

ITU price data collection rules

May 2021

A. Rules applied in collecting mobile-cellular prices

1. The prices of the operator with the largest market share (measured by the number of subscriptions) are used. If prices vary between different regions of the country or economy, prices refer to those applied in the largest city (in terms of population) or in the capital city.
2. Prices should be collected in the currency they are advertised, including taxes. If prices are not advertised in local currency, a note should be added specifying the currency.
3. Where the operator offers different packages with a certain number of calls and/or SMS messages included, the cheapest one on the basis of 70 voice minutes and 20 SMS per month (i.e. with a 30-day validity) should be selected. If instead of a pay-per-use plan a package is selected for the whole basket (e.g. a bundle including 100 minutes, 50 SMS and 100MB) or for some of its elements (e.g. a package including 100 SMS), it should be indicated in the notes.
4. If per-minute prices are only advertised in internal units rather than in national currency, the price of the top-up/refill charge is used to convert internal units into national currency. If there are different refill prices, then the 'cheapest/smallest' refill card is used. If different refill charges exist depending on the validity period, the validity period for 30 days (or closest to 30 days) is used.
5. Prices refer to a regular (non-promotional) plan and exclude special or promotional offers, limited discounts or options such as special prices to certain numbers or restricted to new customers, or plans where calls can only be made during a limited number of (or on specific) days during the month.
6. If subscribers can choose "favourite" numbers (for family, friends, etc.) with a special price, this special price will not be taken into consideration, irrespective of the quantity of numbers involved.
7. Prices refer to outgoing local calls. If different rates apply for local and national calls, then the local rate is used. If different charges apply depending on the mobile operator called, the price of calls to the operator with the second largest market share (measured by the number of subscriptions) should be used, indicating in the notes the rates of calling to other mobile operators. If charges apply to incoming calls, these are not taken into consideration.
8. If prices vary between minutes (1st minute = price A, 2nd minute = price B), the per minute cost of a two-minute call should be reported (for example: price per minute = $(A+B)/2$). Call set-up rates should not be included in the per minute price, but reported under indicator i153_low_pc.
9. If prices vary beyond two minutes, the average price per minute is calculated based on the actual cost of two minutes.

10. If there is a connection cost per call, then this is taken into consideration in the formula for the mobile-cellular basket, based on 35 calls.
11. If there are different off-peak prices, then the one that is the cheapest before midnight is used. If the only off-peak period is after midnight, then this is not used. Instead, the peak price is used.
12. If there are different peak prices, the most expensive one during the daytime is used.
13. If peak and off-peak SMS prices exist, the average of both is used for on-net and off-net SMS.
14. If calls are charged by call or by hour (and not by the minute), the mobile-cellular basket formula will be calculated on the basis of 35 calls or 70 minutes. Similarly, if calls are charged by call or by number of minutes for a specific network/time of the day, this will be taken into account for that particular network/time of the day.
15. Where monthly, recurring charges exist, they are added to the basket.

B. Rules applied in collecting fixed-broadband Internet prices

1. The prices of the operator with the largest market share (measured by the number of fixed-broadband subscriptions) should be used.
2. Prices should be collected in the currency they are advertised, including taxes. If prices are not advertised in local currency, a note should be added specifying the currency.
3. Only residential, single user prices should be collected. If prices vary between different regions of the country or economy, prices applying to the largest city (in terms of the population) should be provided. If that information is not available, prices applying to the capital city should be reported. The selected city should be mentioned in a note in the monthly subscription indicator.
4. From all fixed-broadband plans meeting the above-mentioned criteria, the cheapest one on the basis of a 5GB monthly usage and an advertised download speed of at least 256 kbit/s should be selected. If there is a price distinction between residential and business tariffs, the residential tariff should be used.
5. If the plan selected has no limit for the monthly data usage, enter the required cap for the basket (e.g., 5 GB), add “unlimited” in the notes for the cap and enter in the respective indicator.
6. Plans with limited hours of use will not be considered.
7. In case operators propose different commitment periods, the 12-month plan (or the one closest to this commitment period should be used. If the plan selected requires a longer commitment (i.e. above 12 months), it should be indicated in the note of the monthly subscription. Furthermore, if there are different prices (for example, a discounted price for the first year, and a higher price as of the 13th month), then the price after the discount period should be selected (e.g. the price as of the 13th month). The discounted price charged during the initial period should be indicated in a note under the monthly subscription charge. The reason is that the initial price paid is considered a limited/discounted price, while the other one is the regular price.
8. Prices should be collected for the fixed-broadband (access) technology with the greatest number of subscriptions in the country or economy (FTTH, DSL, cable, etc.).
9. The same price plan should be used for collecting all the data specified. For example, given Plan A is selected for the fixed-broadband service, according to the criteria mentioned above, the elements in Plan A apply to the monthly subscription, to the price of the excess charge, the volume of data that can be downloaded, etc.
10. Prices should be collected for regular (non-promotional) plans and should not include promotional offers or limited or restricted discounts (for example, only to students, or to already existing customers, etc.).
11. With convergence, operators are increasingly providing multiple (bundled) services such as voice telephony, Internet access and television reception over their networks. They often bundle these offers into a single subscription. This can present a challenge for price data collection since it may

not be possible to isolate the prices for one service. In case a bundled service is the cheapest available option to meet the minimum threshold, this bundle should be used.

C. Rules applied in collecting data-only mobile-broadband prices

1. Prices should be collected based on 3G technologies or above, such as UMTS, HSDPA+/HSDPA, CDMA2000, IEEE 802.16e, LTE, LTE-Advanced and WiMAX/WirelessMAN, with an advertised download speed of at least 256 kbit/s. The plans should apply irrespective of the device used (mobile phones, tablets, USB dongles). Prices applying to WiFi or hotspots should be excluded.
2. Prices should be collected in the currency they are advertised, including taxes. If prices are not advertised in local currency, a note should be added specifying the currency.
3. Only residential, single user prices should be collected. If prices vary between different regions of the country or economy, prices applying to the largest city (in terms of population) or to the capital city should be provided.
4. The cheapest plan should be chosen without regard to the plan's modality (prepaid or postpaid). The modality of the reference plan should be recorded. When a postpaid plan is the cheapest plan, the minimum length of the contract should also be recorded in the notes.
Note: For the cheapest option, ideally a plan without a commitment period (but with a minimum 30-day validity period) should be selected. A plan with a longer commitment period can also be considered, but only if its monthly price is found cheaper after all relevant costs (such as connection fee, breakout charges or penalties) are included on a pro-rated basis in the assessment of total costs for the alternative options.
5. Mobile-broadband prices should be collected from the operator with the largest market share measured by the number of mobile-cellular 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 or economy.
6. The validity period considered for the basket is 30 days or four weeks. If a plan with a validity less than the reference period is selected, it will be taken as many times as necessary to cover a period of four weeks. The cheapest plan on the basis of a validity period of 30 days or four weeks should be selected.
7. Price data should be collected for the cheapest plan with a data volume allowance of a minimum of the reference data volume per month (irrespective of the device used):

Mobile Broadband Data only: 2 GB, 3G and above (i.e., broadband speeds)

The selected plan should not necessarily be the one with the cap closest to the basket's reference data volume but include a minimum of the reference data volume. For example, if an operator offers a 500 MB and a 5 GB plan, the 5 GB plan or four times the 500 MB plan could be selected for the 2 GB data-only mobile-broadband basket. The cheapest option should be chosen. Alternatively, if an operator offers a 5 GB and a 1 GB plan, and allows consumers of the 1 GB plan to purchase a 1 GB data add-on, the cheapest of the 5 GB plan or the 1 GB plan with 1 GB plan should be chosen (provided the plan and add-on are compatible).

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.

8. 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. Nighttime data allowances will not be considered.
9. Even if the plan is advertised as 'unlimited', the fine print should be carefully reported since often there are limits in the data volumes (e.g., fair usage policies), either applied by throttling (limiting the speed below the minimum for broadband) or by cutting the service.
10. Non-recurrent fees, such as installation/set-up fees are not collected.
11. Preference should be given to the cheapest available package even if this is bundled with other services (with voice services, for example). If the plan chosen includes other services besides mobile-broadband access, these should be specified in a note. Zero-rated services (i.e., services that can be consumed besides the monthly data allowance, such as via certain platforms or applications) should be specified in a note and should not be counted in the total data allowance volume.
12. Prices refer to a regular (non-promotional) plan and exclude promotional offers and limited discounts or special user groups (for example, existing clients or age-defined groups). Special prices that only apply to a certain type of device (smartphone, tablet, etc.) should be excluded. Allowances during the night are not included.

D. Rules applied in collecting prices for data and voice mobile-broadband services

1. Prices should be collected based on 3G technologies or above, such as UMTS, HSDPA+/HSDPA, CDMA2000, IEEE 802.16e, LTE, LTE-Advanced and WiMAX/WirelessMAN, with an advertised download speed of at least 256 kbit/s. Prices applying to WiFi or hotspots should be excluded.
2. Prices should be collected in the currency they are advertised, including taxes. If prices are not advertised in local currency, a note should be added specifying the currency.
3. Only residential, single user prices should be collected. If prices vary between different regions of the country or economy, prices applying to the largest city (in terms of population) or to the capital city should be provided.
4. The cheapest plan should be chosen without regard to the plan's modality (prepaid or postpaid). The modality of the reference plan should be recorded. When a postpaid plan is the cheapest plan, the minimum length of the contract should also be recorded in the notes.
Note: For the cheapest option, ideally a plan without a commitment period (but with a minimum 30-day validity period) should be selected. A plan with a longer commitment period can also be

considered, but only if its monthly price is found cheaper after all relevant costs (such as connection fee, breakout charges or penalties) are included on a pro-rated basis in the assessment of total costs for the alternative options.

5. Mobile-broadband prices should be collected from the operator with the largest market share measured by the number of mobile-cellular subscriptions.
6. The validity period considered for the basket is 30 days or four weeks. If a plan with a validity less than the reference period is selected, it will be taken as many times as necessary to cover a period of four weeks. The cheapest plan on the basis of a validity period of 30 days or four weeks should be selected.
7. Price data should be collected for data- and voice broadband baskets separately. Baskets may include stand-alone services, bundled services or a combination of the two as long as the cheapest options are selected that meet the following thresholds:
 - a. Low-consumption data-and-voice basket: 70 minutes, 20 SMS and 500 MB.
 - b. High-consumption data-and-voice basket: 140 minutes, 70 SMS and 2 GB.

The selected plan should not necessarily be the one with the data, voice and SMS allowances closest to the consumption set for each data-and-voice basket, but rather the cheapest including the minimum allowances set for each consumption profile. For example, if an operator offers a plan including 35 minutes, 10 SMS and 250 MB, and a plan including 1 GB and unlimited domestic voice and SMS, either twice the first plan (if the package can be purchased twice per month) or the second plan could be selected for the low-consumption data-and-voice basket. The cheapest option should be chosen. Alternatively, if an operator offers a i) 100 minutes, 100 SMS and 1 GB and ii) 70 minutes, 20 SMS and 250 MB plan, and allows consumers of this latter plan to purchase a 250 MB data add-on, the cheapest of the options i and ii should be chosen (provided the plan and add-on are compatible).

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.

8. The excess price per voice minute should be reported as the on-net prices. If different peak and off-peak prices exist, an average shall be reported. If prices vary between minutes (1st minute = price A, 2nd minute = price B, call set-up rate= C), the per minute cost of a two-minute call should be reported (i.e. $(A+B+C)/2$). Call set-up rates should be included in the per-minute price of excess usage and indicated in the corresponding note. If the excess price reported corresponds to a package of minutes, the total price for the package should be reported and the number of minutes included should be specified in a note.
9. The excess price per SMS should be reported as the on-net SMS price. If different peak and off-peak prices exist, the average shall be reported. If the excess price reported corresponds to a package of SMS, the total price for the package should be reported and the number of SMS included should be specified in a note.

10. Pay-as-you-go offers should be used when they are the cheapest option for a given data-and-voice 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. Nighttime data allowances will not be considered.
11. Even if the plan is advertised as 'unlimited', the fine print should be carefully reported since most often there are limits in the data volumes (e.g., fair usage policies), either applied by throttling (limiting the speed) or by cutting the service.
12. Non-recurrent fees, such as installation/set-up fees are not collected.
13. Preference should be given to the cheapest available package even if this is bundled with other services (e.g., online TV content). If the plan chosen includes other services besides data, voice and SMS, these should be specified in a note. Zero-rated services (i.e., services that can be consumed besides the monthly allowances, such as via certain platforms or applications) should be specified in a note and should not be counted in the total allowance.
14. Prices refer to a regular (non-promotional) plan and exclude promotional offers and limited discounts or special user groups (for example, existing clients or age-defined groups). Special prices that only apply to a certain type of device (smartphone, tablet, etc.) should be excluded. Allowances during the night are not included.

E. Entering prices in the online questionnaire

How to enter price basket data:

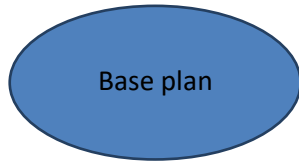
1. All data entered (capacity, price, validity, etc.) should refer to the base plan. In case the base plan includes less capacity than the minimum data allowance required (e.g., 500 MB or 2 GB in the case of mobile-broadband baskets) the final price will be calculated based on the data entered. This could be by multiplying the price of the base plan (if the package can be purchased multiple times) or by adding an excess usage fee (to be entered for indicator "price of excess usage"). In case an add-on package needs to be added to the base plan to meet the requirements of the basket, all information pertaining to this should be entered to the specific indicators dedicated to add-ons. Add-ons must be compatible with the selected base plan. It should be explained in the notes for the base plan how the requirement of the basket is reached should the base plan include less than the minimum data allowance.
2. The same applies for plans with a validity period of less than 4 weeks or 30 days. The base plan will be entered and the final price will be calculated based on the data entered. This could be by multiplying the price of the base plan (if the package can be purchased multiple times) or by adding an excess usage fee (to be entered for indicator "price of excess usage"). In case an add-on package needs to be added to the base plan to meet the requirements of the basket, all information pertaining to this should be entered to the specific indicators dedicated to add-ons.

Add-ons must be compatible with the selected base plan. It should be explained in the notes for the base plan how the requirement of the basket is reached should the base plan include less than the minimum validity period.

3. To enter an unlimited data allowance, enter the required cap for the basket (e.g., 500 MB or 2GB for mobile-broadband baskets or 5 GB for fixed-broadband basket), add “unlimited” in the notes for the cap and indicate in the respective indicator.
4. To enter a pay-as-you-go offer, enter the price for 1 MB for the price of the plan and 1 MB as the cap.
5. For the calculation of the allowance threshold, 2 GB may be considered as equivalent to 2000 MB.

Box 1: How to enter mobile-broadband prices in the ITU ICT Price Basket Questionnaire

Case A: the base plan fits the minimum requirements of the basket in terms of data allowance and validity. Enter the data for the base plan.



Minimum basket requirements

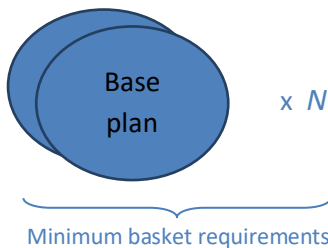
Example A.1: 10\$ for 2 GB and 30 days validity, and no cheaper plan for 2 GB

→ data entered in the database for the data-only mobile-broadband basket: price 10\$, capacity 2 GB and validity 30 days.

Example A.2: 12\$ for 5 GB and 30 days validity, and no cheaper plan for 2 GB

→ data entered in the database for the data-only mobile-broadband basket: price 12\$, capacity 5 GB and validity 30 days.

Case B: the base plan does not fit the requirements of the basket in terms of data allowance, validity period, or both and thus needs to be multiplied several (N) times. Enter the data for the base plan and add in a note how to calculate the basket.



Minimum basket requirements

Example B.1: 4\$ for 500 MB and 30 days validity, and the cheapest option for a 2 GB monthly consumption is to take this plan four times

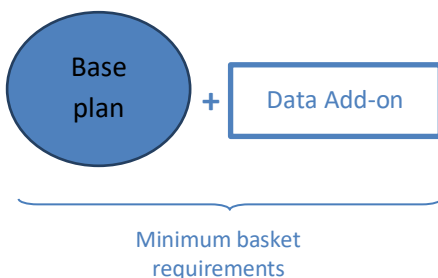
→ data entered in the database for the data-only mobile-broadband basket: price 4\$, capacity 0.5 GB, validity 30 days; → in the note it is specified “multiply plan 4 times”.

Example B.2: 2.5\$ for 1 GB and 30 days validity, and the cheapest option for a 2 GB monthly consumption is to take this plan twice

→ data entered in the database: price 2.5\$, capacity 1 GB, validity 30 days.

→ in the note it is specified “multiply plan 2 times”.

Case C: the base plan does not fit the requirement of the basket either in terms of data allowance, validity period or both and thus one or several add-on packages must be added. Enter the data for the base plan and add in a note how to calculate the basket



Minimum basket requirements

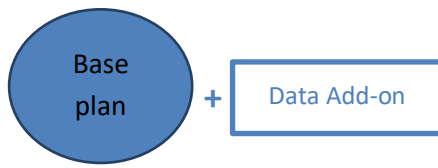
Example C.1 (data-only mobile broadband basket): the cheapest option for 2 GB of monthly data allowance is to combine a base plan for \$8, 1 GB and 30 days validity, and a data add-on for 2\$, 1 GB and 7 days validity

→ data entered in the database for the data-only mobile-broadband basket: base plan price \$8, capacity 1 GB and validity 30 days; add-on price \$2, capacity 1GB and 7 days validity (see Table 1)

→ *in the note of the base plan, it is specified “To be combined with a data add-on package: 2\$, 1 GB and 30 days validity”.

Table 1. Example C.1: sample ICT price basket questionnaire data entry

| | Indicator | Value |
|--------------------|--------------------------------------|-------|
| Base plan* | Price (i271mb_bs_2GB) | 8 |
| | Data cap, in GB (i271mb_c_2GB) | 1 |
| | Validity, in days (i271mb_v_2GB) | 30 |
| Data Add-on | Price (i271mb_add_bs_2GB) | 2 |
| | Data cap, in GB (i271mb_add_c_2GB) | 1 |
| | Validity, in days (i271mb_add_v_2GB) | 7 |



Minimum basket requirements

Example C.2 (Data and voice high-usage basket): the cheapest option for 1.5 GB monthly data allowance, 140 minutes and 70 SMS is to combine a base plan for \$10, 200 minutes + 2 GB, 30 days with an SMS add-on (\$2, 100 SMS, 30 days)

→ data entered in the database for the data and voice low-usage basket: base plan price \$10, 200 minutes, 2 GB, 30 days; SMS add-on price \$2, 100 SMS, 30 days. 0 values are entered into the Voice and Data add-on sections. (see Table 2)

→ *in the note of the base plan, it is specified “To be combined with an SMS add-on package”.

Table 2. Example C.2: sample ICT price basket questionnaire data entry

| | Indicator | Value |
|---------------------|--|-------|
| Base plan* | Price (i271mb_high_bs_2GB) | 10 |
| | Data cap, in GB (i271mb_high_c_2GB) | 2 |
| | Included minutes (i271mb_high_min_2GB) | 200 |
| | Included SMS (i271mb_high_sms_2GB) | 0 |
| | Validity, in days (i271mb_high_v_2GB) | 30 |
| data Add-on | Price (i271mb_high_add_bs_2GB) | 0 |
| | Included data (i271mb_high_add_sms_2GB) | 0 |
| | Validity, in days (i271mb_high_add_v_2GB) | 0 |
| Voice Add-on | Price (i271mb_high_adv_bs_2GB) | 0 |
| | Included minutes (i271mb_high_adv_min_2GB) | 0 |
| | Validity, in days (i271mb_high_adv_v_2GB) | 0 |
| SMS Add-on | Price (i271mb_high_ads_bs_2GB) | 2 |
| | Included SMS (i271mb_high_ads_sms_2GB) | 100 |
| | Validity, in days (i271mb_high_ads_v_2GB) | 30 |

Example C.3 (Data and voice low-usage basket): the cheapest option for 500 MB monthly data allowance, 70 minutes and 20 SMS is to combine a base plan for \$10, 100 minutes + 10 SMS, 30 days with a data add-on (\$2, 150 MB, 7 days) and an SMS add-on (\$1, 10 SMS, 30 days)



Minimum basket requirements

→ data entered in the database for the data and voice low-usage basket: **base plan** price \$10, 100 minutes, 10 SMS, 30 days; **data add-on** price \$2, 150 MB, 7 days; **SMS add-on** price \$1, 10 SMS, 30 days. 0 values are entered into the Voice add-on section. (see Table 3)

→ *in the note of the base plan, it is specified “To be combined with data and SMS add-on packages”.

Table 3. Example C.3 : sample ICT price basket questionnaire data entry

| | Indicator | Value |
|---------------------|---------------------------------------|-------|
| Base plan* | Price (i271mb_low_bs) | 10 |
| | Data cap, in MB (i271mb_low_c) | 0 |
| | Included minutes (i271mb_low_min) | 100 |
| | Included SMS (i271mb_low_sms) | 10 |
| | Validity, in days (i271mb_low_v) | 30 |
| data Add-on | Price (i271mb_low_add_bs) | 2 |
| | Included data (i271mb_low_add_sms) | 150 |
| | Validity, in days (i271mb_low_add_v) | 7 |
| Voice Add-on | Price (i271mb_low_adv_bs) | 0 |
| | Included minutes (i271mb_low_adv_min) | 0 |
| | Validity, in days (i271mb_low_adv_v) | 0 |
| SMS Add-on | Price (i271mb_low_ads_bs) | 1 |
| | Included SMS (i271mb_low_ads_sms) | 10 |
| | Validity, in days (i271mb_low_ads_v) | 30 |