



Seminar on Classification of Energy Reserves
and Energy Statistics,
Beirut, Lebanon, 30 May – 2 June 2004.

**The Joint Monthly Oil Data Project
Data Quality Evaluation**

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No unique indicator of data quality – several criteria are used, like:

- ➡ **Relevance of Statistical Concepts**
- ➡ **Accuracy**
- ➡ **Timeliness**
- ➡ **Accessibility and clarity of information**
- ➡ **Comparability of statistics**
- ➡ **Coherence**
- ➡ **Completeness/coverage**



Although not measures of quality, the resources available for statistics and the burden of form-filling on respondents can make an effect on **Quality**.



Relevance

Relevance in statistics is assured when statistical concepts meet users' needs. Identification of the users and their expectations is a must.

- ✓ Convincing oil companies within the country to submit data.
- ✓ User – producer dialog in Bangkok, Riyadh, Mexico City and Cairo.



Accuracy

Accuracy is defined as the closeness between the estimated value and the (unknown) true population value. Assessing the accuracy of an estimate involves analysing the total error associated with the estimate.

- ✓ Country level: report collected information – estimates
- ✓ International level: revision of the time series

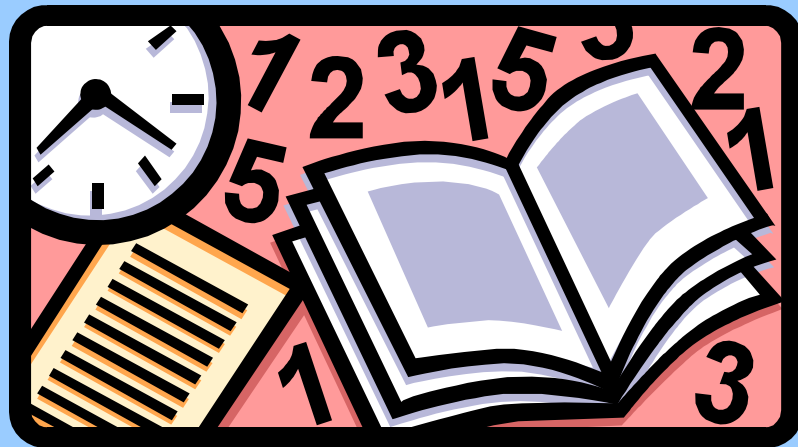


Timeliness

Users want the latest data that are published frequently and on time at pre-established dates.

Data

- ✓ Collection
- ✓ Editing
- ✓ Consolidation
- ✓ Dissemination



➡ Accessibility and Clarity of Information

Statistical data are most valuable when they are:

- ✓ Easily accessible by users
- ✓ Available in the form users desire
- ✓ Adequately documented

Assistance in using and interpreting the statistics should also be forthcoming from the providers.



➡ **Comparability of statistics**

Statistics for a given characteristic have the greatest usefulness when they enable reliable comparisons of values across space and over time.

Providing comparable data makes it possible to publish regional and world totals.



For the sake of **Comparability** the following are needed:

- ✓ Unified definitions
- ✓ Knowing the conversion factors at country level
- ✓ Common unit of measurement
- ✓ Unified methodology
- ✓ Timely submission of data





Coherence

Coherence is the measure of the extent to which one set of statistical characteristics agrees with another and can be used together (with each other) or as an alternative (to each other).

To assess the coherency of the statistics collected, comparisons with other statistics relating to the Joint Oil Exercise data could be made, e.g. comparisons with monthly, quarterly and yearly oil statistics of international organisations.

➡ Completeness/coverage

The component of completeness reflects the extent to which the statistical system in place answers the users' needs and priorities by comparing all user demands with the availability of statistics.

- ✓ How many participating countries
- ✓ How complete the questionnaire/
share of completed cells to the
total number of cells in the
questionnaire



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<http://unstats.un.org/unsd/energy>