How to establish an ICT Indicator database in Indonesia
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ITU Telecom / ICT Indicators
Mobile cellular indicators

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MOBILE NETWORK

	ITU code	*Indicator*	*Definition*
8	271	Mobile cellular telephone subscribers (post-paid + prepaid)	Refers to the use of portable telephones subscribing to a public mobile telephone service and provides access to Public Switched Telephone Network (PSTN) using cellular technology. This can include analogue and digital cellular systems. This should also include subscribers to IMT-2000 (Third Generation, 3G). Subscribers 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 subscribers: prepaid subscribers	Total number of mobile cellular subscribers using prepaid cards. These are subscribers that rather than paying a fixed monthly subscription fee, choose to purchase blocks of usage time. Only active prepaid subscribers 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.

MOBILE NETWORK

	ITU code	*Indicator*	*Definition*
9	2712	Digital mobile cellular subscribers	Total number of subscribers to digital cellular systems (e.g. GSM/D/AMPS, TDMA, CDMA) should include both pre paid and post paid subscribers (2712=271L+271mb).
9.1	271L	Total number of subscribers to low and medium speed access to data communications	Number of mobile cellular subscribers with access to data communications (e.g., Internet) at low speeds below 256 kbit/s (e.g., GPRS, CDMA 1x (Release 0) etc). WAP and i-mode are services that are enabled by these data communications technologies. These services are typically referred to as 2.5G, although, in the case of CDMA 1x (Release 0), they may also be part of the ITU's IMT-2000 family of 3G services. These include: -General Packet Radio Service (GPRS), a 2.5G mobile standard typically adopted by GSM operators as a migration step towards 3G (W-CDMA). -Wireless Application Protocol (WAP), a protocol for wireless communications that makes it possible to create advanced telecommunications services and to access Internet pages from a mobile telephone. -i-mode, a packet-based means of wireless data transfer and uses Compact Wireless Markup Language (CWML) instead of WAP's WML for data display. i-mode was introduced in Japan in 1999 and was an early method available to browse the Web from a cellular phone. -CDMA 1x (Release 0) is a part of the IMT-2000 family of standards and provides an upgrade for CDMA users, but typically has a capacity of below 256 kbit/s.

MOBILE NETWORK

	ITU code	Indicator	Definition
9.2	271mb	Number of cellular mobile subscribers with access to data communications at broadband speeds	Number of subscribers to cellular mobile networks with access to data communications (e.g. the Internet) at broadband speeds (here defined as greater than or equal to 256 kbit/s in one or both directions)* such as WCDMA, HSDPA, CDMA2000 1xEV-DO, CDMA 200 1xEV-DV etc. These services are typically referred to as 3G or 3.5G and include: -Wideband CDMA (W-CDMA), an IMT-2000 3G mobile network technology, based on CDMA that presently delivers packet-switched data transmission speeds up to 384 kbit/s and up to 2 Mbit/s when fully implemented. Known as Universal Mobile Telecommunications System (UMTS) in Europe. -High-speed Downlink Packet Access (HSDPA), an upgrade to W-CDMA to allow downlink data transmission at speeds of typically 8-10 Mbit/s. It is complemented by High-Speed Uplink Packet Access (HSUPA), which offers uplink speeds of around 5 Mbit/s. -CDMA2000 1xEV-DO (Evolution, Data Optimised), an IMT-2000 3G mobile network technology, based on CDMA that delivers packet-switched data transmission speeds of up to 4.9 Mbit/s. *If countries use a different definition of broadband, this should be indicated in a note.

MOBILE NETWORK

	ITU code	*Indicator*	*Definition*
10	271land	Percent coverage of mobile cellular network (land area)	Proportion of total mobile cellular coverage of the land area in percent. This is calculated by dividing the land area covered by a mobile cellular signal by the total land area.
11	271pop	Percent coverage of mobile cellular network (population)	Mobile cellular coverage of population in percent. This indicator measures the percentage of inhabitants that are within range of a mobile cellular signal, irrespective of whether or not they are subscribers. This is calculated by dividing the number of inhabitants within range of a mobile cellular signal by the total population. Note that this is not the same as the mobile subscription density or penetration.

How to compile mobile cellular information

- AIM: To compile data to reflect country situation, for year ending 31 Dec.
- Steps:
  1. List all operators offering mobile services
  2. Determine the fiscal year (reference period)
  3. Determine the technology used by each operator
  4. Ownership - % share
     - Market share in terms of subscribers
     - Coverage (land, population)
  5. Data are provided by operators, use them!
  6. If not, check operators website, is information available?
     1. Yes -> use the information
     2. No - >use information from annual reports
  7. Compile the data for mobile services

MOBILE NETWORK - Example – 31 Dec 2006

Operators	Total subscribers (i271)	Prepaid (i271p)	Digital (i2712)	Coverage –land (i271land)	Coverage-population (i271pop)
Operator 1	100,000	25,000	100,000	40%	60%
Operator 2	250,000	50,000	250,000	80%	85%
Operator 3	10,000	10,000	10,000	20%	40%
Operator 4	200,000	80,000	200,000	95%	95%
Operator 5	120,000	20,000	120,000	60%	70%
Operator 6	50,000	10,000	50,000	50%	60%
Operator 7	500,000	100,000	500,000	95%	100%
Operator 8	10,000	800	10,000	25%	50%
TOTAL - Indonesia	**1,240,000**	**295,800**	**1,240,000**	**95%**	**100%**