



Part I: Quality of official statistics

<u>Quality</u> is a multi-dimensional concept and there is no one single measure of data quality. <u>The fitness for use</u> - the most commonly used and succinct definition of quality of statistical information is adopted by the UN Statistical Commission and is based on definition of quality adopted by ISO

IRTS 2008 (Chapter 8, section A) defines quality of tourism statistics as their fitness for use, describes quality dimensions of tourism statistics and provides recommendations on quality assessment and improvement.

Countries are encouraged to develop their national quality assessment frameworks on the basis of IRTS 2008 recommendations and quality assessment frameworks developed by international/regional organizations

IMF- Data Quality Assessment FrameworkEurostat- European Statistics Code of PracticeOECD- Quality framework for OECD statistics

Part I: Quality of official statistics

The overall aim of quality assessment frameworks is <u>to standardize and</u> systematize statistical quality measurement and reporting across countries.

Such frameworks allow an assessment of national practices against internationally (or regionally) accepted statistical approaches for quality measurement.

The quality assessment frameworks could be used for a number of purposes, including:

(a) to guide a country's efforts to strengthen their statistical systems by providing a self-assessment tool and to identifying areas of improvement;

(b) for technical assistance purposes;

(c) to review particular statistical domains performed by international organizations;

(d) for assessment by other groups of data users.

Part I: Quality of official statistics

In 2010 UNSC decided to develop a generic <u>National Quality Assurance Framework</u> (<u>NQAF</u>) to assist countries that may wish to formulate and operationalize national quality frameworks or further enhance them

Quality assurance is a broader concept than quality assessment. It includes among other elements monitoring of the totality of the statistical process, analysis its particular elements, assessment of quality of outputs, development and implementation of measures to improve applied statistical procedures.

National quality assurance frameworks and Guidelines for NQAF are prepared in 2012 and are available at UNSD website:

http://unstats.un.org/unsd/dnss/docs-nqaf/GUIDELINES%208%20Feb%202012.pdf

Part II: IRTS 2008 on quality of tourism statistics

IRTS 2008 recommends that the following dimensions of quality be adopted in tourism statistics:

- o. Prerequisites of quality
- 1. Relevance
- 2. Credibility
- 3. Accuracy
- 4. Timeliness
- 5. Methodological soundness
- 6. Coherence
- 7. Accessibility

International organizations and other users will judge quality of tourism statistics on this basis

Prerequisites of quality refer to all institutional and organizational conditions that have an impact on the quality of tourism statistics.

Include:

- 1. The legal basis for compilation of data;
- 2. The adequacy of data sharing and coordination among data producing agencies;
- 3. Assurance of confidentiality;

4. The adequacy of human, financial, and technical resources for implementation of tourism statistics programmes;

5. Quality awareness



Credibility

refers to the confidence that users place in the data

It is based on the positive image of the agency responsible for production and dissemination of the data

The compilers challenge is to ensure that tourism statistics are perceived as being produced professionally in accordance with appropriate statistical standards and using transparent data compilation and dissemination policies and practices.

Indicators of credibility should provide evidence that production of tourism statistics is not manipulated and that their release is not timed in response to political pressure;

Part II: IRTS 2008 on quality of tourism statistics:

Accuracy

is the degree of correctness of data with respect to the characteristics of the phenomena they are designed to measure

In practice there is no single aggregate or overall measure of accuracy.

In general, accuracy can be characterized in terms of errors in statistical estimates and is traditionally decomposed into bias (systematic error) and variance (random error) components.

In the case of tourism statistics based on sample surveys, the accuracy can be measured using such indicators as completeness of coverage, relative sampling error and confidence level, non-response errors, response errors, processing errors, etc.

It must be underlined that accuracy and its measurement are also applicable to those statistics based on administrative procedures, which are quite extensive in the case of tourism (border and traffic control, employment and social security agency records, etc.)

Timeliness

refers to the delay between the end of the reference period and the date on which the data are released and available to the public.

Timeliness can be measured by the length of such a delay.

Timeliness is closely related to the existence of a publication schedule. A publication schedule may comprise a set of target release dates or may involve a commitment to release tourism data within a prescribed time period from their receipt.

This dimension usually involves a trade-off against accuracy and relevance

As more accuracy requires more time and *data that are not timely are of limited usefulness and relevance.*

Part II: IRTS 2008 on quality of tourism statistics:

Methodological soundness

Refers to the application of international standards, guidelines and good practices in production of tourism statistics (adequacy of the concepts, definitions, classifications, data variables).

Application of good practices ensures international comparability and is cost effective.

Metadata provided along with tourism statistics play a crucial role for assessing the methodological soundness of data

Methodological soundness and metadata improve data interpretability. Interpretability is the ease with which the user may understand and properly use and analyze the data.

Coherence

Reflects the degree to which the data are logically connected and mutually consistent.

Coherence of tourism statistics means that tourism data can be used in combination with other data in order to obtain additional information.

The use of standard concepts and definitions, classifications, the use of common methodology, whenever warranted, across surveys ensures better coherence.

Coherence does not necessarily mean full numerical consistency of data from different sources but does imply that any differences can be <u>explained</u>.

Part II: IRTS 2008 on quality of tourism statistics:

Accessibility

Refers to the ease with which they can be obtained from those agencies active in tourism statistics.

Good accessibility implies that:

1. Data can be easily obtained and ascertained

2. The media and format of data dissemination are user friendly

3. Advance release calendar is made available so the users are informed well in advance about when the data will become available, and where and how to access them.

The availability of metadata together with the existence of user support services is an important indicator of accessibility.

The dimensions of quality that have been listed above are overlapping and interrelated.

Example:

In practice a trade-off between maximum possible accuracy of a certain indicator and timeliness of its publication usually has to be found.

It is recommended that countries

produce provisional estimates that are available soon after the end of the reference period but are generated from a rather limited database.

estimates <u>are revised</u> at a later date with information that is based on more comprehensive data sets but that is less timely than its provisional version.

Part II: IRTS 2008 on quality of tourism statistics:

Countries <u>are encouraged</u> to develop their national tourism statistics quality assessment frameworks based on the above mentioned dimensions.

Countries are also encouraged to regularly issue quality reports. Such reports should contain a system of quality indicators used in a given country, which will allow users to judge for themselves whether any data set meets their particular quality requirements.

IMTS 2008 <u>recommends</u> that: (a) indicators cover part or all of the dimensions of quality as defined previously, (b) the methodology for their compilation is well established; and (c) the indicators are easy to interpret.

<u>It is recommended</u> that a quality review of tourism statistics be undertaken every <u>four to five years</u> or more frequently if significant methodological changes or changes in the data sources occur.

Part III: Focusing on quality assurance

The generic national quality assurance framework template was developed by the UN Expert Group on national quality assurance framework

The template has five sections:

- 1. Quality context;
- 2. Quality concepts and frameworks;
- 3. Quality assurance guidelines;
- 4. Quality assessment and reporting;
- 5. Quality and other management frameworks.

See http://unstats.un.org/unsd/statcom/doc12/2012-13-NQAF-E.pdf

Part III: Focusing on quality assurance

<u>IRTS 2008</u> states that UNWTO, in cooperation with UNSD, is to develop data quality assessment frameworks applicable to tourism statistics on the basis of existing similar frameworks in other areas of statistics.

UNWTO and UNSD will take into account recommendations of the UN Statistical Commission regarding NQAF and provide additional advice to countries on NQAF implementation in the context of tourism statistics.

Countries are encouraged to consult with each other to avoid duplication of work and to promote coherence of their NQAFs.

Experience of Eurostat and EU member countries should be taken into account.

http://epp.eurostat.ec.europa.eu/portal/page/portal/quality/code_of_practice

