Lessons learned from implementing GSBPM

Joint UNECE, Eurostat, OECD Meeting of the Group of Experts on Business Registers

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Statistics Estonia
Eurostat grant (scope)

- Statistics Estonia is participating in Eurostat grant “Improvement of national business registers (NBR) and testing of European profiling”

- Scope of Topic 2 of the grant: “Describing the NBR with Generic Statistical Business Process Model (GSBPM) and Generic Statistical Information Model (GSIM)”
Definitions

- GSBPM is a reference framework to define and describe statistical processes in a coherent way and to compare them within and between different organisations.

- GSIM is a reference framework used to describe the information objects of a statistical business process. It serves to have generic descriptions of all data and metadata that are part of a statistical production process, including their definition, management and use. With GSIM, information objects that constitute the input and output of the statistical process are described according to standards.
Use of standard models

- To facilitate the comparison of different processes in different organizations
- To help identify good practices
- To help identify areas where efficiency can be gained and costs saved
- To adopt common tools
- To share the costs of developing new tools or methods
Expected results

- Build up the capacity for using GSBPM and GSIM to document the NBR processes
- Describe the NBR process by using GSBPM and GSIM.

- GSBPM can be adopted at different levels and MS are free to decide.
- However it should be considered that grants shall be used to build capacity, create knowledge and allow for future re-use of the results.
Background information

- 2008 — Statistics Estonia started the implementation of the system for tracking the working hours and activities. All working hours had to be allocated to the processes and sub-processes described in GSBPM.

- October 2013 — Statistics Estonia implemented the new organisational structure which is based on GSBPM. Formerly separate domain-based departments were re-organised into four departments, based on processes of the production of statistics — data collection and processing and three domain-based analysing departments.
Statistics Estonia structure

Lessons learned from implementing GSBPM
GSBPM as a basis for standardising processes

Lessons learned from implementing GSBPM
Training course on GSBPM and GSIM

- Trainer — Mr. Steven Vale (UNECE, Statistical Management and Modernisation Unit)
- Time — December 2014
- Place — Statistics Estonia
- Participants — specialist from NBR, metadata and warehouse departments and enterprise statistics department
- Scope — theory and practical use of GSBPM and GSIM in description of the NBR processes
Questions that had to be answered

- Which register processes should be described?
- Which level of detail should be chosen?
- Which timeframes/periods should be covered?
Base information

Scope of the grant:
- Processes of the production of the frame(s)
- Interaction of the NBR with the EuroGroups Register.

NBR statistical activities
- Statistical Economic Units Database (maintenance of NBR and production and maintenance of the frame, register’s survey)
- Economic units statistics
- Business Demography
- Enterprise groups

2.09.2015
Main challenges

How to describe and visualize activities which have different character and timetable?

- continuous activities
- cyclical activities
- activities with strict timetable having start and end dates
- activities performed only in case of need
- activities that are carried out with respect to the live-register maintenance
- activities that are carried out with respect to the frame production and maintenance etc.
Steps performed for selection of the processes (1)

1. List of all register processes and sub-processes and mapping of these with GSBPM processes and sub-processes
Steps performed for selection of the processes (2)

2. Compiling of the table according to the GSBPM logic
3. Supplement with additional information like periods, actors, manner of execution (manual/automatic), population (live register, frozen frame)

<table>
<thead>
<tr>
<th>5.2</th>
<th>Kodeerimine</th>
<th>Probleem - raske teha vahet 5.2 ja 5.3 vahel</th>
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</thead>
<tbody>
<tr>
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<tr>
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<td>April-Okt</td>
<td>Käsit Autom ARO, ALO</td>
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<td>EMTAK</td>
<td>September-Okt</td>
<td>Käsit Autom ARO, ALO</td>
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<tr>
<td>FIE EMTAK</td>
<td>September-Okt (T); Veebruar-Märts (T-2)</td>
<td>Käsit Autom ARO, ALO</td>
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<td>OMLIKK</td>
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<td>Veebruar-Märts, April-Mai, August-September</td>
<td>B Käsit AKO AKO</td>
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<td>SP paranduste tarbeks andmete kodeerimine (EMTAK, SEISUND)</td>
<td>Terve aasta, välja arvates Juuli</td>
<td>B ARO</td>
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</tbody>
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Lessons learned from implementing GSBPM
Steps performed for selection of the processes (3)

4. Analyses of the table and finalise the list of processes which should be described:

1) Production of the frame
2) Maintenance of the frame
3) Register survey
2) Interaction of the NBR with the EuroGroups Register
Outputs produced during project for every selected process

- Table with list of activities mapped with GSBPM relevant processes and sub-processes
- GSBPM diagram where all relevant processes and sub-processes are displayed
- Description of the processes using standard notation (BPMN)
Example 1: GSBPM table for NBR survey for new enterprises

<table>
<thead>
<tr>
<th>GSBPM subprocess</th>
<th>Processes and subprocesses</th>
<th>Time, Periodicity</th>
<th>Frame/ Base</th>
<th>Way of processing</th>
<th>Roles/actors</th>
<th>New survey</th>
<th>Existing survey</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Identify needs</td>
<td>Creating new survey for updating the register</td>
<td>B</td>
<td></td>
<td>AKO, ARO</td>
<td>Always</td>
<td>—</td>
<td>New statistical unit, new data source, new variables...</td>
<td></td>
</tr>
<tr>
<td>1.2 Consult and confirm needs</td>
<td>Creating new questionnaire for updating the register</td>
<td>B</td>
<td></td>
<td>ARO, AKO, SOd</td>
<td>Always</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3 Establish output objectives</td>
<td>Assessment/revision of the data composition of the questionnaire</td>
<td>August-October</td>
<td>B</td>
<td>ARO</td>
<td>Always</td>
<td>As needed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 Design outputs</td>
<td>Design template of the questionnaire in cooperation with ALO</td>
<td>December</td>
<td>B</td>
<td>ARO, ALO</td>
<td>Always</td>
<td>As needed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2 Design variable descriptions</td>
<td>Describing questionnaire variables in iMETA</td>
<td>December</td>
<td>B</td>
<td>ARO, ALO, MO</td>
<td>Always</td>
<td>As needed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.4 Design frame and sample</td>
<td>Design and approve methodology for frame and sample of the questionnaire</td>
<td></td>
<td>B</td>
<td>ARO, AKO, SOd</td>
<td>Always</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.5 Design processing and analysis</td>
<td>Developing and approving of the processing rules, revising the existing rules for questionnaire in VAIS</td>
<td>December</td>
<td>B</td>
<td>ARO, ALO</td>
<td>Always</td>
<td>As needed</td>
<td></td>
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</tr>
<tr>
<td>3.2 Build or enhance process components</td>
<td>Implementation of the processing rules (new and changes) of the questionnaire in VAIS</td>
<td>December</td>
<td>B</td>
<td>ALO</td>
<td>Always</td>
<td>As needed</td>
<td></td>
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</tr>
</tbody>
</table>

Lessons learned from implementing GSBPM
Example 2: Production of the frame on GSBPM diagram

Lessons learned from implementing GSBPM
Example 3: Production of the frame on BPMN graph
Lessons learned so far

- It is possible to use GSBPM for description of the register processes but in order to achieve the comparability between the MS the level of the detail of description needs to be agreed upon.

- There are some NBR processes which are described under more than one GSBPM subprocess.

- How and what to present as a timeline as some activities are periodical, others are performed all year around.
Thank you for your attention