



Peder Næs

Documents

**Quality self-assessment in
Statistics Norway**

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Initialisation and execution of the quality review

The planning of the quality review was initiated in November 2007. Two different self-assessment forms were tested:

- DESAP (Development of a Self Assessment Programme), which was developed by the German statistics agency for Eurostat
- Self-assessment of Product, which was developed by the Swedish statistics agency.

Our tests showed that the DESAP was the form best suited to Statistics Norway. This was because it was more general and not specially made for Swedish conditions, it took less time to complete, there was an electronic version (developed by the Lithuanian statistics agency), and because it was more interesting to fill out (partly due to a graphic summary appearing at the end).

Statistics Norway chose to use the English version of the DESAP form without translating it into Norwegian. Translation would require extensive resources and would delay the start of the review. Further, it was considered that those responsible for the various statistics were sufficiently fluent in English to fill out the form, or would benefit from learning the English terms used in the form. It was also assumed that division heads and group leaders would be involved in the self-assessments. All divisions were further given the opportunity to include the project manager in the first self-assessment.

During the planning of activities process at the end of 2007, it was decided that a self-assessment should be carried out for all statistics in Statistics Norway in 2008. The first self-assessments were already completed by early January 2008.

The quality review was approved as a project for the improvement and standardisation of statistical production (FOSS) on the 4th of March 2008.

By the 1st of December 2008, a total of 194 self-assessments had been completed. The number of self-assessments per division varies from 2 to 29. All relevant statistical divisions in Statistics Norway report having self-assessed all of their statistical routines.

An evaluation round was carried out in the department meetings of the following departments: Economics, energy and the environment, Social statistics, Industry statistics and National accounts and financial statistics. Most of the divisions gave the impression that the self-assessment had been beneficial, particularly for division heads, group leaders and new employees. However, some division heads in the Economics, energy and the environment department perceived the review to be of limited value.

Objectives and results

Objectives

The project proposal stipulates the following long term objectives:

- Provide a better insight into the quality of Statistics Norway's statistical production
- Provide a basis for considering improvement measures
- Document the situation before initiating FOSS in order to be able to quantify the effects at a later date
- Help to assess where standardised solutions may be appropriate

The project proposal stipulates the following short term objectives:

All statistics shall be subjected to a self-assessment using the DESAP form by the 1st of September 2008.

An overview should be established of when different self-assessments should be carried out early in 2008.

After an analysis of the first results from the self-assessment in May, there should be a decision, before summer, whether to follow-up with inspection of statistics.

Results - performance objectives

An overview should be established of when different self-assessments should be carried out early in 2008.

An inquiry was sent to all statistical divisions early in January 2008, asking when the self-assessment had been planned for the different statistics. All divisions responded eventually and the plans were on the whole adhered to by most divisions. This exercise is believed to have contributed to all self-assessments actually being carried out in 2008.

After an analysis of the first results from the self-assessment in May, there should be a decision, before summer, whether to follow-up with inspection of statistics, in order to enable this work to start in the second half of the year.

After assessing the first results, the project decided together with the liaison group (consisting of Jan Bjørnstad and Hans Viggo Sæbø) that it was not necessary to initiate any inspections in 2008.

All statistics shall be subjected to a self-assessment using the DESAP form by the 1st of September 2008.

By the 1st of September 2008 deadline, 180 of 194 self-assessments had been completed. A few weeks later, all assessments had been completed.

The number of self-assessments varied considerably in the different sections. See table 1.

Table 1. No. of self-assessments, no. of statistics in the statistics calendar and no. in product number in the product register per division

Division for	No. of self-assessments	No. of statistics in statistics calendar	No. in product number
Energy statistics	8	17	17
Environmental statistics	20	42	96
Income and wage statistics	2	42	36
Price statistics	5	13	13
Labour market statistics	4	23	44
External trade	2	6	12
Population statistics	28	39	41
Health statistics	6	26	29
Social welfare statistics	9	33	104
Education statistics	6	40	26
Business register	11	5	7
Primary industry statistics	22	38	46
Transport, tourism and ICT statistics	29	67	59
Construction and service statistics	14	42	51
Manufacturing	8	11	17
Financial markets statistics	3	22	14
Public finance	5	21	12
Financial corporations	5	15	14
Accounting statistics	7	7	9

The number of self-assessments per division does not appear to tally with either the number of statistics in the statistics calendar or the product number in the product register. The project has left it to the statistical divisions themselves to assess how many different statistical routines they have. Despite some major deviations in table 1, the project believes that all statistical routines in Statistics Norway have been self-assessed.

For example, the Division for income and wage statistics decided that they only needed to assess two routines, the wage statistics and the income statistics. The reason for the deviations in table 1 for this division is that it publishes wage statistics according to the statistics calendar for a number of different industries and that each of these has their own product number. It did not seem appropriate to carry out a separate self-assessment for each industry since the same processes are used for all of the statistics.

The project regards the performance objective of all statistics being self-assessed by the 1st of September to have been achieved a few weeks after the deadline. The project is not aware of any statistics that are not covered by the self-assessments carried out.

Some general results from the self-assessments

When a comparison is made of the self-assessments for the different divisions and departments in Statistics Norway it becomes apparent that the results are quite similar. This also applies when comparing register-based statistics and statistics based on data collected directly from questionnaires by Statistics Norway.

All of the groupings mentioned give themselves a low score on:

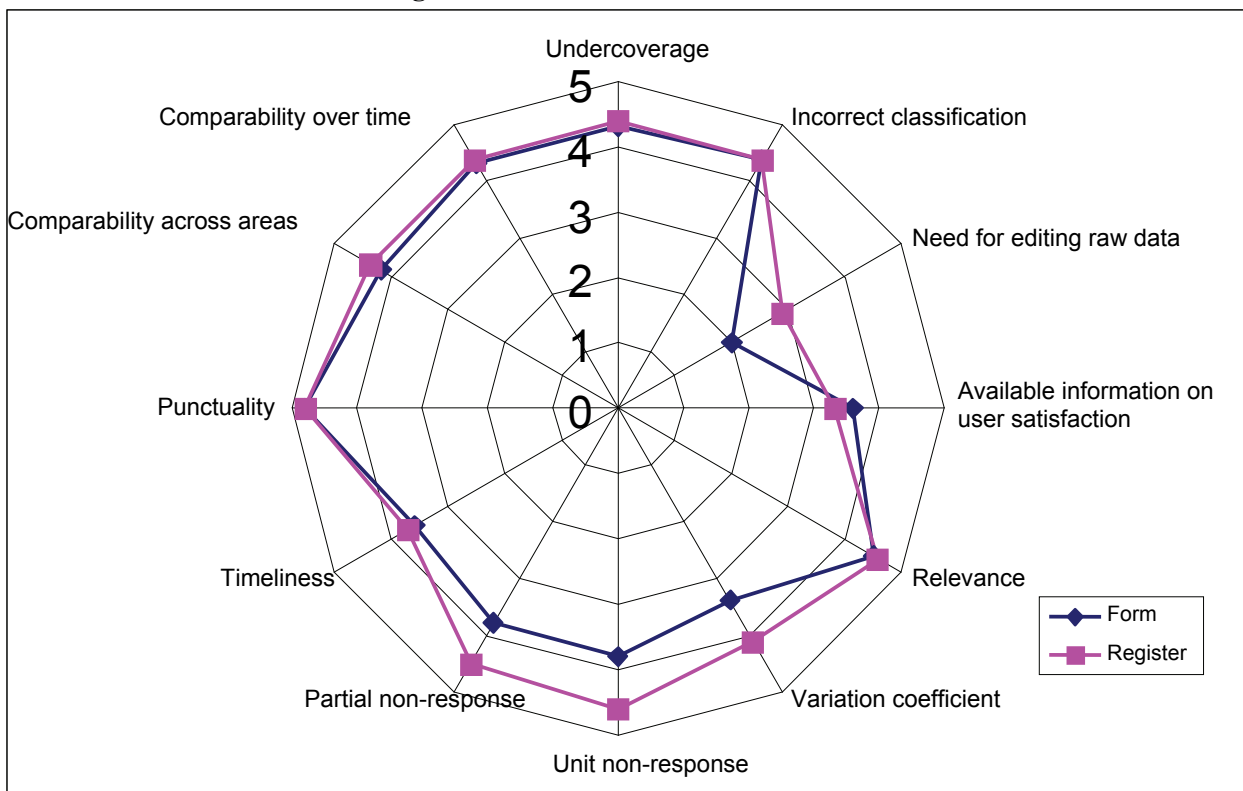
- The need for editing raw data
- Available information on user satisfaction
- Timeliness

All of the groupings give themselves a high score on:

- Punctuality
- Relevance

More detailed analysis of the self-assessments is left to various other projects (see Building on the project results). All of the results are stored at a location open to all employees of Statistics Norway, where everything is available in one spreadsheet as well as separate spreadsheets for the different divisions. Some divisions have not assembled all their assessments into one spreadsheet, but created separate spreadsheets for the individual self-assessments.

Results from DESAP 2008, average score all statistics



Results – impact objectives

The project has provided a better insight into the quality of Statistics Norway’s statistical production as well as a basis for considering improvement measures. It has also helped to assess where standardised solutions may be appropriate.

With regard to the objective of “documenting the situation before initiating FOSS in order to be able to quantify the effects at a later date, there is a great deal of uncertainty whether this project has made a major or minor contribution.

Summary of objectives and results

The results are considered to correspond well with both the impact objectives and performance objectives defined for the project.

Progress and resource use

The project proposal was approved on the 4th of March 2008 by the FOSS committee, with a start date of 4th of March and completion date of 15th of September. The final report was completed on the 10th of December. The report was submitted to the FOSS committee on the 16th of December.

The total number of hours planned for the project was 2,100. A total of 2,090 were registered for product number 1887 in 2008. The breakdown of hours planned and used was as follows:

Table 2. Man-hours planned and used per division

Division	Planned hours	Used hours	Used hours/planned. Per cent
Total	2 100	2 090	100
101	300	448	149
120	300	36	12
Statistical divisions	1 500	1 606	107
Energy statistics		63	
Environmental statistics		135	
Income and wage statistics		0	
Price statistics		2	
Labour market statistics		48	
External trade		3	
Population statistics		136	
Health statistics		70	
Social welfare statistics		152	
Education statistics		17	
Business register		9	
Primary industry statistics		244	
Transport, tourism and ICT statistics		321	
Construction and service statistics		190	
Manufacturing		54	
Financial markets statistics		23	
Public finance		22	
Financial corporations		15	
Accounting statistics		102	

Table 2 shows an over use of man-hours in the Division for the Director general, staff (101). This is because the project manager has carried out work that was planned to be carried out by the Division for statistical methods and standards. It can also be observed that some statistical divisions have evidently forgotten to register some hours.

Organisation and work process

The project group consisted of:
Peder Næs

The liaison group consisted of:
Jan Bjørnstad
Hans Viggo Sæbø

The reference group consisted of:
FOSS coordination group, Roger Jensen and Leiv Solheim

Execution

The divisions mainly carried out the work by themselves. The project manager, Peder Næs, spent some time assisting various divisions and managed the execution of the work. Anne Sofie Abrahamsen, Li-Zhun Zhang and Ib Thomsen spent some time providing guidance to a number of the divisions.

Leiv Solheim and Roger Jensen made valuable contributions during the testing during execution of the project.

Peder Næs took part in all divisions' first self-assessments, except for the following divisions: Energy statistics, Environmental statistics and Business register.

Many divisions have had assistance from a statistical methodologist , but not all. The person responsible for the relevant statistics, group leader and division head were involved in most of the self-assessments. A member of staff from the Division for interviews took part in most self-assessments with interviews.

A summary was made of the experiences in the department meetings of the following departments: Economics, energy and the environment statistics, Social statistics, Industry statistics and National accounts and financial statistics in November/December 2008.

Building on the project results

The quality review resulted in suggestions for changes, which have either been carried out already or are in the process of being carried out in the statistical divisions, as well as the start-up of several projects in 2008 and plans to initiate projects in 2009.

Projects initiated in 2008 based on findings in the quality review:

- Process information for the collection of data was collected in 2008, and will be used in 2009. The project has developed a checklist which will be used when submitting data from the Division for data processing and support and the Division for interviews to the statistical divisions. The project was initiated because the quality review revealed that the statistical divisions were not always aware of what quality controls were carried out on the data they received.

- A employee expertise project gained useful information from the quality review. A separate note was prepared which summarises the answers to questions concerning the assessment of employees' own expertise in the quality review.
- A project will analyse the responses to the quality review that related to user conditions. The project was initiated because the quality review revealed that knowledge of users' needs was one of the areas where the quality review showed that we gave ourselves a lower score compared to other areas.

Of the measures that are planned for 2009 in the statistical departments as a follow-up to the quality review, many relate to:

- Applying a system to the follow-up of users
- Gathering knowledge on register owners' quality controls (our suppliers)
- The increasing use of automatic imputations
- Compiling more and better documentation

Building on the quality review further

The data from the quality review can be used as a basis for selecting individual statistics for inspection in 2009.