INTERNATIONAL TELECOMMUNICATION UNION

TELECOMMUNICATION
Document 029-E DEVELOPMENT BUREAU

TITLE: Draft definitions: Key telecommunication/ICT indicators

## Key indicators of the telecommunication/ICT sector

The fifth World Telecommunication/ICT indicators meeting (Geneva, October 2006) proposes the following key indicators and definitions. Please address any questions or comments to indicators@itu.int.

|  | $\begin{aligned} & \text { ITU } \\ & \text { code }^{1} \end{aligned}$ | Indicator | Definition |
| :---: | :---: | :---: | :---: |
| FIXED TELEPHONE NETWORK |  |  |  |
| 1 | 112 | Main (fixed) telephone lines in operation | A main line is a telephone line connecting the subscriber's terminal equipment to the public switched network and which has a dedicated port in the telephone exchange equipment. This term is synonymous with the term main station or Direct Exchange Line (DEL) that are commonly used in telecommunication documents. It may not be the same as an access line or a subscriber. Some countries include the number of ISDN channels; if so, this should be specified in a note. Fixed wireless subscribers should also be included. |
| 2 | 117 | Total capacity of local public switching exchanges | The total capacity of public switching exchanges corresponds to the maximum number of main lines that can be connected. This number includes, therefore, main lines already connected and main lines available for future connection, including those used for the technical operation of the exchange (test numbers). The measure should be the actual capacity of the system rather than the theoretical potential when the system is upgraded or if compression technology is employed. |
| 3 | 1142 | Percent of main (fixed) lines connected to digital exchanges | This percentage is obtained by dividing the number of main lines connected to digital telephone exchanges by the total number of main lines. This indicator does not measure the percentage of exchanges which are digital, the percentage of inter-exchange lines which are digital or the percentage of digital network termination points. Respondents should indicate whether the main lines included in the definition represent only those in operation or the total capacity. |
| 4 | 116 | Percent of main (fixed) lines which are residential | This percentage is obtained by dividing the number of main lines serving households (i.e., lines which are not used for business, government or other professional purposes or as public telephone stations) by the total number of main lines. Respondents should indicate the definition of households that is being applied. |
| 5 | 1162 | Percent of main (fixed) lines in urban areas | This percentage is obtained by dividing the number of main lines in urban areas by the total number of main lines in the country. The definition of urban used by the country should be supplied. |
| 6 | 1163 | Number of localities with telephone service | Localities are cities, towns and villages in a country. This indicator reflects the number of localities that have telephone service. To enhance usefulness, the total number of localities should be provided as well as the population of localities covered by telephone service. |
| 7 | 1112 | Public payphones | Total number of all types of public telephones, including coin and card operated and public telephones in call offices. Publicly available phones installed in private places should also be included, as should mobile public telephones. All public telephones regardless of capability (e.g., local calls or national only) should be counted. If the national definition of "payphone" differs from that above (e.g., by excluding pay phones in private places) then respondents should indicate their own definition. |

[^0]|  | $\begin{aligned} & \text { ITU } \\ & \text { code }^{1} \end{aligned}$ | Indicator | Definition |
| :---: | :---: | :---: | :---: |
| MOBILE NETWORK |  |  |  |
| 8 | 271 | Mobile cellular telephone subscribers (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 subscribers to IMT-2000 (3G) high-speed mobile networks (i271G). 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. |
| 9 | 2712 | Digital mobile cellular subscribers | Total number of subscribers to digital cellular systems (e.g., GSM, D/AMPS (TDMA), CDMA). Should include both post-paid and prepaid subscribers. $2712=271 h+271 G$ |
| 9.1 | 271L | Total number of subscribers to low and medium speed mobile networks | Sum of low and medium speed mobile subscribers (2G and 2.5G). |
| 9.2 | 271G | Number of subscribers to IMT2000 (3G) high-speed mobile networks | Number of subscribers to IMT-2000 (3G) high-speed mobile networks (e.g., CDMA2000 1X, WCDMA, CDMA2000 1xEV-DO, etc.) regardless of whether they are using multimedia services, though with capacity for data communications, via Internet. In this context, "high-speed mobile" implies a speed that is equal to, or greater than, $144 \mathrm{kbit} / \mathrm{s}$ in at least one direction. <br> -Code Division Multiple Access (CDMA) 2000 1x is an IMT-2000 3G mobile network technology, based on CDMA, that delivers packet switched data transmission speeds of up to 144 kbps . -Wideband CDMA (W-CDMA) is an IMT-2000 3G mobile network technology, based on CDMA, that presently delivers packet switched data transmission speeds up to 384 kbps and up to 2 Mbps when fully implemented. Known as Universal Mobile Telecommunications System (UMTS) in Europe. <br> -CDMA2000 1xEV-DO is an IMT-2000 3G mobile network technology, based on CDMA, that delivers packet switched data transmission speeds of up to 2.4 Mbps . <br> -Enhanced Data rates for GSM Evolution (EDGE) is an intermediate technology that brings second-generation GSM closer to third-generation capacity for handling data speeds up to 384 kbits/s. |
| 10 | 271land | Percent coverage of mobile cellular network (land area) | 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 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. |

## TEXT/DATA NETWORK

| $\mathbf{1 2}$ | 311 | Telex subscriber lines | A telex subscriber line is a line connecting the subscriber's terminal <br> equipment to the public telex network and which has a dedicated <br> port in the telex exchange equipment. |
| :--- | :--- | :--- | :--- |
| $\mathbf{1 3}$ | 4213 | Total Internet <br> subscribers | $4213=4213$ tb $+4213 d+42131$ <br> The number of total Internet subscribers includes dial-up, public <br> leased lines and broadband subscribers. Only active subscribers <br> should be included. |


|  | $\begin{aligned} & \text { ITU } \\ & \text { code } \end{aligned}$ | Indicator | Definition |
| :---: | :---: | :---: | :---: |
| 13.1 | 4213d | Dial-up Internet subscribers | Number of Dial-up Internet subscribers. Dial-up is a connection to the Internet via a modem and telephone line, which requires that the modem dial a phone number when Internet access is needed. Dial-up modem speeds are generally limited to speeds of $28 \mathrm{kbit} / \mathrm{s}$ to 56 kbit/s. |
| 13.2 | 4213tb | Total broadband Internet subscribers | 4213tb $=4213 \mathrm{cab}+4213 \mathrm{ds}$ l +4213 ob <br> Total broadband Internet subscribers refers to a subscriber who pays for high-speed access to the public Internet (a TCP/IP connection). High-speed access is defined as being equal to, or greater than $256 \mathrm{kbit} / \mathrm{s}$, as the sum of the capacity in both directions. If countries use a different definition of broadband, this should be indicated in a note.The statistic is measured irrespective of the type of access, or the type of device used to access the Internet, or the method of payment. |
| 13.2.1 | 4213cab | Cable modem Internet subscribers | Internet subscribers using modems attached to cable television networks. Speed should be equal to, or greater than 256 kbits, as the sum of the capacity in both directions. |
| 13.2.2 | 4213dsI | DSL Internet subscribers | Internet subscribers using Digital Subscriber Line (DSL) technology. DSL is a technology for bringing high-bandwidth information to homes and small businesses over ordinary copper telephone lines. Speed should be equal to, or greater than 256 kbits, as the sum of the capacity in both directions. |
| 13.2.3 | 42130b | Other broadband Internet subscribers | Internet subscribers using other than DSL and cable modem. This includes technologies such as mobile cellular technologies, Satellite broadband Internet, Fibre-to-the-home Internet access, Ethernet LANs etc. |
| 13.3 | 42131 | Leased line Internet subscribers | Number of leased line Internet subscribers. |
| 14 | 4212 | Estimated Internet users | The estimated number of Internet users. A growing number of countries are measuring this through regular surveys. Surveys usually indicate a percentage of the population for a certain age group (e.g., 15-74 years old). The total number of Internet users in this age group should be supplied and not the percentage of Internet users in this age group multiplied by the entire population. In situations where surveys are not available, an estimate can be derived based on the number of subscribers. The methodology used should be supplied, including reference to the frequency of use (e.g., in the last month). |
| 14.1 | 4212f | Percent female Internet users | Share of females in the total number of Internet users. This is calculated by dividing the number of female Internet users by the total number of Internet users and multiplied by 100. |
| 14.2 | 4212f\%f | Female Internet users as percent of female population | Share of female Internet users in the total number of females. This is calculated by dividing the number of female Internet users by the total number of females and multiplied by 100. |
| 15 | 424 | PWLAN locations | The number of Public Wireless Local Area Network (PWLAN) locations (i.e., hotspots). PWLANs are based on the IEEE 802.1b standard, commonly referred to as WiFi. |
| 16 | 28 | ISDN subscribers | The number of subscribers to the Integrated Services Digital Network (ISDN). This can be separated by basic rate interface service (i.e., $2 \mathrm{~B}+\mathrm{D}$, ITU-T Rec. I.420) and primary rate. |
| 16.1 | 281 | Basic rate ISDN subscribers | The number of subscribers to the basic rate interface service. |
| 16.2 | 282 | Primary rate ISDN subscribers | The number of subscribers to the primary rate interface service. |
| 16.3 | 28c | ISDN voice channel equivalents | B-channel equivalents converts the number of ISDN subscriber lines into their equivalent voice channels, and is the sum of basic and primary rate equivalents. The number of basic rate subscribers is multiplied by two and the number of primary rate subscribers is multiplied by 23 or 30 depending on the standard implemented. |
| 17 | 4214 | International Internet bandwidth | Total capacity of international Internet bandwidth in Mega Bits Per Second (Mbps). If capacity is asymmetric (i.e., more incoming that outgoing), provide incoming capacity. |
| 17.1 | 4214og | Outgoing | Total outgoing capacity of international Internet bandwidth in Mega Bits Per Second. |
| 17.2 | 4214ic | Incoming | Total incoming capacity of international Internet bandwidth in Mega Bits Per Second. |


|  | $\begin{aligned} & \text { ITU } \\ & \text { code }^{1} \end{aligned}$ | Indicator | Definition |
| :---: | :---: | :---: | :---: |
| QUALITY OF SERVICE |  |  |  |
| 18 | 123 | Waiting list for main lines | Un-met applications for connection to the Public Switched Telephone Network (PSTN)due to a lack of technical facilities (equipment, lines, etc.). The waitlist should reflect the total number across all PSTN service providers in the country. |
| 19 | 143 | Faults per 100 main lines per year | The total number of reported faults to main telephone lines for the year. Faults, which are not the direct responsibility of the public telecommunications operator, should be excluded. This is calculated by dividing the total number of reported telephone faults for the year by the total number of main lines in operation and multiplied by 100. The number of faults per 100 main lines per year should reflect the total across all PSTN service providers in the country. |
| 20 | 141 | Percent of telephone faults cleared by next working day | Percentage of PSTN faults reported that have been corrected by the end of the next working day. (i.e., not including non-working days (e.g., weekends, holidays)). The percent of telephone faults cleared by next working day should reflect the total number across all PSTN service providers in the country. |
| TRAFFIC |  |  |  |
| 21 | 1311m | Local telephone traffic (minutes) | Local telephone traffic consists of effective (completed) fixed telephone line traffic exchanged within the local charging area in which the calling station is situated. This is the area within which one subscriber can call another on payment of the local charge (if applicable). This indicator should be reported in the number of minutes. |
| 22 | 1312m | National trunk telephone traffic (minutes) | National trunk (toll) traffic consists of effective (completed) fixed national telephone traffic exchanged with a station outside the local charging area of the calling station. The indicator should be reported as the number of minutes of traffic. |
| 22.1 | 1313wm | National fixed to mobile traffic (minutes) | Total outgoing minutes from the national fixed network to the mobile cellular network within the territory. |
| 22.2 | 1311im | Internet Dial-up traffic (minutes) | The total volume in minutes of dial-up sessions over the public switched telephone network to access the Internet. |
| 23 | 133wm | Outgoing mobile minutes | Total number of minutes made by mobile subscribers (including minutes to fixed and minutes to other mobile subscribers). |
| 23.1 | 1331wm | Outgoing/originating mobile minutes to same mobile network | Number of minutes made by mobile subscribers to the same mobile network. |
| 23.2 | 1332wmf | Outgoing mobile minutes to fixed networks | Number of outgoing minutes made by mobile subscribers to fixed networks. |
| 23.3 | 1332wm | Outgoing/originating mobile minutes to other mobile networks | Number of minutes made by mobile subscribers to other mobile networks. |
| 24 | 132mb | International incoming and outgoing fixed telephone traffic (minutes) | Sum of international incoming and outgoing fixed traffic (i132m+i132mi). |
| 24.1 | 132m | International outgoing fixed telephone traffic (minutes) | This covers the effective (completed) fixed traffic originating in a given country to destinations outside that country. The indicator should be reported in number of minutes of traffic. |
| 24.2 | 132mi | International incoming fixed telephone traffic (minutes) | Effective (completed) fixed traffic originating outside the country with a destination inside the country. The indicator should be reported in number of minutes of traffic. |
| 25 |  | Public data traffic (nonInternet) | Traffic from public data services such as X. 25 and frame-relay (but excluding Internet) measured in megabytes per second (Mbytes). |
| 26.1 | 1333wm | Outgoing/originating mobile minutes to international | Number of mobile minutes originating in a country to destinations outside that country. |
| 26.2 | 1334wm | Roaming minutes (outside home network ) | Total number of roaming minutes made by own mobile subscribers to make and receive calls when outside the country (outside home network), e.g., when traveling abroad. |


|  | $\begin{array}{\|l\|} \hline \text { ITU } \\ \text { code }^{1} \end{array}$ | Indicator | Definition |
| :---: | :---: | :---: | :---: |
| 26.3 | 1336wm | Roaming minutes in visited network (foreign subscribers) | Total number of minutes made by visiting (foreign) subscribers when making and receiving calls in visited network. |
| 26.4 | 1335wm | Incoming international minutes to mobile network | Number of incoming minutes (fixed and mobile) received by mobile networks from another country. |
| 26.5 | 133sms | SMS sent | Total number of mobile Short Message Service (SMS) sent. |
| 26.6 | 133mms | MMS sent | Total number of mobile Multimedia Messaging Service (MMS) sent. |
| 26.7 | 133rm | Number of countries with which there is a roaming agreement. | Total number of countries, with which there is a roaming agreement. If there are several operators with a different number of roaming agreements, the operator with the highest number of roaming agreements should be selected. |
| 27 | 132tb | International incoming and outgoing total telephone traffic (minutes) | Sum of international incoming and outgoing fixed and mobile traffic (i132m+i132mi). |
| 27.1 | 132t | International outgoing total telephone traffic (minutes) | This covers the effective (completed) fixed and mobile traffic originating in a given country to destinations outside that country. The indicator should be reported in number of minutes of traffic. |
| 27.2 | 132ti | International incoming total telephone traffic (minutes) | Effective (completed) fixed and mobile traffic originating outside the country with a destination inside the country. The indicator should be reported in number of minutes of traffic. |
| 28 | 132vp | VoIP | Definition not yet available. To be discussed: indicators to reflect rise in VoIP |

## TARIFFS

Because most countries now have some form of competition in at least one market segment, there may not be a standard tariff. In addition, tariffs within services may not be uniform (e.g., telephone subscription charges may vary across the nation). The following guidelines may be useful. It is preferable to use the tariffs of the operator with the largest market share (measured by subscribers). It is preferable to use the tariffs that the majority of consumers pay (e.g., if most of the customers are in urban areas, use urban tariffs). It is preferable to include taxes and provide a note specifying whether taxes are included and what the rate is. It is preferable to use the same operator each year to enhance chronological comparability. It is preferable to report tariffs in national currency. If this is not the case, the currency has to be specified in a note.

|  |  |  | Fixed local telephone service tariffs -residential |
| :---: | :---: | :---: | :---: |
| 29.1.1 | 151 | Installation fee for residential telephone service | Installation (or connection) refers to the one-off charge involved in applying for residential basic telephone service. Where there are different charges for different exchange areas, the charge for the largest urban area should be used and specified in a note. |
| 29.1.2 | 152 | Monthly subscription for residential telephone service | Monthly subscription refers to the recurring fixed charge for subscribing to the PSTN. The charge should cover the rental of the line but not the rental of the terminal (e.g., telephone set) where the terminal equipment market is liberalized. Separate charges should be stated where appropriate, for first and subsequent lines. If the rental charge includes any allowance for free or reduced rate call units, this should be indicated. If there are different charges for different exchange areas, the largest urban area should be used and specified in a note. |
| 29.1.3 | 153 | Price of a 3-minute fixed telephone local call (peak rate) | Local call refers to the cost of a peak rate 3-minute call within the same exchange area using the subscriber's own terminal (i.e., not from a public telephone). |
| 29.1.4 | 1530 | Price of a 3-minute fixed telephone local call (off-peak rate) | Local call refers to the cost of an off-peak rate 3-minute call within the same exchange area using the subscriber's own terminal (i.e., not from a public telephone). |
|  |  |  | Fixed local telephone service tariffs -business |
| 29.2.1 | 151b | Installation fee for business telephone service | Installation (or connection) refers to the one-off charge involved in applying for business basic telephone service. Where there are different charges for different exchange areas, the charge for the largest urban area should be used and specified in a note. |


|  | ITU <br> code | Indicator | Definition |
| :--- | :--- | :--- | :--- |
| 29.2 .2 | 152 b | Monthly <br> subscription for <br> business telephone <br> service | Monthly subscription refers to the recurring fixed charge for <br> subscribing to the PSTN. The charge should cover the rental of <br> the line but not the rental of the terminal (e.g., telephone set) <br> where the terminal equipment market is liberalized. Separate <br> charges should be stated where appropriate, for first and <br> subsequent lines. If the rental charge includes any allowance for <br> free or reduced rate call units, this should be indicated. If there <br> are different charges for different exchange areas, the largest <br> urban area should be used and specified in a note. |
| $\mathbf{3 0}$ | 153 tm | International telephone <br> call prices | This is the cost of a fixed 3-minute directly dialed (i.e., without <br> operator intervention) call originating within the country to another <br> country. The rate should be supplied for peak rate time calls and off- <br> peak (discount) rate calls (if applicable). The cost should be reported <br> in national currency, with a statement on what taxes are applied. <br> International tariffs to all countries should be provided. |

## Mobile cellular tariffs

Because most countries now have some form of competition in at least one market segment, there may not be a standard tariff. In addition, tariffs within services may not be uniform (e.g., telephone subscription charges may vary across the nation). The following guidelines may be useful: It is preferable to use the tariffs of the operator with the largest market share (measured by subscribers). It is preferable to use the tariffs that the majority of consumers pay (e.g., if most of the customers are prepaid subscribers, prepaid tariffs should be used). It is preferable to include taxes and provide a note specifying whether taxes are included and what the rate is. It is preferable to use the same operator each year to enhance chronological comparability. It is preferable to report tariffs in national currency. If this is not the case, it should be specified in a note. The note should further specify which operator and which tariff plan was used.

| 31.1.1 | 151c | Mobile cellular connection charge | The initial, one-time charge for a new subscription. Refundable deposits should not be counted. Although some operators waive the connection charge, this does not include the cost of the Subscriber Identify Module (SIM) card. The price of the SIM card should be included in the connection charge. A note should indicate whether taxes are included (preferred) or not. |
| :---: | :---: | :---: | :---: |
| 31.1.2 | 152c | Mobile cellular monthly subscription | The monthly subscription charge for mobile cellular service. Due to the variety of plans available in many countries, it is preferable to use the tariff with the cheapest initiation/connection charge. If prepaid services are used (for those countries that have more prepaid than postpaid subscribers), the monthly subscription charge would be zero. If the plan includes free minutes, this should be put in a note. A note should indicate whether taxes are included (preferred) or not and what the rate is. |
| 31.1.3 | 153c | Mobile cellular price of 3 minute local call (peak) | The price of a three minute peak rate local call from a mobile cellular telephone. If operators charge different prices depending on who is being called (e.g., same mobile network, fixed network, another mobile network) these should be listed separately. In order to enhance inter-country comparability it is preferable to use pre-paid tariffs. A note should indicate whether taxes are included (preferred) or not. |
| 31.1.4 | 153co | Mobile cellular price of 3 minute local call (off-peak) | The price of a three minute off-peak rate local call from a mobile cellular telephone. If operators charge different prices depending on who is being called (e.g., same mobile network, fixed network, another mobile network) these should be listed separately. In order to enhance inter-country comparability it is preferable to use pre-paid tariffs. A note should indicate whether taxes are included (preferred) or not. |
| 31.1.5 | 153sms | Mobile cellular price of SMS | Price of sending a national Short Message Service (SMS) message from a mobile handset. |
| 31.1.6 | 151pcard | Mobile cellular cheapest recharge card value | Refers to the cheapest available prepaid recharge card. |
| 31.2 | 153m | Average mobile termination charge | Operators inside a country add a mobile termination charge to all calls completed to wireless devices within their country. The charge amount varies by country and applies to all calls that are placed to wireless devices. |

## Other data tariffs

| 32 | 1531 | Private leased line <br> charge (2 Mbit/s) | Connection charge and monthly rental charge for $2 \mathrm{Mbit} / \mathrm{s}$ private <br> leased line. |
| :--- | :--- | :--- | :--- |


|  | ITU <br> code | Indicator | Definition |
| :--- | :--- | :--- | :--- |
| Internet tariffs |  |  |  |
| Connection, monthly rental and usage charges for Internet access service. It is preferable to use the tariffs of the ISP <br> with the largest market share (measured by subscribers)The tariff chosen for a particular country would be the <br> package with the cheapest/lowest minimum monthly charge, that is widely available (or, in the case of regional service <br> providers, is available in the capital city) and is available to the general public without restriction (e.g., excluding in- <br> company or limited time offers, and excluding offers that are bundled with some other service). If additional charges <br> are payable for telephone usage for dial-up use, this and the amount, preferably by minute, should be specified in a <br> note. A note should indicate whether the subscription includes free hours and/or is flat-rate. |  |  |  |

## Dial-up Internet tariffs

For a dial-up Internet connection, a telephone call charge may apply while connected. The telephone call charge refers to the amount payable to the telephone company for local telephone charges while connected to the ISP. This maybe similar to local call charges (indicators 153 and 1530) above, if not provide the cost applicable. Both peak and off-peak telephone call charge should be provided.

| 33.1 | $4213 c$ | Dial-up Internet <br> connection charge |
| :---: | :---: | :--- |
| 33.2 | 4213 s | Dial-up Internet <br> monthly subscription |
| 33.3 | $4213 p$ | Dial-up Internet - <br> price of per minute <br> (peak) connection |
| 33.4 | 4213 po | Dial-up Internet - <br> price of per minute <br> (off-peak) connection |
| 33.5 | 4213 _t20 | Internet access tariff <br> (20 hours per month) |

The initial, one-time charge for a new dial-up internet connection. Refundable deposits should not be counted. A note should indicate whether taxes are included (preferred) or not.
The monthly subscription charge for dial-up internet service. A note should indicate whether taxes are included (preferred) or not. The note should also specify the amount of free monthly hours included if applicable.
Cost of per minute (peak) connection once the free Internet hours included in the dial-up subscription is used up. A note should indicate whether taxes are included (preferred) or not.
Cost of per minute (off-peak) connection once the free Internet hours included in the dial-up subscription is used up. A note should indicate whether taxes are included (preferred) or not.
This indicator refers to the lowest price for 20 hours of dial-up Internet usage per month. It includes the tariff components of monthly line rental, line usage charge and Internet access charge, plus any tax that may be levied (as this is a service used by both residential and business consumers). The tariff chosen for a particular country would be the package for 20 hours per month that is the cheapest, that is widely available (or, in the case of regional service providers, is available in the capital city) and is available to the general public without restriction (e.g., excluding incompany or limited time offers, and excluding offers that are bundled with some other service).

## Broadband Internet tariffs

|  |  | B213bc | Broadband Internet <br> connection charge | The initial, one-time charge for a new broadband internet <br> connection. Refundable deposits should not be counted. A note <br> should indicate whether taxes are included (preferred) or not. |
| :---: | :---: | :--- | :--- | :--- |
| 34.2 | 4213 bs | Broadband Internet <br> monthly subscription | The monthly subscription charge for broadband internet service. A <br> note should indicate whether taxes are included (preferred) or not. |  |
| STAFF | 51 | Total full-time <br> telecommunication staff |  |  |
| $\mathbf{3 5}$ | Total full-time staff employed by telecommunication network <br> operators in the country for the provision of public telecommunication <br> services, including mobile services. Part-time staff should be <br> expressed in terms of full-time staff equivalents. |  |  |  |
| 35.1 | 51 f | Female <br> telecommunication <br> staff | The number of full time telecommunication staff that are female. |  |
| 35.2 | 51 fp | Female professional <br> telecommunication <br> staff | The number of full-time professional staff that are female. <br> Professional staff are those included in ISCO-88 group XX (To <br> check ISCO88) |  |
| 36.1 | 51 w | Mobile <br> communications staff | Total number of staff employed by mobile cellular network <br> operators. This refers to mobile operators building infrastructure <br> and not staff employed by resellers. |  |
| 36.3 | 51 wf | Female mobile <br> communications staff | Total number of female staff employed by mobile cellular network <br> operators. This refers to mobile operators building infrastructure <br> and not staff employed by resellers. |  |
| 51wfp | Female professional <br> mobile <br> communications staff | Total number of professional female staff employed by mobile <br> cellular network operators. This refers to mobile operators building <br> infrastructure and not staff employed by resellers. Professional <br> staff are those included in ISco-88 group. |  |  |


|  | $\begin{aligned} & \text { ITU } \\ & \text { code }^{1} \end{aligned}$ | Indicator ${ }^{\text {D }}$ | efinition |
| :---: | :---: | :---: | :---: |
| REVENUE |  |  |  |
| 37 | 75 | Total revenue from all telecommunication services | This is the total (gross) telecommunication revenue earned from all (fixed, mobile and data) services within the country. This should exclude revenues from non-telecommunications services. Revenue (turnover) consists of telecommunication service earnings during the financial year under review. Revenue should not include monies received in respect of revenue earned during previous financial years, neither does it include monies received by way of loans from governments, or external investors, nor monies received from repayable subscribers' contributions or deposits. Revenues should be net of royalties. |
| 37.1 | 71 | Revenue from fixed telephone service | Revenue received from fixed telephone connection, subscription and calls. |
| 37.1.1 | 711 | Revenue from fixed telephone connection charges | Revenue received for connection (installation) of fixed telephon service. This may include charges for transfer or cessation of service. |
| 37.1.2 | 712 | Revenue from fixed telephone subscription charges | Revenues from recurring charges for subscription to the PSTN including equipment rentals where relevant. |
| 37.1.3 | 713 | Revenue from fixed telephone calls | The sum of income from local, national long distance and international calls. $713=7131+7132+7133 .$ |
| 37.1.3.1 | 7131 | Revenue from local calls | Revenue from fixed local calls based on applicable retail charges on users. |
| 37.1.3.2 | 7132 | Revenue from national long distance calls | Revenue from fixed national long distance calls based on applicable retail charges on users. |
| 37.1.3.3 | 7133 | Revenue from international calls | Revenue from fixed international calls based on applicable retail charges on users. |
| 37.2 | 741 | Revenue from mobile communications | Revenues from the provision of all types of mobile communications services such cellular, private trunked radio and radio paging. |
| 37.3 | 741d | Mobile data revenues | Revenues from mobile data services such as text messaging (SMS), high-speed network access, WAP use, etc. |
| 37.4 | 741m | Text and multimedia messaging revenues | Revenues from text messaging (e.g., SMS) and from non-text messaging based mobile data services such as high-speed access charges and WAP use. |
| 37.5 | 731 | Revenue from data services | Revenues from data services such as data communications (e.g., packet switching) and Internet access but not telegram or telex. |
| 37.6 | 7311 | Revenue from Internet services | Revenue from internet service based on applicable retail charges on users. |
| 37.7 | 732 | Revenue from leased lines | Revenue from the provision of leased lines. |
| 37.8 | 733 | Revenue from fixed value-added telecommunication services | Represents the revenue generated by the telecommunication service sector for fixed value-added telecommunication services. |
| 37.9 | 74 | Other revenues | Any other revenues not accounted for elsewhere for the provision of public telecommunication services. Responders should indicate in a note what are the main sources of "other" telecommunications revenues. |
| INVESTMENT |  |  |  |
| 38 | 81 | Total annual investment in telecom | Also referred to as annual capital expenditure, this is the gross annual investment in telecom (including fixed, mobile and other services) for acquiring property andnetwork. The term investment means the expenditure associated with acquiring the ownership of property (including intellectual and non-tangible property such as computer software) and plant. These include expenditure on initial installations and on additions to existing installations where the usage is expected to be over an extended period of time. Note that this applies to telecom services which are available to the public, and excludes investment in telecom software or equipment for private use. |
| 38.1 | 83 | Fixed telephone service investment | Annual investment on equipment for fixed telephone service. |


|  | $\begin{array}{\|l\|} \hline \text { ITU } \\ \text { code }^{1} \end{array}$ | Indicator | Definition |
| :---: | :---: | :---: | :---: |
| 38.2 | 841m | Mobile communication investment | Annual investment on equipment for mobile communication networks. |
| 38.3 | 841f | Foreign investment | Annual investment in telecom coming from foreign sources, also referred to as Foreign Direct Investment (FDI). |
| COMMUNITY ACCESS INDICATORS |  |  |  |
| 39 | PIAC5 | Total number of PIACs | Refers to the total number of Public Internet Access Centres (PIAC). A PIAC is a site, location, or centre of instruction at which Internet access is made available to the public, on a full-time or part-time basis. This may include telecentres, digital community centres, Internet cafés, libraries, education centres and other similar establishments, whenever they offer Internet access to the general public. All such centres should have at least one public computer for Internet access. |
| 39.1 | PIAC6 | Total number of DCCs | Refers to the total number of a nation's Digital Community Centres (DCC). A DCC is a place where the public can access Internet services from terminal facilities placed at their disposal. A DCC is an undertaking based on a government framework for universal access. It should offer equitable, universal and affordable access. A DCC is a sub-category of a PIAC but there are some minimum requirements for a Public Internet Access Centre (PIAC) to be considered a DCC. Every DCC should have at least one computer and one printer and a minimum connection speed of $64 \mathrm{kbit} / \mathrm{s}$ per centre to the Internet Service Provider (ISP). DCC users should also be provided with support and maintenance and it should be opened a minimum of 20 hours per week. |
| 39.2 | PIAC7 | Total number of other PIACs | Refers to the total number of other Public Internet Access Centres (not PIACs and not DCCs). Other PIACs include cybercafés. Education Centres may be classified as a DCC or a PIAC, depending on the conditions they satify (see indicator 51 and 51.1) |
| 39.3 | PIAC3 | Number of localities with PIAC | Refers to all localities (a nation's villages, towns, and cities) that have at least one Public Internet Access Centre (PIAC). A PIAC is a site, location, or centre of instruction at which Internet access is made available to the public, on a full-time or part-time basis. |
| 39.4 | PIAC1 | Percentage of localities with PIACs | A public Internet access centre (PIAC) is a site, location, centre of instruction at which Internet access is made available to the public, on a full-time or part-time basis. This may include telecentres, digital community centres, Internet cafés, libraries, education centres and other similar establishments, whenever they offer Internet access to the general public. All such centres should have at least one public computer for Internet access. Localities refer to a country's villages, towns and cities. The percentage of localities with public Internet access centres (PIACs) is computed by dividing the number of localities with at least one PIAC by the total number of the country's localities and multiplying by 100. The indicator should be broken down by range of inhabitants. This indicators will be used to measure the WSIS target "to connect villages with ICTs and establish community access points" by 2015. |
| 39.5 | PIAC2 | Percentage of the population with access to a PIAC | Measures the number of inhabitants enjoying PIAC coverage as a proportion of the country's total population. When a locality (village, town, city) has at least one PIAC then the entire population living in this locality is considered to be served by that PIAC. |
| 39.6 | PIAC4 | Target population for DCC services | Refers to the potential population (the potential population refers to anyone of age 6 years or more) minus the number of noncommunity Internet users (non-community Internet users are those citizens that have Internet access from a point different from a PIAC, for example at home). |
| 39.7 | PIAC8 | Total number of computers in DCCs | Refers to the total number of computers available in all Digital Community Centres. A DCC is a place where the public can access Internet services from terminal facilities placed at their disposal. See Indicator 51.1 for the definition of a DCC. |
| 39.8 | PIAC9 | Actual DCC usage percentage | To calculate the actual DCC usage percentage, countries should divide the actual number of DCC users by the DCC target population (see indicator 50 for definition) for DCC services and multiply by 100 . A user is defined as a person who accesses the Internet at least once a month. |


|  | $\begin{aligned} & \text { ITU } \\ & \text { code }^{1} \end{aligned}$ | Indicator | Definition |
| :---: | :---: | :---: | :---: |
| OTHER INDICATORS |  |  |  |
| 40 | 955 | Number of radio sets | The total number of radio sets. A radio set is a device capable of receiving broadcast radio signals, using popular frequencies, such as FM, AM, LW and SW. A radio set may be a standalone device, or it may be integrated into another device, such as a Walkman, a car, or an alarm clock. |
| 41 | 965 | Number of TV sets | The total number of television sets. A television set is a device capable of receiving broadcast television signals, using popular access means such as over-the-air, cable and satellite. A television set may be a standalone device, or it may be integrated into another device, such as a computer or a mobile phone. It may be useful to distinguish between digital and analogue signal delivery and between TV sets receiving only a limited number of signals (usually over-the-air) and those that have multiple channels available (e.g., by satellite or cable). |
| 42 | 965m | Total number of multichannel TV subscribers | $965 m=965 c+965 s$. <br> This is the total number of multi-channel TV subscribers (both terrestrial and satellite). |
| 42.1 | 965c | Number of terrestrial multi-channel TV subscribers | Number of terrestrial multi-channel TV such as cable TV, digital terrestrial TV, Microwave Multi-point Distribution systems (MMDS) and Satellite Master Antenna Television (SMATV) subscribers. |
| 42.2 | 965s | Direct to Home satellite antenna subscribers | The number of subscribers to a home satellite antenna that can receive television broadcasting directly form satellites. |
| 43 | 965cp | Homes passed by multi-channel TV | Number of households that have a multi-channel (both terrestrial and satellite) television connection whether they are subscribing or not. |
| 44 | 422 | Number of Personal Computers | The number of Personal Computers (PC) measures the number of computers installed in a country. The statistic includes PCs, laptops, notebooks etc, but excludes terminals connected to mainframe and mini-computers that are primarily intended for shared use, and devices such as smart-phones that have only some, but not all, of the functions of a PC (e.g., they may lack a full-sized keyboard, a large screen, an Internet connection, drives etc). |


[^0]:    ${ }^{1}$ Code used by the International Telecommunication Union (ITU) to identify the indicator. This code appears in ITU questionnaires.

