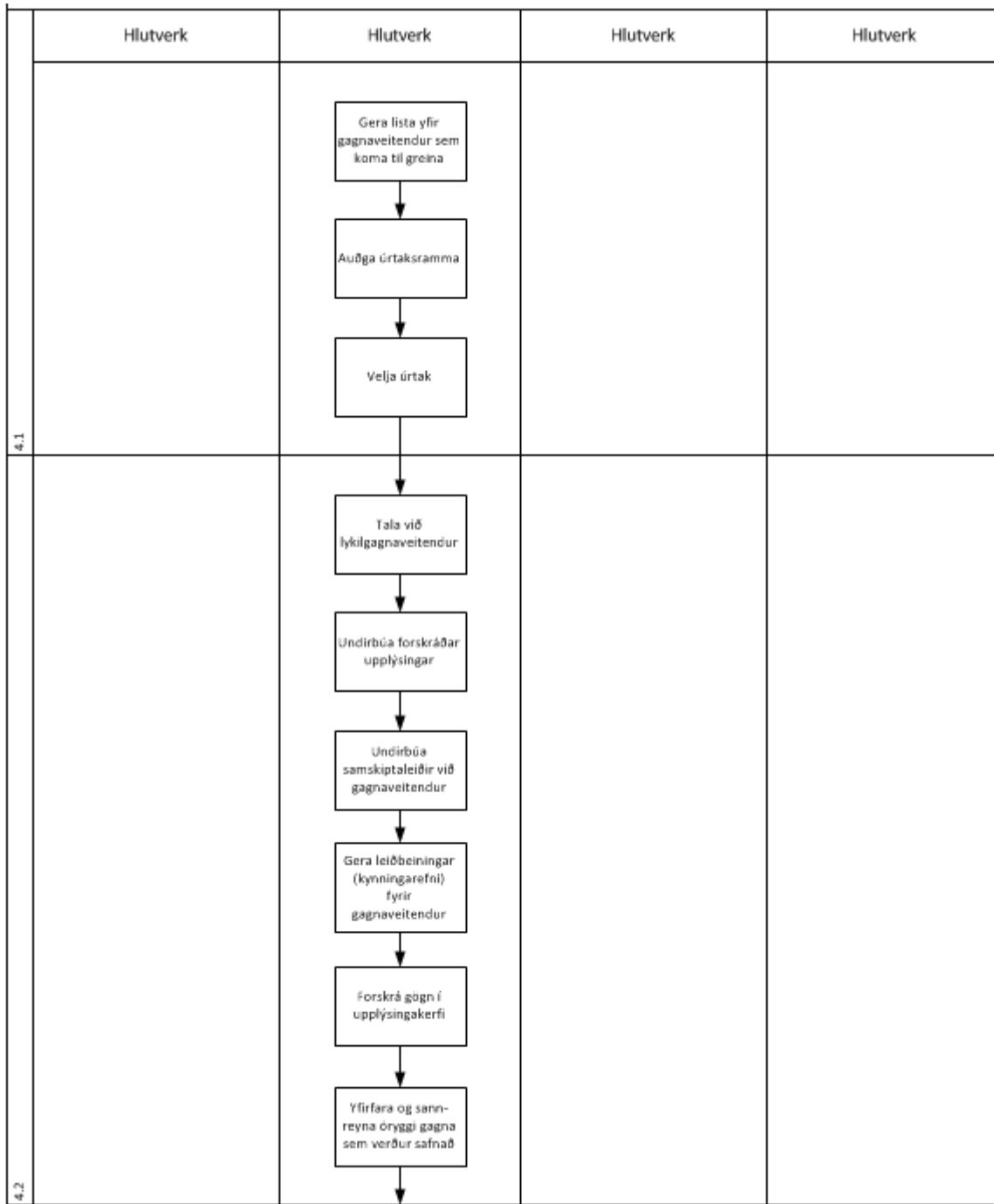
To make the GSBPM usable for us

- Translate to Icelandic
  - Around 20 meetings
  - All managers (heads of units) + one third of experts

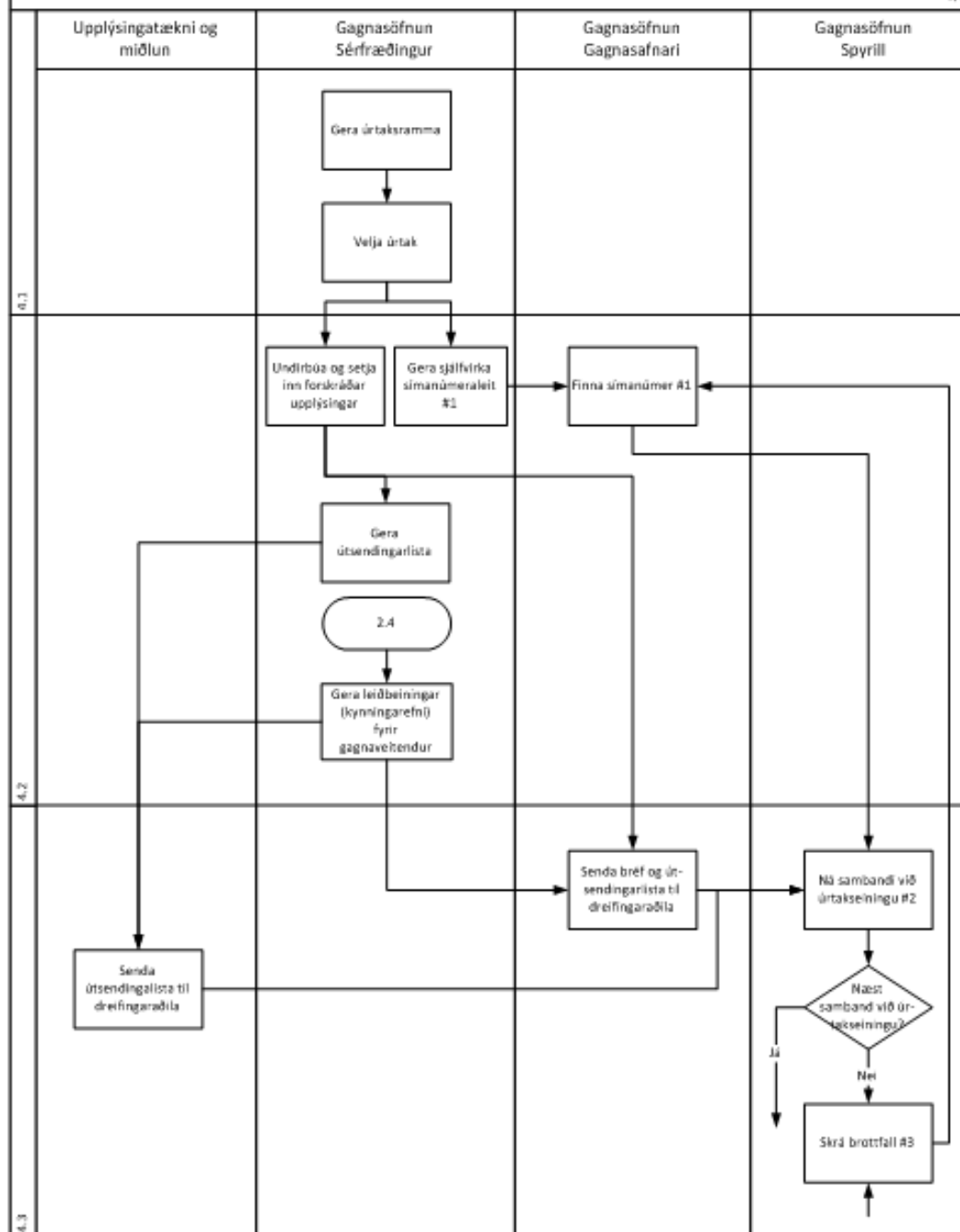


Template based on the GSBPM for process mapping of the data collection process

The process map is used as part of the operating procedures



An operating procedure for the CATI process drawn up from the previous template



# Pros and Cons

- Pros

- Much quicker to map the processes
- Much better to compare same processes for different products
- Easier to communicate with colleagues in other countries on process matters

- Cons

- Some complications in the processes can easily be lost

Thank you for listening



# Appendix 1: The Management Process

**Get the Right Things Done**



# Appendix 2: The GSBPM 5.0

GSBPM-2

## Quality Management / Metadata Management

Specify Needs	Design	Build	Collect	Process	Analyse	Disseminate	Evaluate
1.1 Identify needs	2.1 Design outputs	3.1 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 Build or enhance process components	4.2 Set up collection	5.2 Classify & 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 Build or enhance dissemination components	4.3 Run collection	5.3 Review & validate	6.3 Interpret & explain outputs	7.3 Manage release of dissemination products	8.3 Agree 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 business case	2.6 Design production systems & workflow	3.6 Test statistical business process		5.6 Calculate weights			
		3.7 Finalise production system		5.7 Calculate aggregates			
				5.8 Finalise data files			

