Survey Self-Assessments

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Abstract: This session will briefly review self-assessments conducted by government offices in Europe, especially Sweden and Portugal. Progress on this effort at EIA will be described, which began with us first developing a self-assessment questionnaire, and then conducting meetings for each of our surveys. The interviews touch on all aspects of survey operations, but do not cover as much detail as a quality profile. In addition, survey managers are asked to complete a one-page table summarizing the basic quality measures and how readily available these are. They are also asked to select a survey specific target for improvement. Current progress, usefulness, and options for future work will be discussed.

Outline: This paper will briefly review related work being done in Europe, especially

- Audits at Statistics Sweden,
- Eurostat's DESAP and cobwebs,
- Quality program at Portugal's INE.

We will then discuss the approach taken at EIA, our progress, and options for the future.

Note: Most of the information for Sweden, Eurostat, and OECD is 3rd-hand and dated, based on material from a May 2004 conference in Mainz, Germany.

Statistics Sweden

The quality audit program at statistics Sweden was started in November 2002 with plans to audit 200 programs in 5 years. By May 2004, they had completed 36, and by summer 2005 had completed 69. There are 4 basic steps to the program:

- The survey staff assemble documentation and complete a 25-page self-assessment questionnaire.
- An audit by a team of 3 auditors. This is also described as a "peer review." The auditors are volunteers from other offices within Statistics Sweden. They receive one day of training and serve on 2 to 4 audits per year. The auditors review the assessment and documentation, and meet with the survey staff.
- Report and action plan. The report is written by the audit team, and most reports are 10 to 12 pages. The audit team completes all work in 5 days.
- Action and follow-up. A group of 3 staff members work part-time on the administration of the audits. This includes scheduling the audits, recruiting the volunteer auditors, and also following-up on the recommendations. They also compile and share good examples.

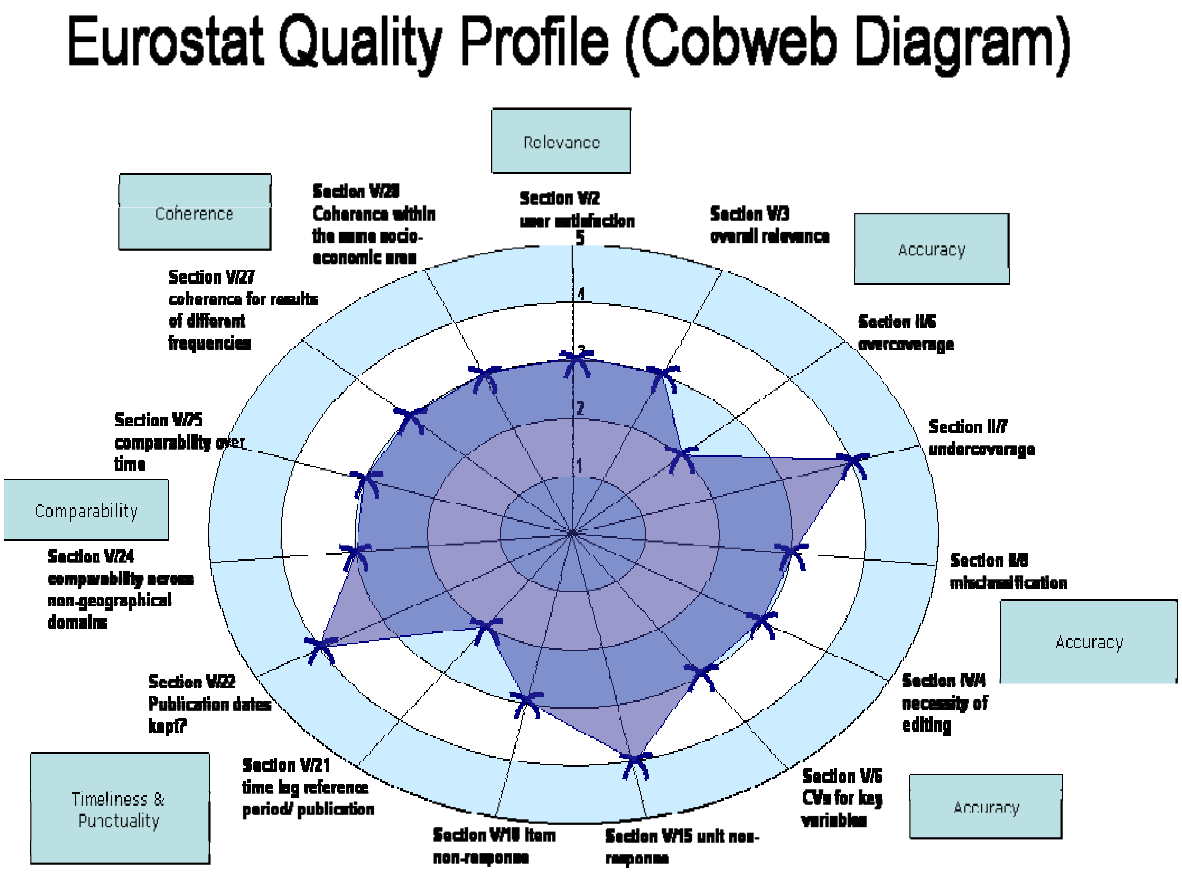
The first 69 reviews have resulted in 673 recommendations (average of 10 per review) and 135 good examples (average of 2 per review.) The most frequent recommendations

dealt with IT systems (65%) but these have a low percentage for being resolved. Documentation was the second most common, and had the highest percent for being resolved or being worked on.

Some examples of proposals taken are new data collection routines, change of software used to process data, more documentation, and regular updating of codes. Some of these had been suggested previously.

Eurostat - Development of a Self-Assessment Program (DESAP)

The DESAP was developed for the 2002 Leadership Group on Quality and is designed to be used with other quality or assessment tools. The objective is to provide a standardized European generic tool for an easy self-assessment to be used by survey managers. It has a 55 page questionnaire covering all phases of a survey, and includes open-ended questions. It is hoped that it will be used in a process that ends by prioritizing the ideas identified. Results are displayed in a cobweb diagram, where higher scores are indicated by being further from the center.



Organization for Economic Cooperation and Development (OECD)

Survey staff complete a 28-page self-evaluation form, which is designed to encourage coordination with others, use of standards and guidelines, and metadata and metadata quality. These forms are then reviewed by a small quality team. The final report includes a matrix of strengths and weaknesses, and a list of envisioned actions.

Summary of Statistics Sweden, Eurostat, and OECD

- All used a survey specific self assessment process.
- All started with lengthy questionnaires and are adapting them.
- All view the process as positive and collaborative.
- All recognize the importance of prioritizing identified needs and planning to improve.

Internal Quality Audits at Portugal's INE

Subset of material presented by Maria João Zilhão, Quality Management Unit, Portuguese National Statistical Institute, at Joint Statistical Meetings, August 2005, Minneapolis. Portugal will be hosting the 2007 ISI meetings.

The Portuguese National Statistical Institute (INE) has about 800 employees, and this year marks 70 years of activity. The Quality Management System has four components:

- Framework. Based on ISO Norms (9000:2000) and EFQM Excellence Model (European Foundation for Quality Model.)

- Involvement activities. Have several procedures to promote involvement.
    - Internal Suggestions – Anyone may propose suggestions about anything. The Quality Committee chooses the 3 best suggestions on a yearly basis and awards prizes. Top Management answers every suggestion.
    - Internal Sessions – Monthly one hour presentations to share best practices and news on innovations. Everyone is invited. Good for involvement!
    - Quality award – Internal award to promote sharing of good practices and innovations.

- Quality Documentation System. Have a quality manual, charter, and procedures handbooks. The handbooks are produced by multidisciplinary teams and define different phases of the process, responsibilities, and minimum levels of documentation.

- Internal Quality Audits. The audits seek to verify the degree of procedures implementation (handbooks procedures; Checklists) and if procedures are properly designed.
    - The Internal Quality Auditors are statisticians from different units (multidisciplinary team) who have received training on Internal Quality Audits (ISO Norms, techniques, and behavior.) Have 14 auditors, with 2 or 3 on each team.
    - Some rules for the audits. Management defines the annual audit plan, no one should audit its own activity, and each activity should be audited on a regular basis.
    - Improvement actions must be published, carried out by the audited departments, and followed by the audit teams.
    - Auditing involves people in the quality program (auditors and audited teams)
    - Auditor / “Consultant”

INE received the Quality award in Public services in 1998. Ongoing work includes internal and external audits, and self-assessments using DESAP.

EIA Approach

When we started, we didn't have all of the details from others, such as the topics to cover. We formed a team with staff from the EIA offices running surveys and hired a consulting firm to help us develop a list of questions and decide what data to collect. We tried to address all ongoing aspects of survey operations, but not design or start-up issues. The topics were reviewed with ASA Energy Committee in April 2004, and we followed many of the suggestions. The full form is in the attachment, but here are the topics:

- Frames
- Sampling error
- Response and imputation rates
- Question content & understanding
- Data processing and edits
- Comparability
- Feedback
- External data – what do we know about the quality of data collected by states or other agencies
- Trade-off between timely data and revisions
- Costs - can we estimate (yes/no)
- Documentation and metadata availability
- Confidentiality - describe procedures
- Internal communications and training
- Quality measures: worthwhile & easy to use?
- What successes would you like to share within EIA?
- Based on all of the above, what needs work?

The format we are using is to have an advance group meeting to explain the project and distribute the list of questions. We then have an individual meeting for each survey with survey personnel and 1 or 2 interviewers from the Statistics and Methods Group. We are not conducting an audit, and are not demanding proof. But the interviewers do ask follow-up questions, so it is not self-conducted. Most interviews were 75 to 90 minutes. The interviewers drafted reports (most about 5 pages) which the survey staff reviewed and modified.

We had two post-interview requests. First, to select a goal for their survey for the year. Second, we asked for an inventory of the basic quality measures for their survey to determine how available the measures are (automated, some manual work required, or unavailable) and collect recent values. These measures are summarized in a matrix on the last page of the attachment and are: frame activity, mode of data receipt, response rate, imputation rates, editing details, time to publish and if schedule met, revisions of published key aggregate data (percent change from first published to final release.)

Progress: We have completed all interviews, but are still writing summary reports and we have not discussed with EIA management. We interviewed some of the IT staff, but did not have the time to interview the contractors. We had very good cooperation and many good discussions with survey staff.

There was an interviewer learning curve for this project. We found that the preparation and writing took a few days for each survey, especially since we are in a separate office and not familiar with most surveys. Of course, some managers are easier to interview than others, and some have many interruptions. We also found that EIA's survey managers have no downtime anymore. We are posting the reports on our internal intra-net. Survey managers have final determination of what is posted. We have tried to emphasize successes.

Some preliminary findings include:

- Our survey respondents vary a lot, from highly trained engineers, to elected officials (small municipal plants) to contract employees.
- Changes to data collected are time-consuming for us and our respondents.
- EIA has a wide variety in our automated data collection procedures.

And some successes:

- Summer interns work great for annual surveys
- Dealing with our respondents using personalized "old-fashioned customer service" works, at least for some surveys.

Preliminary thoughts on our assessment process:

- Preliminary discussions with EIA management showed that some managers already know much of what we found, even small details.
- Alternatively, there wasn't enough detail in the reports to answer specific questions, such as how specific estimates are calculated.
- Received comment at FCSM in December 2004 that questions in a self-assessment should be tough. There is some evidence that some of our questions may have been too soft. For example, we had different survey managers within one group contradict each other on questions on costs and training for new staff.
- Goals being selected are reasonable; most are projects already underway or planned. However, not all survey managers selected a goal.
- Took less time than a quality profile, but some went out-of-date while being written.

Questions for the Committee

EIA is interested in suggestions for the future on any aspect of this project.

- Frequency – how often should we conduct a review?
  (We don't think that we can review all surveys every year.)
- Does it make sense to review all surveys in one program area during the same year?
- Should we ask survey staff to complete the questionnaire, and then have a more rigorous review?
- Do we need a greatly expanded list of questions, such as the DESAP?
- Who should be on the review team?
- Other?