

Mineral and Energy Reserve Statistics

Applying the Fundamental Principles of Official Statistics

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**Training on application of UNFC
for sustainable resources
management**

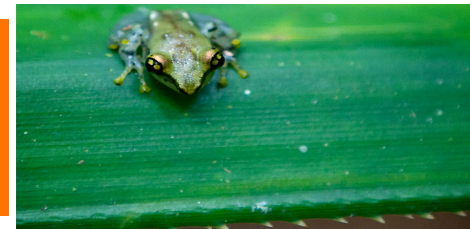
19–20 June, 2019

Nur-Sultan, Kazakhstan

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Overview



- Introduction to the UN Fundamental Principles of Official Statistics
- Applying the Principles in the context of energy and mineral reserve statistics



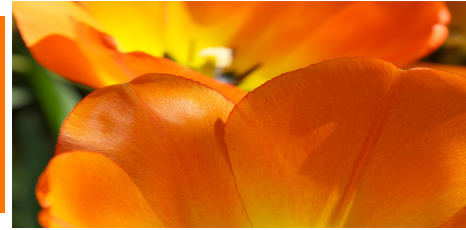
The UN Fundamental Principles of Official Statistics

Why fundamental principles for official statistics?



- Official statistics are an essential public good that requires protection to maintain long-term public trust
- Risks to trust in official statistics include:
 - Interference from political levels of government or other external sources
 - Failure to adequately explain statistics and what lies behind them to users
 - Breaches of confidentiality
 - Unintentional misinterpretation of statistics
 - Intentional manipulation of statistics
 - Failure to provide statistics relevant to users' needs

The UN Fundamental Principles of Official Statistics



- The *Fundamental Principles of Official Statistics* were first adopted by the Conference of European Statisticians (CES) in 1991 to ensure public trust and cooperation in official statistics
- The UN General Assembly acknowledged in 2014 that official statistics are crucial for decision making and adopted the 1991 CES principles as a global set

The Principles



1. Relevance, impartiality and equal access

Official statistics provide an indispensable element in the information system of a democratic society, serving the government, the economy and the public with data about the *economic, demographic, social and environmental* situation. To this end, official statistics that meet the test of *practical utility* are to be compiled and made available on an *impartial* basis by official statistical agencies to honour *citizens' entitlement* to public information.

2. Professional standards and ethics

To retain *trust* in official statistics, statistical agencies need to decide according to *strictly professional considerations*, including *scientific principles* and professional *ethics*, on the *methods and procedures* for the collection, processing, storage and presentation of statistical data.

3. Accountability and transparency

To facilitate a correct *interpretation* of the data, statistical agencies are to *present information according to scientific standards on the sources, methods and procedures of the statistics*.

4. Prevention of misuse

Statistical agencies are *entitled to comment* on erroneous interpretation and misuse of statistics.

5. Sources of official statistics

Data for statistical purposes may be drawn from *all types of sources*, be they statistical surveys or administrative records. *Statistical agencies are to choose* the source with regard to quality, timeliness, costs and the burden on respondents.

The Principles (cont'd)



6. Confidentiality

Individual data collected by statistical agencies for statistical compilation, whether they refer to natural or legal persons, are to be strictly *confidential* and used *exclusively for statistical purposes*.

7. Legislation

The *laws*, regulations and measures under which the statistical systems operate are *to be made public*.

8. National coordination

Coordination among statistical agencies within countries *is essential to achieve consistency and efficiency* in the statistical system.

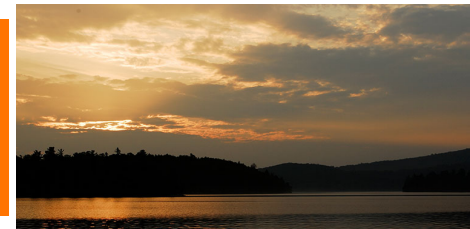
9. Use of international standards

The *use* by statistical agencies in each country *of international concepts, classifications and methods promotes the consistency and efficiency* of statistical systems at all official levels.

10. International cooperation

Bilateral and multilateral *cooperation* in statistics *contributes to the improvement* of systems of official statistics in all countries

Generic Law on Official Statistics



- In 2016, the UNECE published a “Generic Law” on official statistics for use by the countries of Eastern Europe, the Caucasus and Central Asia
 - It provides a “recommendation and good practice guidance” on developing a solid legal basis for the functioning of a *national statistical system* and the production of high quality official statistics.
- The Generic Law should be adjusted to national circumstances
 - But its provisions should not be profoundly altered as they reflect the *Fundamental Principles of Official Statistics* and the European statistics *Code of Practice*

Generic Law – “Main” Principles of Official Statistics



All producers of official statistics shall develop, produce and disseminate official statistics according to the following main principles:

1. Professional independence

Producers of official statistics *shall decide, independently* and free from any pressures or interference from political or other external sources, *on the development, production and dissemination of statistics* and they *may comment publicly* on statistical issues and any misuse of official statistics.

2. Impartiality and objectivity

Official statistics must be developed, produced and disseminated in a *neutral, reliable and unbiased* manner *free from any political statements or considerations*.

3. Accuracy and reliability

Official statistics *must reflect* as faithfully, accurately and consistently as possible *reality and be based on scientific criteria*.

4. Coherence and comparability

Official statistics are *consistent* internationally *and comparable* over time and across regions and countries.

5. Clarity and transparency

Official *statistics must be* presented in a *clear and understandable* way and *methods must be transparent*.

6. Statistical confidentiality and exclusive use for statistical purposes

Individual personal or legal entity data collected or obtained by producers of official statistics *are to be kept strictly confidential*.

7. Relevance

Official statistics *must meet users' needs* and *honour citizens' right to public information*.

CES Declaration on official statistics and the SDGs



- According to the UN Conference of European Statisticians, official statistical agencies are committed to:
 - Contribute to the SDGs through a limited, systematic and high-quality set of statistics
 - Use best available methods to produce timely, high-quality statistics
 - Make use of multiple data sources, including administrative sources and geospatial information
 - Develop broader measures of progress
 - Engage with stakeholders to ensure statistical quality
 - Provide leadership on the dissemination and interpretation of statistics
 - Produce more statistics disaggregated by demographic groups
 - Aide in developing statistical capacity in all countries



Applying the principles in the context of mineral and energy reserve statistics

The fundamental principles and mineral and energy reserve statistics



- Where do the main challenges lie with respect to mineral and energy reserve statistics?
 - **Outside interference** – the possibility that the statistics will be subject to undue interference from political or other outside bodies
 - **Accuracy** – the risk associated with the ability of the statistics to reflect reality
 - **Coherence and consistency** – the risk associated with the comparability of statistics across time and across countries

Risk from outside interference



- Mineral and energy reserve statistics are, in some cases, considered sensitive, so risk of political interference exists
- Mineral and energy reserve statistics are often collected by agencies other than the national statistical offices, so the possibility of political interference may be greater due to lack of arm's-length relationship

Risks from poor accuracy



- Mineral and energy reserve statistics are a complex area where measurement is difficult
 - Not all statistics are based on sound methods and data
 - Monetary valuation is a new area and particularly prone to inaccuracies
- It is important to be open about data weaknesses
 - It may be better not to publish data of low accuracy rather than risk the reputation of the statistical agency

Risks from poor coherence and consistency



- Countries will have different capacities and take different approaches to mineral and energy reserve statistics
 - Comparability of statistics from country-to-country will be limited in some areas as a result
 - Use of UNFC as a standard classification system will help reduce heterogeneity
- Coherence among datasets within countries is also a concern
 - Mineral and energy reserves are often calculated using different classifications (CRIRSCO and PRMS)
 - Compiling mineral and energy asset accounts according to the SEEA is a good way of improving coherence, since the SEEA provides a consistent methodology for classifying and measuring mineral and energy resources (based on UNFC)

Risk mitigation strategies



- Consultation
 - User consultation is essential to ensure that mineral and energy reserve statistics meet needs
- Openness and transparency
 - Publish a clear strategy for addressing mineral and energy reserve statistics needs and ensure it is implemented to the fullest extent possible
 - Ensure statistics are made available on a timely basis to all users and are well documented
- Cooperation
 - Cooperation within and between countries is essential to solving problems related to accuracy, coherence and consistency
 - Agencies must work together to meet users' needs in the most efficient way possible
- Emphasize the importance of statistical agency leadership
 - Statistical agencies are well equipped and accustomed to dealing with the risks surrounding official statistics
 - Their close involvement should be sought in all cases, even when another agency takes the lead in reporting mineral and energy reserve statistics



Thank you

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