
**Seminar on ICT measurement and indicators
The Ashok, Chanakya Puri
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ITU Telecom indicators and definition

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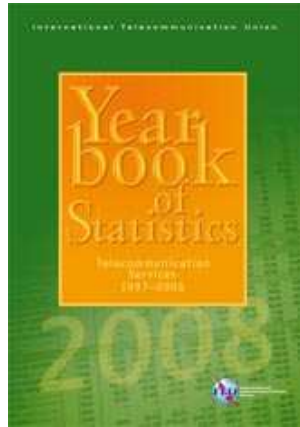
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ITU statistical work

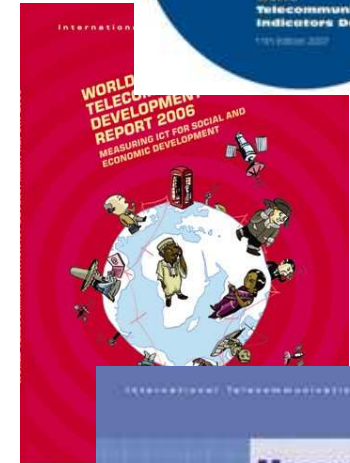
- **Collection and dissemination** of telecom/ICT statistics (infrastructure and access, ICT households)
- **Setting standards** (definitions, manuals)
- **Analyses** (global, regional, thematic)
- **Cooperation** (UNSD, MDG, Partnership on Measuring ICT for Development, etc.)
- **Technical assistance** (NSOs, regulators/ministries)

The indicators are used for.....



- **Yearbook of Statistics** (annually, since 1974)
- **World Telecommunication/ICT Indicators (WTI) database**
- **World Telecommunication/ICT Development Report (WTDR)**
- **Regional Telecommunication Indicators reports** (Africa, Asia-Pacific, Americas)
- **Measuring the Information Society : The IDI**
- **Information Society Statistical Profiles 2009: Asia and the Pacific**
- **Online (free statistics)**

<http://www.itu.int/ITU-D/ICTEYE/Indicators/Indicators.aspx>

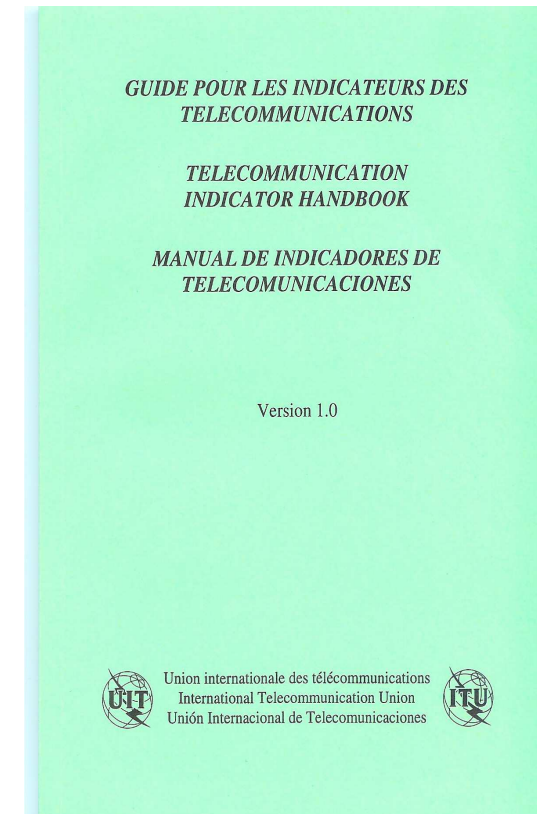


World Telecommunication/ICT Indicators meeting

- Has been taking place since 1996
- Attended by telecom/ICT regulators, ministries, national statistical offices, analysts
- Serves as a forum for discussing indicators, revisions and updates to definition
- 7th WTI meeting in Cairo, Egypt, March 2009

Telecommunication Indicators Handbook

- Version 1 released in 1996
- Second update in WTI meeting 2005
- Third update in WTI meeting 2007
- Available online
- <http://www.itu.int/ITU-D/ict/material/Top50.doc>
- Presented in Cairo, March 2009



Guidelines

- International comparability: Trade-off between wish list (everything!) and most important and most likely to collect from most countries
- Telecom/ICT sector mandate: Subscriber, revenue, traffic, tariff statistics, etc
- Audience: Analysts, governments, statisticians, etc

Categories of Telecom Indicators

- Fixed telephone network (7)
- Mobile cellular services (7)
- Internet (22)
- Quality of service (3)
- Traffic (21)
- Tariffs (fixed, mobile, Internet)
- Staff (6)
- Revenue (16)
- Investment (4)
- Community access indicators (2)
- Broadcasting (6)

Indicators

■ Fixed telephone network

- Fixed telephone lines
 - % digital
 - % residential
 - % in urban areas
- Capacity of telephone exchanges
- Public payphones
- % of localities with telephone service

■ Mobile cellular network

- Mobile cellular subscriptions
 - % Prepaid
 - % Digital
 - Mobile broadband
- % mobile coverage
 - land
 - population

Indicators

■ Internet

- Total fixed Internet subscribers
 - Dial-up
 - Fixed broadband
 - Cable modem
 - DSL
 - Leased lines
 - Other
- Estimated Internet user
 - Female Internet users
 - Female Int. users as % of female population
- PWLAN locations

■ Number of computers

■ Internet

- ISDN subscribers
 - Basic subscribers
 - Primary subscribers
 - ISDN voice channel equivalents
- International Internet bandwidth (Mbps)
 - Incoming
 - Outgoing
- Domestic Internet bandwidth
 - Incoming
 - Outgoing

Indicators

■ Tariffs

➤ Fixed (residential, business)

- Connection/installation
- Monthly subscription
- 3-minute peak local call charge
- 3-minute off-peak local call charge

➤ Mobile (prepaid)

- Connection/installation
- Per minute call charge (peak, off-peak, weekend)
 - On-net
 - Off-net
 - Fixed
- Cost of prepaid SMS

➤ Fixed broadband Internet tariffs

- Connection
- Monthly subscriptions

Indicators

■ Quality of service

- Waiting list for fixed lines
- Faults per 100 fixed lines
- % of fixed telephone faults cleared by next working day

■ Traffic

- Local (fixed)
- National (fixed, mobile)
- International (fixed, mobile)
 - Incoming
 - Outgoing
- International (Total)
 - Incoming
 - Outgoing
- SMS sent
- MMS sent

Indicators

■ Staff

- Total full-time telecom staff
 - Female
 - Female professional
 - Mobile telecom staff
 - Female
 - Female professional staff

■ Revenue

- Total telecom revenue
 - Fixed telecom revenue
 - Mobile telecom revenue
 - Mobile data revenue
 - Text and multimedia revenue
 - Data revenues
 - Internet revenues
 - Other

Indicators

■ Investment

- Total annual investment
 - Fixed telephone service investment
 - Mobile communication investment
 - Foreign investment

■ Broadcasting

- Radio sets
- TV sets
- Multi-channel TV subscribers
- Terrestrial multi-channel TV subscribers
- Direct to home satellite antenna subscribers
- Homes passed by multi-channel TV

Indicators

- **Community access**

- Number of localities with public Internet access centres
- Percentage of population with access to a public Internet access centre

Revisions (2009)

1. Presented during the World Telecommunication/ICT Indicators meeting, Cairo, Egypt, 3-5 March 2009
2. Some indicators are renamed
(mobile cellular subscribers → subscriptions)
3. New indicators added to the list
4. Definition of indicators updated
5. Other information related to the collection of the data added

Example: MOBILE CELLULAR NETWORK indicators

	<i>ITU code</i>	<i>Indicator</i>	<i>Definition</i>
8	271	Mobile cellular telephone subscriptions (post-paid + prepaid)	Refers to users of portable telephones subscribing to an automatic public mobile telephone service that provides access to the Public Switched Telephone Network (PSTN) using cellular technology. This can include analogue and digital cellular systems but should not include non-cellular systems. This should also include subscriptions to IMT-2000 (3G) high-speed mobile networks (i271G). Subscriptions to public mobile data services or radio paging services should not be included. If this service has a name, please indicate in a note as well as the year the service commenced operation.
8.1	271p	Mobile cellular subscriptions: prepaid	Total number of mobile cellular subscriptions using prepaid cards. These are subscriptions that rather than paying a fixed monthly subscription fee, choose to purchase blocks of usage time. Only active prepaid subscriptions that have used the system within a reasonable period of time should be included. This period (e.g., 3 months) should be indicated in a note.

Challenges

- Too many indicators to consider for data collection
 - Fast changing telecom/ICT services and technologies that need to be reflected regularly in the list and definition of indicators
 - Need to harmonize definition that can be used by majority of countries
 - Need to know whether countries are collecting or able to collect the data for the indicators
 - Whether ITU definitions can be interpreted correctly at country level
 - Others.....
-

Expert Group on Telecommunication/ICT Indicators (EGTI)

- One of the recommendations of the WTI meeting, Cairo Egypt, 3-5 March 2009
- Invitation to join was sent to all WTI meeting participants, ICT experts and to all ITU member states
- The EGTI will include national ICT experts, engineers, analysts and statisticians who know the technologies and the indicators that need to be collected
- The EGTI will be chaired by an individual who will ensure that the work is done on time and according to ITU requirements
- The EGTI chair will report to the WTI meeting the list of telecom/ICT indicators and definitions
- The EGTI will use the online discussion forum and will meet in person to discuss the work
- All of above are summarized in the Terms of Reference of the EGTI

Thank you.

For further information, contact:
[indicators\[at\]itu.int](mailto:indicators@itu.int)

visit www.itu.int/ict



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