# **COVERING NOTE**

# **Telecommunication Development Bureau (ITU-D)**

Geneva, 17 February 2014

# **Subject:** New telecommunication/ICT indicators from administrative data sources, 2011-2013

This document contains the definitions of the ITU indicators based on administrative data sources that have been developed between 2011 and 2013, after the publication of the *ITU Handbook for the Collection of Administrative Data on Telecommunications/ICT*. These additions reflect the outcomes of the Expert Group on Telecommunication/ICT Indicators (EGTI), as endorsed by the World Telecommunication/ICT Indicators Symposium.

## Internet data traffic

### Fixed (wired)-broadband Internet traffic (exabytes) (i135tfb)

#### **Definition:**

*Fixed (wired)-broadband Internet traffic (exabytes)* refers to traffic generated by fixed-broadband subscribers, measured at the end-user access point. It should be measured by adding up download and upload traffic. Wholesale traffic, walled-garden traffic and IPTV and cable-TV traffic should be excluded.

## Mobile-broadband Internet traffic (within the country) (i136mwi)

#### Definition:

Mobile-broadband Internet traffic (within the country) refers to broadband traffic volumes originated within the country from 3G networks or other more advanced mobile networks, including 3G upgrades, evolutions or equivalent standards in terms of data transmission speeds. Traffic data should be collected and aggregated at the country level for all 3G or more advanced mobile networks within the country. Download and upload traffic should be added up and reported together. Traffic should be measured at the end-user access point. Wholesale and walled-garden traffic should be excluded. The traffic should be reported in exabytes.

## Mobile-broadband Internet traffic (outside the country, roaming out) (i136mwo)

#### Definition:

Mobile-broadband Internet traffic (outside the country, roaming out) refers to broadband traffic volumes originated outside the country from 3G networks or other more advanced mobile networks, including 3G upgrades, evolutions or equivalent standards in terms of data transmission speeds. Traffic data should be collected and aggregated at the country level for all customers of domestic operators roaming outside the country and using 3G or more advanced mobile networks. Download and upload traffic should be added up and reported together. Traffic should be measured at the end-user access point. Wholesale and walled-garden traffic should be excluded. Traffic should be reported in exabytes.

## **Quality of service**

## Mobile-cellular unsuccessful call ratio (i146u)

#### Definition:

*Mobile-cellular unsuccessful call ratio* refers to the ratio of unsuccessful mobile-cellular calls to the total number of mobile-cellular call attempts in a given year. An unsuccessful call is a call attempt to a valid number where (a) the call is not answered, (b) there is no called party busy tone, and (c) there is no ringing tone on the caller's side within 40 seconds from the moment when the last digit of the called number is received by the network. The caller must be within coverage of a mobile-cellular network.

## Mobile-cellular dropped call ratio (i146d)

#### Definition:

*Mobile-cellular dropped call ratio* refers to the proportion of incoming and outgoing mobile-cellular calls which, once they have been correctly established and therefore have an assigned traffic channel, are dropped or interrupted prior to their normal completion by the user, the cause of the early termination being within the operator's network.

## Complaints per 100 mobile-cellular subscriptions (i146c)

#### **Definition:**

*Complaints per 100 mobile-cellular subscriptions* refers to the number of complaints related to the provision of mobilecellular services received in a given year, divided by the total number of active mobile-cellular subscriptions, multiplied by 100. Statistics should include all complaints related to the provision of mobile-cellular services (including voice, SMS and data) received in the given year, regardless of the validity and subject of the complaint. Where more than one complaint is made by the same customer on the same subject, each instance of the complaint should be counted separately. If a customer complains again before an existing complaint has been closed, then this should not be treated as a separate complaint, but as a continuation of the first unclosed complaint.

## Complaints per 100 mobile-broadband subscriptions (i146mw)

#### **Definition:**

*Complaints per 100 mobile-broadband subscriptions* refers to the number of complaints related to the provision of mobile-broadband services received in a given year, divided by the total number of active mobile-broadband subscriptions, multiplied by 100. Statistics should include all complaints related to the provision of mobile-broadband services received in the given year, regardless of the validity and subject of the complaint. Where more than one complaint is made by the same customer on the same subject, each instance of the complaint should be counted separately. If a customer complains again before an existing complaint has been closed, then this should not be treated as a separate complaint, but as a continuation of the first unclosed complaint.

## Complaints per 100 fixed (wired)-broadband subscriptions (i147c)

#### Definition:

*Complaints per 100 fixed (wired)-broadband subscriptions* refers to the number of complaints related to the provision of fixed (wired)-broadband services received in a given year, divided by the total number of fixed (wired)-broadband subscriptions, multiplied by 100. Statistics should include all complaints related to the provision of fixed (wired)-broadband services received in the given year, regardless of the validity and subject of the complaint. Where more than one complaint is made by the same customer on the same subject, each instance of the complaint should be counted separately. If a customer complains again before an existing complaint has been closed, then this should not be treated as a separate complaint, but as a continuation of the first unclosed complaint.

## Service activation time for fixed (wired)-broadband service (in days) (i147t)

#### Definition:

Service activation time for fixed (wired)-broadband service refers to the time from the date of application to the date of service activation. The average service activation time for all new applications received within the given year should be provided.

## **Pay TV**

## **IPTV** subscriptions

#### Definition:

*IPTV subscriptions* refers to the number of subscriptions to Internet protocol television (IPTV), i.e. TV delivered over an IP-based network managed to support the required level of quality of service, quality of experience, security, interactivity and reliability. This does not include video accessed over the public Internet – for example, by streaming – and subscriptions to over-the-top audiovisual content providers.

## Satellite-TV subscriptions

#### Definition:

*Satellite-TV subscriptions* refers to the number of pay direct-to-home (DTH) satellite subscriptions, i.e. pay TV received via a satellite dish capable of receiving satellite television broadcasts. This does not include free-to-air satellite TV.

## Cable-TV subscriptions

#### Definition:

*Cable-TV subscriptions* refers to multichannel TV programming delivered over coaxial cable networks. It includes both analogue and digital cable-TV subscriptions. If the breakdown of analogue/digital cable-TV subscriptions is available, data for each type of cable-TV subscriptions should be specified in a note. It excludes IPTV delivered over cable-TV networks.

### Other TV subscriptions

#### Definition:

*Other TV subscriptions* refers to pay-TV subscriptions other than IPTV, satellite TV and cable TV. This includes subscriptions to TV platforms such as microwave multipoint distribution systems (MMDS) and pay digital terrestrial television (pay DTT). Free-to-air TV should not be included. The TV platforms corresponding to the data reported should be indicated in a note.

## **Mobile-broadband prices**

As agreed at the 11<sup>th</sup> World Telecommunication/ICT Indicators Symposium (WTIS), which was held in Mexico City on 4-6 December 2013, ITU collects data for the following mobile-broadband plans: (i) handset-based, prepaid, 500 MB; (ii) handset-based, postpaid, 500 MB; (iii) computer-based, prepaid, 1 GB; (iv) computer-based, postpaid, 1 GB.

A common set of rules and assumptions are applied to the mobile-broadband indicators:

- 1. Prices should be collected based on one of the following technologies: UMTS, HSPA family, LTE family, CDMA EV-DO family and mobile WiMAX (IEEE 802.16e and 802.16m). Prices applying to WiFi or hotspots should be excluded.
- 2. Prices should be collected in national currency, including taxes.
- 3. Only residential, single-user prices should be collected. If prices vary between different regions of the country, prices applying to the largest city (in terms of population) or to the capital city should be provided.
- 4. Prices should be collected for both: a) handset-based mobile-broadband subscriptions and b) computer-based mobile-broadband subscriptions.
- 5. Mobile-broadband prices should be collected from the operator with the largest market share (measured by the number of mobile-broadband subscriptions). If this information is not available, mobile-broadband prices should be collected from the mobile-cellular operator with the largest market share (measured by the number of mobile-cellular subscriptions) in the country.

- 6. Different operators can be chosen for different mobile-broadband services if: a) there are different market leaders for specific segments (postpaid, prepaid, computer-based, handset-based); b) there is no offer available for a specific sub-basket.
- 7. Prices should be collected for prepaid and postpaid services, for both handset-based and computer-based plans. If there are several plans, the plan satisfying the indicated data volume requirement should be used.
- 8. Where operators propose different commitment periods for postpaid mobile-broadband plans, the 12-month plan (or the closest to this commitment period) should be selected. A note should be added where only longer commitment periods are offered.
- 9. Price data should be collected for the cheapest plan, with a data volume allowance of a minimum of:
  - 1. 1 GB for a USB/dongle (computer-based) subscription
  - 2. 500 MB for a handset-based subscription.

The selected plan should not be the one with the cap closest to 500 MB or 1 GB, but include a minimum of 500 MB/1 GB. This means, for example, if an operator offers a 300 MB and an 800 MB plan, the 800 MB plan or twice the 300 MB plan (if the package can be purchased twice for a monthly capacity of 600 MB) should be selected for the 500 MB sub-basket. The cheapest option should be selected.

Data volumes should refer to both upload and download data volumes. If prices are linked to 'hours of use' and not to data volumes, this information should be added in a separate note. **Note:** ITU will most likely not be able to include these cases in a comparison.

- 10. Price data should be collected for a validity period of 30 days. For instance, if the selected plan has a validity of 10 days, it will be counted three times, in order to reflect a validity period of 30 days.
- 11. Preference should be given to packages (including a certain data volume). Pay-as-you-go offers should be used when they are the cheapest option for a given basket or the only option available. If operators charge different pay-as-you-go rates depending on the time of the day (peak/off-peak), then the average of both should be recorded. If the off-peak rate is after midnight, it should not be taken into account.
- 12. Even if the plan is advertised as 'unlimited', the fine print should be carefully read since most often there are limits on the data volumes, applied either by throttling (limiting the speed) or by cutting the service.
- 13. Data on non-recurrent fees, such as installation/set-up fees, are not collected.
- 14. Preference should be given to packages that are not bundled (with voice services, for example). If the plan chosen includes other services besides mobile-broadband access, these should be specified in a note.

15. Prices refer to a regular (non-promotional) plan and exclude promotional offers and limited discounts or special user groups (for example, existing clients). Special prices that apply to a certain type of device (iPhone/Blackberry, iPad) should be excluded. Allowances during the night are not included.

## Prepaid handset-based 500 MB

#### Price of the plan:

Price of the plan, in local currency, for a mobile-broadband handset-based prepaid tariff with 500 MB volume of data.

#### Cap in MB:

Maximum amount of Internet data (in megabytes, MB) that can be transferred within 30 days included in the mobile-broadband handset-based plan.

#### Price of excess usage, per MB:

Price per additional megabyte (MB) of Internet data downloaded beyond the cap on the mobile-broadband handsetbased plan.

#### Validity of the plan in days:

Validity of the 500 MB prepaid plan, in number of days.

## Postpaid handset-based 500 MB

#### Price of the plan:

Price of the plan, in local currency, for a mobile-broadband handset-based postpaid tariff with 500 MB volume of data.

#### Cap in MB:

Maximum amount of Internet data (in megabytes, MB) that can be transferred within 30 days included in the mobilebroadband handset-based plan.

#### Price of excess usage, per MB:

Price per additional megabyte (MB) of Internet data downloaded beyond the cap on the mobile-broadband handsetbased plan.

#### Validity of the plan in days:

Validity of the 500 MB postpaid plan, in number of days.

## Prepaid computer-based (USB/dongle) 1 GB

#### Price of the plan:

Price of the plan, in local currency, for a mobile-broadband computer-based prepaid tariff with 1 GB volume of data.

#### Cap in GB:

Maximum amount of Internet data (in gigabytes, GB) that can be transferred within 30 days included in the mobile-broadband computer-based.

#### Price of excess usage, per GB:

Price per additional gigabyte (GB) of Internet data downloaded beyond the cap on the mobile-broadband computerbased plan.

#### Validity of the plan in days:

Validity of the 1 GB prepaid plan, in number of days.

## Postpaid computer-based (USB/dongle) 1 GB

#### Price of the plan:

Price of the plan, in local currency, for a mobile-broadband computer-based postpaid tariff with 1 GB volume of data.

## Cap in GB:

Maximum amount of Internet data (in gigabytes, GB) that can be transferred within 30 days included in the mobile-broadband computer-based plan.

#### Price of excess usage, per GB:

Price per additional gigabyte (GB) of Internet data downloaded beyond the cap on the mobile-broadband computerbased plan.

#### Validity of the plan in days:

Validity of the 1 GB postpaid plan, in number of days.