





## ITU Regional Forum and Training Workshop on Telecommunication/ICT Indicators: Measuring the Information Society and

ITU-ASEAN Meeting on Establishing National ICT Statistics Portals and Measuring ASEAN ICT targets Bangkok, 13-16 October 2014

### **Data Quality**

Esperanza Magpantay, Senior Statistician ICT Data and Statistics Division BDT/ ITU

.....

### Context

- What is data quality
- Dimensions of data quality
- Current work in ITU on data quality



### What is Quality

Is quality = ACCURACY?

Are data of good quality when:

- produced too late
- can't be found or accessed
- conflict with other data
- unknown or unverifiable sources
- not provided on a regular basis
- but not really shows what is needed

#### QUALITY is a multi-dimensional concept



# UNSD National Data Quality Framework (NQAF): Dimensions of Data Quality

- Relevance The degree to which statistical outputs meet current and potential user needs
- Accuracy and reliability- accuracy is the degree to which the information correctly describes the phenomena it was designed to measure. Reliability - Closeness of the initial estimated value to the subsequent estimated value.
- 3. Timeliness and punctuality timeliness refers to length of time between data availability and the event or phenomenon they describe. Punctuality refers to whether data are delivered on the dates promised, advertised or announced.

Source: UNSD.

4				
• • • • • • • • • • • • • • • • • • • •	 •	• • • • • • • • • • • • • • • • • • •	,	• • • • • • • • • • • • • • • • • • •

### **NQAF: Dimensions of Data Quality**

- 4. Accessibility and clarity accessibility refers to the ease and conditions under which statistical information can be obtained. Clarity refers to the extent to which easily understandable metadata are available, where these metadata are necessary to give a full understanding of statistical data.
- 5. Comparability and coherence comparability refers to adequacy of statistics to be combined in different ways and for various uses. Coherence refers to the degree to which data can be compared over time, geographic areas or other relevant domains.

Source: UNSD.

Bangkok, 13-16 October 2014 5

### Current work in ITU on data quality – background

- 1. WTIS 2013 recommended that the ITU work on developing a data quality assessment framework.
- Countries should consider developing NQAF.
- 3. Discussions on NQAF could be included in the discussions of national coordination of ICT statistics.

### Current work in ITU on data quality

- 1. Conduct of the quality assessment of ITU statistical processes (data collection, compilation, verification, dissemination).
- 2. Development of a DQAF to help improve the data processes of ITU statistics.
- 3. Will be included in the EGH discussions 2014/15.
- 4. Results of the assessment will be presented in WTIS 2014, in Georgia.

### Objective of the data quality assessment

- 1. Serve as a reference material
- 2. Provide a mechanism for the exchange of idea on quality assurance with producers and users of ICT statistics (international, national level)



### **Ensuring data quality**

ITU

NRAs/Ministries/ NSOs

Operators/ISPs, households, individuals

### **THANK YOU**

### More information

http://www.itu.int/ict