Country Practice Template - Instructions

I. Purpose of the template

The country practice template has been developed by the Oslo Group on Energy Statistics to collect and share country experiences in the compilation of energy statistics. The template is designed mainly for statisticians involved in the collection and compilation of official energy statistics in the country, and is intended to be a tool for people working with producing statistics to describe their own practices as well as learn from other country practices. By using a common template it will be easier to find relevant information and to make comparisons between countries' practices. The country practices will be made publicly available online, initially through the Oslo Group Website (http://www.og.ssb.no/) and at a later stage through a knowledge-base platform of the United Nation Statistical Division. The template is also available at the UNSD website: http://unstats.un.org/unsd/energy/template.htm

II. Country practice vs. best practice

The country practice template is meant to collect *all* kind of practices across countries within the field of energy statistics. It is important to have in mind that a country practice isn't necessarily a best practice. There is no universally accepted definition of a best practice. When defining best practices for our purpose we need to keep the main objective of this exercise in mind: To share experiences that can generate initiative and improvement of the production of official energy statistics worldwide. Institutions in different countries have different challenges when it comes to data collection and available resources. This means that one institution's old, but reliable practice is to another institution an innovating best practice.

Generally, a best practice is considered a technique or methodology that through experience has proven to reliably lead to a desired result. It can serve as a model for generating initiative elsewhere and in principle could be adapted to specific circumstances.

In many cases a best practice for one country may or may not be directly replicated by another country. This can be due to differences in the structure of the energy sector or different consumption patterns of energy. There is also a trade-off between costs and quality and quality and timeliness. A critical evaluation of how a best practice can be adapted and transferred is therefore essential.

III. Who should complete the template?

Entities engaged in the collection and compilation of energy statistics in the country. If there are other agencies in your country involved in the collection and compilation of energy statistics, we would encourage you to forward the template to them with the request to complete it with information about their respective programmes.

III. How to use the country practice template

The template is intended to cover the most important aspects of a statistical production process. It could be linked either to a specific energy statistics or a topic within the field of energy statistics. Examples of statistics or topics could be: Electricity production, electricity consumption, natural gas production, energy use, energy use in the manufacturing sector, energy balances, physical energy flow accounts etc. The template could also be interpreted in a broader sense to describe the statistical

production process of an institution, division etc. Each country has to find the most suitable level to write the country practice depending on how their statistical production process is organized.

If the template is applied on a very comprehensive statistics that uses a lot of secondary data sources, like for instance the energy balance, it might be more appropriate to give a broader overview than if the template is applied to a less comprehensive topic, like for instance energy consumption in manufacturing industries. This is because a lot of the secondary data sources used in the energy balance will have its own country practice.

A glossary has been included to facilitate the response to the template. The definitions are mainly based on the glossary from the <u>OECD Glossary of Statistical Terms</u> (http://stats.oecd.org/glossary/). In some cases, we have used a different wording than the OECD Glossary, but the content is consistent with their definitions.

Please respond to each question in the country practices in energy statistics. If a question is irrelevant for the respondent, it can be left empty. Alternatively you can write *not relevant*.

Also, if you feel that important aspects of your statistics are not covered by the questions in the template, please add this information under the most appropriate/descriptive heading.

IV. Contact information

Please kindly submit the country practice(s) to the following email addresses:

To: oslogroup@ssb.no

Copy: energy stat@un.org

Glossary

Main source: http://stats.oecd.org/glossary/

Accessibility: Accessibility is concerned with the means by which all groups can have access to the electronic engagement, including the visually disadvantaged.

Accuracy: Closeness of computations or estimates to the exact or true values that the statistics were intended to measure.

Cell suppression: (Cell) suppression is a method of disclosure avoidance used to protect individuals' confidentiality by not showing (suppressing) the cell values in tables of aggregate data for cases where only a few individuals or businesses are represented or dominate the cell value. The cells that are not shown are called primary suppressions. To make sure the primary suppressions cannot be closely estimated by subtracting the other cells in the table from the marginal totals, additional cells are also suppressed. These additional suppressed cells are called complementary or secondary suppressions (source: U.S. Census Bureau).

Coherence: The coherence of statistics is their ability to be reliably combined in different ways and for various uses. Consistency refers to logical and numerical coherence.

Comparability: Comparability aims at measuring the impact of differences in applied statistical concepts and measurement tools/procedures when statistics are compared between geographical areas, non-geographical domains, or over time. We can say it is the extent to which differences between statistics are attributed to difference between the true values of the statistical characteristics.

Contracting entity: A contracting entity is any entity which is ordering a survey or the compilation of a statistics, and paying for it.

Consistency: Consistency refers to logical and numerical coherence.

Data confidentiality: Data confidentiality is a property of data, usually resulting from legislative measures, which prevents them from unauthorized disclosure.

Data editing: Data editing is the activity aimed at detecting and correcting errors (logical inconsistencies) in data. E.g.:

- *Micro-editing*: An exhaustive check to find errors by inspecting each individual observation.
- *Macro-editing*: A procedure for tracking suspicious data by checking aggregates or applying statistical methods on all records or on a subset of them.
- Selective editing: Selective editing is a procedure which targets only some of the micro data items or records for review by prioritizing the manual work and establishing appropriate and efficient process and edit boundaries.

Data sources: Data sources refer to the original data source(s) used (administrative data, household survey, enterprise/establishment survey, etc).

Dissemination: Dissemination is the release to users of information obtained through a statistical activity.

Error: Error is the difference between the observed value of an index and its "true" value. E.g.:

- **Coverage error:** Coverage error is the error in an estimate that results from failure to include specified units in the conduct of a survey (undercoverage), and inclusion of some units erroneously either because of a defective frame or because of inclusion of unspecified units or inclusion of specified units more than once in the actual survey (overcoverage).
- Measurement errors: Measurement errors occur when the response provided differs from the real value. Such errors may be attributable to the respondent, the interviewer, the questionnaire, the collection method or the respondent's record-keeping system. They may be random or may result in a systematic bias if they are not random.
- Model assumption errors: Model assumption errors occur with the use of methods, such as calibration, generalised regression estimator, calculation based on full scope or constant scope, benchmarking, seasonal adjustment and other models not included in the preceding accuracy components, in order to calculate statistics or indexes.
- Non-response errors: Non-response errors are errors caused by unit non-response, i.e. the unit has failed to respond, or item non-response, i.e. the unit has failed to respond to some, but not all questions in the survey. Non-response causes an increase in variance due to the decrease in effective sample size and/or due to the use of imputation, and may cause bias if the non-respondents and respondents differ with respect to the characteristic of interest.
- **Processing error:** A processing error is the error in final survey results arising from the faulty implementation of correctly planned implementation methods. For example errors that occur during coding, data entry, data editing, and imputation.
- Sampling errors: Sampling errors arise from the fact that the estimates are based on a sample and not a census of the entire population. The sampling error is measured by the standard error, which estimates the expected deviation between the survey estimate and the estimate that would have been obtained if a complete enumeration had been carried out.

Frame: A list, map or other specification of the units which define a population to be sampled.

Imputation: Imputation is a procedure for entering a value for a specific data item where the response is missing or unusable.

ISIC (International Standard Industrial Classification of All Economic Activities): ISIC is a statistical standard used as a basis for coding units according to principal activity. The ISIC makes it possible to compare and analyze statistical data at the national and international level. Website: http://unstats.un.org/unsd/cr/registry/isic-4.asp

Microdata: Microdata are observation data collected on an individual object (statistical unit).

Population: The population represents the entire group of units (households, producers, services) which is the focus of the statistics.

Punctuality: Punctuality refers to the possible time lag existing between the actual delivery date of data and the target date when it should have been delivered, for instance, with reference to dates announced in some official release calendar or previously agreed among partners.

Relevance: The degree to which statistical information meets the real needs of clients/users.

Sample: A sample is a subset of a frame where elements are selected based on a randomised process with a known probability of selection.

Sample design *The sample design provides information on the target and final sample sizes, strata definitions and the sample selection methodology.*

Sampling: Sampling is the process of selecting a number of cases from all the cases in a particular group or universe.

- Area sampling: A method of sampling when no complete frame of reference is available. The total area under investigation is divided into small sub-areas which are sampled at random or by some restricted random process. Each of the chosen sub-areas is then fully inspected and enumerated, and may form a frame for further sampling if desired.
- Multi-stage sampling: A sample which is selected by stages, the sampling units at each stage being sub-sampled from the (larger) units chosen at the previous stage. The sampling units pertaining to the first stage are called primary or first stage units; and similarly for second stage units, etc.

Sampling frame: A list of all members of a population used as a basis for sampling.

Statistical units: Statistical units are the entities for which information is sought and for which statistics are ultimately compiled. These units can, in turn, be divided into <u>reporting units</u>, observation <u>units</u> and <u>analytical units</u>.

- Reporting units: A reporting unit is a unit that supplies the data for a given survey instance.
- Observation units: Observation units are those entities on which information is received and statistics are compiled. During the collection of data, this is the unit for which data is recorded. It should be noted that this may, or may not be, the same as the reporting unit.
- Analytical units: Analytical units represent real or artificially constructed units, for which statistics are compiled.

Survey: The term survey covers any activity that collects or acquires statistical data. Included are censuses, sample surveys, the collection of data from administrative records and derived statistical activities.

Timeliness: Timeliness is the speed of dissemination of the data - i.e. the time between the end of a reference period (or reference date) and dissemination of the data.