ITU ICT Price Basket Statistics Manual

Methodology for the compilation of internationally comparable ICT service price statistics based on retail price data

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1 Introduction: The policy relevance of measuring ICT price statistics

- 1. In an increasingly digital world, ensuring affordable access to Information and Communication Technology (ICT) services and devices is essential for fostering inclusive socioeconomic growth. Affordability of devices and services is a critical dimension of Universal and Meaningful Connectivity (UMC), a concept and policy principle developed in 2021 within the context of the United Nations Secretary-General's Roadmap for Digital Cooperation. UMC is the possibility for everyone to enjoy a safe, satisfying, enriching, and productive online experience at an affordable price. UMC ensures that everyone can access the Internet optimally and affordably whenever and wherever needed, emphasizing a multidimensional approach to connectivity.
- 2. To monitor progress towards UMC, the International Telecommunication Union (ITU) and other international stakeholders, such as the G20¹, have developed a statistical measurement framework which includes indicators on the price of ICT services. This manual contributes to the standardization of affordability statistics through the definition of ICT price basket statistics. The measurement of affordability of devices is not dealt with by this manual. Statistics about access to devices are usually collected through household surveys².
- 3. ICT price basket statistics serve as a critical measure for evaluating service affordability, thus providing policymakers with insights necessary for promoting UMC. This first section explores the concept and significance of ICT price basket statistics, presenting their role in assessing affordability, supporting digital inclusion, and informing policy aimed at bridging the digital divide. Specifically, it provides an overview of how these price baskets are structured to reflect the prices of mobile and fixed ICT services, illustrating their utility in cross-country comparisons. The section also introduces the UMC framework, which highlights affordability as a foundational element for achieving equitable digital access, alongside quality and usability. Finally, affordability targets are discussed as benchmarks that guide global and national efforts to lower connectivity barriers, fostering a more inclusive digital landscape.

1.1. Overview of ICT Price Basket Statistics

- 4. ICT price basket statistics offer a standardized approach to consolidating the price associated with various ICT services, enabling a systematic evaluation of affordability across countries. Developed and standardized by the International Telecommunication Union (ITU) through its Expert Group on Telecommunication/ICT Indicators (EGTI), these baskets represent essential ICT services—including mobile cellular, data-only mobile-broadband, bundled mobile data and voice services, and fixed broadband services—presented in comparable terms. Through the aggregation of ICT service prices into standardized units, these price baskets facilitate detailed cross-country comparisons and robust affordability analyses, providing valuable insights into economic accessibility levels across diverse regions. This framework allows policymakers and researchers to identify affordability patterns, informing targeted interventions that can improve access to digital services and thus enhance digital inclusion globally.
- 5. A central objective of ICT price basket statistics is to support the goals of UMC, an international framework focused on delivering inclusive digital access by addressing key dimensions such as affordability, service quality, and sustainable usage. The UMC framework aligns with broader global efforts to ensure equitable access to digital services, with affordability considered a primary driver of digital inclusivity. For instance, the United Nations Broadband Commission has established an affordability benchmark, recommending that ICT service prices should not exceed 2% of a country's monthly GNI per capita (UN Broadband Commission, 2024). This affordability threshold reflects a consensus that lowering ICT prices is vital for removing economic barriers to connectivity and promoting universal digital access.
- 6. The price of ICT services appears to be correlated with a spectrum of factors, including institutional strength which encompasses regulatory maturity, contract enforcement,

¹ See the guidelines released during the G20 Brazilian Presidency (<u>www.gov.br/mcom/pt-br/acesso-a-informacao/governanca/governanca-de-tic-1/documentos-g20/p1-g20-dewg-brasil-2024-umc.pdf</u>).

² See the ITU Manual for Measuring ICT Access and Use by Households and Individuals (<u>https://www.itu.int/en/ITU-D/Statistics/Pages/publications/manual.aspx</u>).

transparency, neutrality, and dispute resolution- along with economic conditions, and technological infrastructure, which seem to play central roles. For example, countries with mature telecommunications regulations often see reduced ICT service prices, as robust regulatory environments can drive competition, lower market entry barriers, and encourage service efficiency (ITU, 2021). Such findings highlight how regulatory maturity acts as a connectivity enabler, illustrating how ICT price basket data can provide critical evidence of the impact of policy measures on connectivity and access levels.

- 7. Also, the demand for ICT services, such as broadband, is widely recognized as price-elastic, particularly within low- and middle-income countries, where even marginal price reductions can significantly boost service adoption. Empirical studies reveal that broadband demand exhibits variable elasticity across regions, reflecting underlying disparities in income levels and digital infrastructure (Katz & Koutroumpis, 2012; Galperin & Ruzzier, 2013). Moreover, reductions in broadband prices have been shown to yield a multiplier effect on productivity and economic growth, underscoring the strategic importance of lowering ICT prices to foster socioeconomic advancement (Czernich et al., 2011). These findings highlight the pivotal role of affordability in expanding ICT access, suggesting that policies aimed at reducing service prices can substantially enhance digital inclusion and mitigate the digital divide.
- 8. In summary, ICT price basket statistics are invaluable tools for tracking progress toward digital equity. By offering a comprehensive measure of affordability, they enable the comparison of national performance against global standards and reveal the impact of ICT prices on connectivity. These statistics not only shape policies that aim to bridge the digital divide but also empower countries in their pursuit of UMC by supporting data-driven strategies that promote digital inclusivity and sustainable development. In this way, ICT price baskets are indispensable to efforts aimed at achieving UMC, fostering environments where affordability barriers are minimized, and digital inclusion can thrive.

1.2. Universal and Meaningful Connectivity

- 9. The UMC framework represents a holistic approach to achieving inclusive digital access, transcending basic Internet availability to encompass affordability, quality, and usability of ICT services. UMC emphasizes that access alone is insufficient to ensure digital inclusion; instead, digital services must be accessible, affordable, high-quality, and usable. Affordability is particularly critical, as high prices remain a significant obstacle to ICT adoption, especially in low- and middle-income countries where limited purchasing power and elevated service prices restrict digital participation.
- 10. Within the UMC framework, affordability extends to both ICT services and the devices required for access. Ensuring affordability across socio-economic strata is vital to achieving broad-based connectivity without placing a disproportionate financial burden on individuals. To this end, international benchmarks, such as the UN Broadband Commission's recommendation to keep ICT service prices below 2% of monthly GNI per capita, guide affordability targets. ICT price basket statistics facilitate this by offering standardized affordability measures, allowing policymakers to evaluate ICT accessibility across different regions or countries. By quantifying service prices relative to income levels, these statistics help identify affordability gaps and highlight areas needing policy interventions.
- 11. UMC's dimensions-regular and reliable access, adequate speed, sufficient data volumes, and device affordability-are interlinked, creating a robust framework for assessing and achieving meaningful connectivity. By gathering price data through well-defined price baskets, ITU enables assessments of affordability within the UMC framework, guiding policies that aim to broaden digital access. ICT price baskets provide insights into the price associated with varied service levels, covering mobile cellular, data-only mobile-broadband, fixed broadband, and bundled mobile data and voice services-each aligned with common user needs and designed to meet minimum usage thresholds.
- 12. In addition to affordability, speed has become a central element of the "meaningful" aspect of Internet connectivity. Recent data from the Affordability of ICT Services 2023 Policy Brief (ITU, 2023) highlight that the median advertised download speed for entry-level fixed broadband plans rose from 5 Mbit/s in 2019 to 20 Mbit/s in 2023. Despite this global improvement, gaps

remain considerable across income groups and regions. In high-income economies, the median advertised entry-level speed in 2023 reached 100 Mbit/s, while in LDCs it was only 4 Mbit/s. These differences underscore the importance of quality (including speed) as a key dimension of universal and meaningful connectivity, indicating that policies aimed at lowering prices must go hand-in-hand with measures to enhance network performance.

13. UMC serves as a strategic goal for digital inclusion, with ICT price baskets enabling countries to track affordability trends and compare progress against global targets. By pinpointing connectivity price barriers, these statistics highlight where policy action is most needed. Armed with this evidence, governments and stakeholders can prioritize interventions, invest strategically, and accelerate progress toward universal and meaningful connectivity.

1.3. Affordability Targets

- 14. Affordability targets, as articulated through global and regional initiatives, establish critical benchmarks for evaluating ICT service accessibility. These benchmarks are indispensable for policymakers, providing a means to assess whether ICT prices conform to international standards for equitable digital access. Affordability has been widely recognized as a significant impediment to universal connectivity; consequently, initiatives such as the UN Broadband Commission³ and the Connect 2030 Agenda have defined explicit affordability targets.⁴ These targets are designed to ensure that the price of ICT services does not inhibit individuals, particularly in low- and middle-income countries, from fully participating in the digital economy.
- 15. A widely recognized affordability target is the 2% monthly GNI per capita threshold for ICT service prices, endorsed by the UN Broadband Commission. Historically, this target has evolved; prior to the establishment of the 2% monthly benchmark, affordability standards were less stringent, 5% of monthly GNI per capita. Over time, this target was progressively lowered as part of a concerted global effort to make ICT services more accessible and to bridge the digital divide. This benchmark reflects a global consensus that affordable access to ICT is fundamental for inclusive digital development. Adherence to this threshold helps ensure that most people have the opportunity to connect digitally. The 2% monthly GNI target serves both as a practical metric and as an aspirational goal within the UMC framework, encapsulating the minimum affordability required for meaningful, sustainable digital engagement.
- 16. Beyond the 2% monthly GNI target, the Connect 2030 Agenda has established additional affordability metrics that aim to further ensure universal access to ICT services. One of the key targets outlined is to reduce the price of entry-level broadband services to ensure that, all countries achieve affordability benchmarks that allow for full participation in the digital economy. The Connect 2030 Agenda emphasizes the importance of making broadband accessible not just in terms of price, but also in terms of availability, quality, and inclusivity. This initiative also encourages countries to develop policies that promote competitive markets and sustainable business models to further reduce prices and improve access, particularly for marginalized and underserved communities.
- 17. Additionally, the Alliance for Affordable Internet suggested that an entry-level broadband plan should price no more than 2% of average monthly income for those living in low-income countries. This measure is particularly relevant for understanding disparities within and between countries and for ensuring that no one is left behind in the digital transition.
- 18. Also, the ITU/UN UMC affordability targets establish critical benchmarks for assessing digital accessibility. These metrics differentiate between entry-level and advanced mobile-broadband services, using thresholds based on data usage levels-currently set at 2GB for entry-level and 5GB for advanced services-to evaluate affordability. By defining these affordability standards, the UMC framework ensures that policymakers have a reliable means to measure the accessibility of ICT services and to identify areas requiring intervention. As data consumption

³ See <u>https://www.broadbandcommission.org/advocacy-targets/</u>

⁴ The Global Digital Compact, approved by the UN General Assembly in September 2024, acknowledges the pivotal role of affordability to unlock the full potential of digital technologies, and countries have committed to develop targets and indicators for affordable connectivity, and increase the affordability of services.

patterns evolve, there is growing recognition of the need to revisit these thresholds, with proposals to increase them to 5GB and 10GB, respectively, ensuring affordability metrics remain aligned with current usage trends.

- 19. While these affordability targets set important benchmarks, they do not guarantee universal access for all segments of society. For individuals in the lowest income deciles, the 2% of monthly GNI per capita benchmark can still be a substantial burden. Evidence from the ITU's 2022 affordability policy brief highlights that ICT service prices remain unaffordable for the bottom 40% of the population in many parts of the world, exacerbating digital exclusion (ITU, 2022a; ITU, 2022b).
- 20. The reality is that income disparities within countries mean that what is considered affordable at a national level may not translate into affordability for those at the bottom of the income distribution. This discrepancy highlights the need for targeted policies that directly address the specific barriers faced by lower-income groups to ensure that digital access is truly inclusive and equitable (GSMA, 2013).
- 21. Incorporating these various affordability metrics into policy frameworks allows for a more robust and multifaceted approach to promoting universal digital access. By considering both household expenditure, individual service prices, and broader affordability baskets, policymakers can more accurately target initiatives to close the digital divide. These benchmarks collectively contribute to ensuring that ICT services are not just available but are also accessible to all, regardless of income, and that such services contribute to meaningful participation in the digital economy.

2. Methodology Overview

22. The methodology behind ICT price basket statistics is essential to ensure consistent, accurate, and globally comparable data on ICT service affordability. This section outlines the historical evolution of ICT price basket collection, examining key developments in the methodology, and discusses the macroeconomic context that underpins affordability metrics. These elements provide a foundation for interpreting ICT price statistics within the broader economic landscape.

2.1. A Brief History of the ICT Price Baskets Collection

- 23. The ITU ICT Price baskets have undergone multiple revisions to align with technological changes and market developments since the monitoring of tariffs for fixed telephony in the 1980s. Over the years, both substantial (e.g., inclusion or exclusion of new services, such as the introduction of mobile cellular charges in the early 1990s or the introduction of dial-up Internet services in the early 2000s) and incremental (revision of allowance thresholds and refinement of data collection methodology) changes occurred.⁵
- 24. In the past decade, EGTI adopted three revisions. Until 2017, ITU price baskets included three services: fixed (covering both mainline telephony and broadband Internet), mobile cellular (voice and SMS) and mobile broadband (a handset-based, prepaid and a computer-based post-paid basket). From 2018, monitoring the price of fixed telephony was discontinued and along with fixed broadband, data was collected for four mobile broadband baskets: a mobile cellular low-usage one with 70 minutes and 20 SMS, a device-neutral data-only mobile broadband one with 1.5 GB monthly allowance, and, as a novelty, two bundled data and voice mobile broadband baskets were added with a low-consumption one including 70 minutes, 20 SMS and 500 MB data, and a high-consumption one including 140 minutes, 70 SMS and 1.5 GB data. The thresholds were established based on a global assessment of consumption patterns.⁶ As part of a next revision agreed by EGTI, and a harmonization of methodology for a collaboration with the Alliance for Affordable Internet, from 2021, data allowance was increased from 1.5 GB to 2 GB for two of the baskets, and the rule for contract modality was revised in a way that post-paid plans could only be used for the baskets when commitment period and early termination fees were taken into account.
- 25. The most recent revision and the methodology presented in this Manual was agreed by EGTI in September 2024 and implemented from the 2025 data collection. In brief, the changes included the discontinuation of the mobile cellular low-usage basket, revision of the thresholds for the mobile broadband baskets reflecting increased data usage worldwide and the decline in SMS traffic in middle- and high-income economies, along with the removal the requirement taking into consideration the commitment periods. (See also Annex I about the discontinued mobile cellular and the temporarily retained data- and voice high-consumption basket.)

2.2. Macroeconomic Context and Reference Indicators

- 26. When comparing ICT service prices across countries in absolute terms, it is common practice to convert local currency values into a single currency (e.g. USD) or use purchasing power parity (PPP) adjustments. However, these conversions can be influenced by macroeconomic factors—such as exchange rates and cost-of-living differences—which should be taken into account when interpreting cross-country comparisons. ICT price statistics operate within a broader macroeconomic framework, where price metrics are influenced by purchasing power, and other key economic indicators. This part provides a comprehensive overview of the macroeconomic context relevant to ICT price basket statistics.
- 27. First, this section elaborates on the application of PPP as a pivotal tool for comparing price levels across countries, and the differentiated interpretations that result. PPP serves to adjust

⁵ Historical price statistics are available in the *ITU Yearbook of Statistics* series.

⁶ See also Annex 1 of the *ITU Measuring Digital Development: ICT Price Trends 2019* report.

nominal income and price data to account for differences in the price of living and purchasing power across economies, thus enabling more meaningful cross-country comparisons. The use of PPP-adjusted values mitigates the distortions associated with nominal exchange rates and provides a more harmonized metric for evaluating ICT price levels. By utilizing PPP, stakeholders can better assess the real-world prices of ICT services, ensuring that price evaluations reflect the true purchasing capacity of consumers. This perspective is vital for formulating equitable digital policies and fostering greater inclusivity in global ICT access. In fact, cross-country comparisons also facilitate benchmarking with other countries, providing policymakers with insights to enhance national policies.

- 28. While ICT price basket statistics focus on assessing benchmarking service prices in a standardized way, the *Consumer Price Index (CPI) Manual* (IMF, 2020) applies a different approach, using "representative items" under COICOP 08.3 (Information and Communication Services). The CPI framework captures typical consumer expenditure patterns, whereas the ITU baskets are specifically designed to measure a set of minimum usage thresholds for key ICT services. As a result, the ITU baskets are not directly integrated into CPI calculations, but the concepts do overlap in some areas–most notably in the measurement of telecommunication expenditures⁷.
- 29. In contrast to absolute price comparisons, affordability focuses on the relative burden of ICT service prices, typically expressed as a share of income (e.g., GNI per capita). This approach highlights how national wealth distribution and individual purchasing power affect the real accessibility of digital services. Beyond GNI, this section also presents comparisons with other reference indicators, such as Gross Domestic Product (GDP) per capita and household income, to elucidate their roles in interpreting affordability within the ICT context. GNI provides a broad measure of national income, including international flows, while other indicators offer distinct perspectives that complement and deepen the analysis of ICT affordability.
- 30. While GDP per capita is frequently utilized to assess overall economic performance, it differs significantly from GNI as it measures the total value of goods and services produced within a country's borders, regardless of income ownership. GDP per capita provides an indication of domestic production capabilities and the economic strength of a country. However, these distinctions are critical when interpreting affordability measures, as GDP per capita may not fully capture the income available to residents for ICT expenditure, especially in economies with significant outflows or inflows of income from abroad. Thus, GNI often serves as a more precise metric when evaluating the economic resources that can be allocated towards ICT services.
- 31. While this manual does not engage in the detailed calculation of GNI, it references the System of National Accounts (SNA) as the authoritative framework for understanding GNI. The SNA provides the standardized methodology used for the compilation of GNI, which represents the total income accruing to residents of a nation, including income from abroad. GNI per capita serves as an essential indicator in the ICT sector, facilitating cross-national comparisons of affordability by representing the average income available to the population. By examining ICT service prices in relation to GNI per capita, policymakers can evaluate whether the pricing of services aligns with global affordability objectives, such as the 2% monthly GNI per capita threshold endorsed by the UN Broadband Commission.
- 32. Additionally, household income serves as a granular metric that provides direct insight into consumer purchasing power, offering an additional dimension for assessing the economic burden of ICT services at the microeconomic level. Unlike GNI or GDP, household income focuses on the disposable income that individuals and families can allocate towards ICT-related expenses (including ICT goods and services), thereby providing a more direct measure of affordability from the consumer's perspective. Understanding these differences allows for a more nuanced interpretation of ICT price data, facilitating a more targeted approach to policy-making. It helps identify where affordability gaps might persist, both at a macroeconomic and household level, ensuring that interventions can be designed to effectively mitigate barriers to ICT adoption and foster greater digital inclusion. Furthermore, from a microeconomic

⁷ For a full overview of how CPI classifications handle ICT services, see the IMF manual, pages 269-270.

perspective, the notion of "wallet share" can shed light on the proportion of total household expenditures allocated to ICT services (such as fixed broadband and mobile). Household expenditure surveys capturing this information offer valuable insights into consumer priorities and behaviors, enriching the macro-level affordability analysis by illustrating how families balance ICT spending against other essential needs.

3. The 2024 Revision of the ITU ICT Price Baskets Definitions and Methodology

33. This section presents the updated definitions and methodologies for compiling ICT price baskets as approved by the ITU Expert Group on Telecommunications/ICT indicators (EGTI), reflecting changes in consumption patterns and technological advancements. By documenting the evolution of the ICT price baskets and explaining their revised compositions, this section aims to guide users through the principles and practices of collecting, processing, and analyzing ICT service price data.

3.1. Conceptual Framework

34. The ICT price baskets are designed to capture the price of representative telecommunication services used globally, providing benchmarks for assessing affordability and accessibility. These baskets represent common user needs across various consumption levels, including data, voice, and SMS. The 2024 revision emphasizes data-driven services, acknowledging the growing reliance on Internet for essential activities such as communication, education, and work. By adjusting thresholds and removing outdated components⁸, the revised baskets ensure continued relevance and adaptability to technological and behavioral shifts. ⁹ Table 1 provides an overview of the updated definitions compared to the previous versions.

Table 1 Comparison of the Old and New ICT Price Basket Definitions (2024 Updates)

ICT Price Basket	Old Definition (2021-2024)	New Definition (from 2025)
Mobile Cellular Low - Usage Basket	70 minutes + 20 SMS	Removed
Data-only Mobile Broadband	Minimum of 2 GB	Minimum of 5 GB
Mobile Data and Voice Low (,)) Consumption Basket	70 minutes + 20 SMS + 500 MB	70 minutes + 50 SMS + 1 GB
Mobile Data and Voice High (• + •) Consumption Basket	140 minutes + 70 SMS + 2 GB	140 minutes + 20 SMS + 5 GB
Fixed Broadband Basket ्रिंग	Minimum of 5 GB	No change Minimum of 5 GB

Source: ITU EGTI Summary Report 2025¹⁰

35. After selecting or defining the ICT price baskets, the next step involves ensuring that the chosen plans are representative of the broader market. In particular, this may involve looking to the largest operator or ISP in terms of subscription numbers for mobile services (this implies that

¹⁰ <u>https://www.itu.int/itu-d/meetings/egti2024/wp-</u>

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content/uploads/sites/27/2024/11/ITU_EGTImeeting2024_SummaryReport_rev.pdf
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⁸ The 2024 updates to the ICT price baskets reflect evolving consumption patterns and technological advancements, with a stronger emphasis on data usage. The removal of the mobile cellular low-usage basket (70 minutes + 20 SMS) from data collection underscores this shift. The historical background and details of the discontinued mobile cellular low-usage basket (70 minutes + 20 SMS) are provided in Annex.

⁹ The IMF CPI Manual recommends that it is not necessary to wait until a product is obsolete before the new one is introduced, so the ITU strategy is in line with that.

the same mobile network operator will be used for all mobile baskets), or selecting the most common technology in the case of fixed broadband (Step 1 of Phase 1 in Figure 1). Furthermore, where geographic price variations exist, offers that apply to the entire country– or at least the most populous city–should be considered¹¹. Taken together, these steps ensure that the pricing data accurately reflect the most widely accessible service plans, thereby laying a strong foundation for further comparisons and analyses.



Figure 1 Workflow for Selecting Offers and Collecting Price Data (Data Collection)

Source: ITU

- 36. In addition, although each basket sets usage thresholds for data, voice, and SMS, these thresholds can be met by one or multiple plans, add-ons, or a combination thereof. For example, fulfilling the basket's requirements might involve purchasing a base plan plus an extra data package, resorting to pay-as-you-go rates for certain services, or buying the same plan multiple times if allowed. Nevertheless, the cheapest solution does not necessarily yield the largest total allowance; it only needs to meet or exceed the basket's thresholds at the lowest overall price.
- 37. Finally, when operators offer plans or bundles that exceed the required data, voice, or SMS thresholds, it may still be more economical to opt for these so-called "overshooting" options. In such cases, the full price of the plan or bundle should be taken into account rather than prorating it solely to match the basket's requirements. This ensures that even if allowances surpass the stipulated thresholds, the resulting price calculation remains both accurate and transparent (Step 2 of Phase 1 in Figure 1).
- 38. Building on the first two steps, Step 3 of Phase 1 in Figure 1 entails collecting official pricing from published sources, including taxes and any relevant fees, ensuring that all price information is up to date and accurate. Step 4 then focuses on entering these details-such as plan name, allowance, price, and validity period-into the data collection system, thus providing a structured record for subsequent calculations.
- 39. Additionally, to ensure consistency across all ICT price baskets, Table 2 consolidates the universal rules that apply to each basket. These guidelines cover aspects such as territorial validity, the treatment of promotions and zero-rated services, currency specifications, and the inclusion of taxes.

¹¹ Historically, ITU guidelines have used the largest or capital city as the reference location when collecting ICT price data, given its wide service availability and alignment with prior methodologies. While this approach may not fully capture subnational variations, it provides a consistent baseline for international comparisons.

Table 2 Common Methodology for All Baskets

Territorial validity	Ŷ	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.
Treatment of promotions, zero-rated services, social media	***	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.
		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.
Currency	Ś	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. Any change/development in the local currency (e.g., devaluation, new denomination) should be specified in a note from the time of its effect.
Taxes		Prices should include all applicable taxes. If the advertised price does not already reflect those taxes, the full amount (including taxes) must be incorporated so that the final recorded price aligns with actual consumer prices.

Source: ITU

3.2. ITU ICT Price baskets 2025 Definitions and Data collection rules

This section presents the data collection rules for the ICT price baskets for which data is collected as of 2025. (See Table 1 above for a schematic overview of the baskets).

(1) The data-only mobile-broadband basket (5GB)

Ŷ	The data-only mobile-broadband basket refers to the cheapest available mobile data connection from the largest operator in a country, using 3G or more advanced technology, that allows at least 5 GB monthly Internet data usage and meets the data collection requirements specified below.
Data-only mobile-broadband basket (5 GB)	The basket refers to mobile service plans that focus on data transmission-both upload and download-at broadband speeds. This basket aims to measure the affordability of Internet access when users require data services. The minimum monthly data allowance for this basket has been increased from 2 GB to 5 GB , reflecting today's higher data consumption fueled by video streaming, online education, remote work, and other data-intensive activities. This increase is supported by improvements in mobile network infrastructure in recent years, which enable users to effectively consume higher data volumes. The adjustment underscores the growing importance of reliable and sufficiently large data plans to enable meaningful engagement in digital spaces.
	This basket applies to broadband services running on 3G or more advanced technologies (UMTS, HSDPA+/HSDPA, CDMA2000, LTE, LTE-Advanced, WiMAX/WirelessMAN). Plans must advertise a minimum download speed of 256 kbit/s. The main criterion is to identify the least expensive plan that meets or exceeds 5 GB of data per month. The scope excludes separate WiFi or hotspot-only offerings.
	METHOD OF DATA COLLECTION
Reference Operator	Mobile-broadband prices should be collected from the mobile-cellular operator with the largest market share, measured by the number of mobile-cellular subscriptions (regardless of whether broadband or not) in the country or economy.
Type of plan, contract modality, commitment period	Only residential, single-user prices should be collected. 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 ¹² .
Meeting the allowance thresholds	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: 5 GB, 3G and above (i.e., broadband speeds). The selected plan does not have to be the one whose data allowance most closely matches the basket's required volume. Instead, any plan that meets or exceeds the required threshold should be assessed, and the cheapest option selected.
	Example 1: An operator offers a monthly 2.5 GB and a monthly 10 GB plan, the 10 GB plan or two times the 2.5 GB plan could both be <i>valid options</i> for the 5 GB data-only mobile-broadband basket. After assessing their total price, the cheapest of the available options should be chosen.
	Example 2: An operator offers a monthly 10 GB and a monthly 4 GB plan and allows consumers of the 4 GB plan to purchase a 1 GB data add-on, the cheapest of the 10 GB plan or the 4 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 global or regional

¹² Under the revised methodology, prices associated with the commitment period of a postpaid plan are no longer considered.

	comparison. 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. Night-time data allowances will not be considered. 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. Data allowance beyond the throttling threshold offered at speeds below 256 kbit/s should not be counted.
Bundles	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.
Validity period	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 or complemented by one or more compatible plans or add-ons as required to reach the 30 days or four weeks validity period. The cheapest solution covering a validity period of 30 days or four weeks should be selected.
Territorial validity	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.
Treatment of promotions, zero- rated services, social media	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.
	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.
Treatment of differentiated on- /off-net prices	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. (Not applicable)
Treatment of differentiated on- /off-net prices Time of day	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. (Not applicable) Plans selected for this basket should allow usage at any time (i.e., not restricted to certain hours). Night-time data allowances offered separately–or at reduced or zero price–are excluded from both the data allowance and price calculations, ensuring that only freely usable data throughout the day is considered.
Treatment of differentiated on- /off-net prices Time of day Technology, speed	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. (Not applicable) Plans selected for this basket should allow usage at any time (i.e., not restricted to certain hours). Night-time data allowances offered separately–or at reduced or zero price–are excluded from both the data allowance and price calculations, ensuring that only freely usable data throughout the day is considered. 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.

Currency	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. Any change/development in the local currency (e.g., devaluation, new denomination) should be specified in a note from the time of its effect.
Taxes	Prices should include all applicable taxes. If the advertised price does not already reflect those taxes, the full amount (including taxes) must be incorporated so that the final recorded price aligns with actual consumer prices.
CLARIFICATION AND SCOPE	The basket focuses on residential, single-user prices, collected in the largest or capital city of the country or economy, over a standardized 30-day (or four-week) period. If a plan's validity is shorter, it may be combined or repeated as many times as necessary to reach the full 30 days or four weeks.
OPERATIONAL ISSUES	For plans that are limited in terms of validity (less than 30 days), the price of the additional days is calculated and added to the base package in order to obtain the final price. Two possibilities exist, depending on the operator, for extending a plan that is limited in terms of data allowance (or validity). The customer either (i) continues to use the service and pays an excess usage charge for additional data ¹³ , or (ii) purchases an additional (add-on) package. Thus, for some countries, prices reflect the price of the base package plus an excess-usage charge (e.g. a base package including 4.5 GB plus the price for 500 MB of excess usage for a monthly usage of 5 GB), or a multiplication of the base package price (e.g. two times the price of a 2.5 GB plan for a monthly usage of 5 GB) conditional to the plan can be taken multiple times or subject to T&Cs. In cases where operators offer plans that do not fully meet the 5 GB threshold, the price of additional data (through excess usage or add-ons) is included to reach a monthly total of 5 GB. For plans with validity shorter than 30 days, calculations are adjusted by multiplying or combining plans/add-ons until reaching a 30-day or four weeks period. If a plan advertises unlimited data but reduces the speed below 256 kbit/s after a certain volume, only the portion consumed before throttling is considered broadband data.

¹³ Some operators throttle speeds after the data allowance included in the base package has been used up. Customers can then pay an excess-usage charge in order to continue to have full-speed connections. In some cases, even throttled speeds are still considered to be broadband (i.e. equal to or greater than 256 kbit/s, according to ITU's definition).

(2) and (3) The mobile-broadband data- and voice high- and low-consumption baskets

() Mobile-broadband data- and voice high-and low- consumption baskets	 The mobile-broadband data and voice basket refers to the cheapest available mobile broadband data connection from the largest operator in a country, using 3G or more advanced technology, that allows the following amount of minimum monthly voice, SMS and Internet data usage respectively: Low-consumption data-and-voice basket: Includes a minimum of 1 GB of data, 70 voice minutes, and 50 SMS, representing the basic needs of low-usage users. High-consumption data-and-voice basket: Comprises 5 GB of data, 140 voice minutes, and 20 SMS, reflecting higher consumption typical in data-driven environments. These baskets aim to measure the affordability of combined voice, data, and SMS services in a standardized manner. By focusing on both low- and high-consumption patterns, they offer insights into the price of essential connectivity across diverse user groups.
	METHOD OF DATA COLLECTION
Reference Operator	Prices should be collected from the operator with the largest market share measured by the number of mobile-cellular subscriptions .
Type of plan, contract modality, commitment period	Only residential, single-user prices should be collected. 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 ¹⁴ .

¹⁴ Under the revised methodology, prices associated with the commitment period of a postpaid plan are no longer considered.

Meeting the allowance thresholds	 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: Low-consumption data-and-voice basket: 70 minutes, 50 SMS and 1 GB. High-consumption data-and-voice basket: 140 minutes, 20 SMS and 5 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. Example 1: An operator offers a monthly plan (Plan A) including 35 minutes, 25 SMS and 500 MB, and a monthly plan (Plan B) including 2 GB and unlimited domestic voice and SMS. In this case, both Plan A taken two times (if the package can be purchased twice per month) or Plan B taken once could be valid options for the <i>data-and-voice low-consumption basket</i>. After assessing their total monthly price, the cheapest offers a monthly plan (Plan C) with 100 minutes, 100 SMS and 1 GB allowance and a monthly plan (Plan D) with 70 minutes, 50 SMS and 500 MB allowance, and consumers of Plan D could purchase a monthly 500 MB data add-on, the cheapest of the two options (Plan C or Plan D with an add-on) 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. 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 offers should be used when they are the cheapeet), then the average of both should be recorded. Nighttime data allowances will not
Bundles	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.
Validity period	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 (conditional to the plan can be taken multiple times or subject to T&Cs) to cover a period of four weeks or complemented by one or more compatible plans or add-ons as required to reach the 30 days or four weeks validity period. The cheapest solution covering a validity period of 30 days or four weeks should be selected.
Territorial validity	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.
Treatment of promotions, zero- rated services, social media	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. 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.

Treatment of differentiated on- /off-net prices	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 price 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. 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 meas 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. 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.
Time of day	When selecting the plan, it should allow usage at any time (i.e., not restricted to certain hours). Night-time data allowances offered separately-or at reduced or zero price-are excluded from both the data allowance and price calculations, ensuring that only freely usable data throughout the day is considered.
Technology, speed	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.
Non-recurrent fees	Non-recurrent fees, such as installation/set-up fees are not collected.
Currency	Prices should be collected in the currency they are advertised, including taxes. If
	currency. Any change/development in the local currency (e.g., devaluation, new denomination) should be specified in a note from the time of its effect.
Taxes	 Prices should include all applicable taxes. If the advertised price does not already reflect those taxes, the full amount (including taxes) must be incorporated so that the final recorded price aligns with actual consumer prices.

OPERATIONAL ISSUES	The mobile data and voice low consumption basket is based on a monthly data usage of a minimum of 1 GB of data, 70 voice minutes, and 50 SMS. The mobile data and voice high consumption basket is based on a monthly data usage of a minimum of 5 GB, 140 minutes, and 20 SMS. For plans that limit the monthly amount of voice, SMSs, or data transferred (e.g., include data volume caps below 1 GB (low-consumption) or 5 GB (high-consumption)), the price of the additional units is added to the basket, either on a pay-as-you go basis or using compatible add-ons, if permits taking the base plan multiple times (see details below). The minimum speed of a broadband connection is 256 kbit/s, relying on 3G technologies or above. The data-and-voice price basket is chosen without regard to the plan's contract modality, while at the same time, early termination fees for post-paid plans with annual or longer commitment periods are not taken into consideration. For plans that are limited in terms of validity (less than 30 days or four weeks), the price of the additional days is calculated and added to the base package in order to obtain the final price. Two possibilities exist, depending on the operator, for extending a plan that is limited in terms of data allowance (or validity). The customer either (i) continues to use the service and pays an excess usage charge (e.g. a base package including 4.5 GB plus the price for 500 MB of excess usage for a monthly usage of 5 GB), or a multiplication of the base package price (e.g. twice the price of a 2.5 GB plan for a monthly usage of 5 GB) conditional to the plan can be taken multiple times or subject to T&Cs.
	times or subject to T&Cs. The plans selected represent the least expensive offers that include the minimum amount of data, minutes and SMSs for each respective data-and-voice basket. The guiding principle is to base each plan on what customers could and would purchase given the data allowance and validity of each plan.

¹⁵ Some operators throttle speeds after the data allowance included in the base package has been used up. Customers can then pay an excess-usage charge in order to continue to have full-speed connections. In some cases, even throttled speeds are still considered to be broadband (i.e. equal to or greater than 256 kbit/s, according to ITU's definition).

(4) The fixed-broadband basket

َرَيْتَى Fixed-broadband basket (5 GB)	The fixed-broadband basket refers to the monthly price of the cheapest available fixed-broadband Internet subscription plan offering at least 5 GB of data usage per month at a minimum advertised download speed of 256 kbit/s.
	METHOD OF DATA COLLECTION
Reference ISP	Retail price data should be collected from the Internet Service Provider (ISP) or operator with the largest market share (measured by the number of fixed-broadband subscriptions).
Type of plan, contract modality, commitment period	Only residential, single user prices should be collected. 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. ITU collects metadata for the plan selected for the basket, such as advertised speed, data allowance, price of excess usage, installation charges, etc. All metadata provided should refer to the plan selected for the fixed-broadband basket.
Meeting the allowance thresholds	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. If the plan selected has no limit for the monthly data usage, respondents to the ITU questionnaire should enter the required cap for the basket (e.g., 5 GB), and indicate "unlimited" in the respective data notes. If the advertised speed for the plan selected is "throttled" above a specific data cap, this should be indicated in the data notes. Data allowance beyond the throttling threshold offered at speeds below 256 kbps should not be counted. If a plan sets a data cap below 5 GB, the price of additional data is added to reach that threshold.
Bundles	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.
Validity period	The validity period considered for the basket is 30 days or four weeks.
Territorial validity	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.

Treatment of promotions, zero- rated services, social media	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.).
Treatment of differentiated on- /off-net prices	(Not applicable)
Time of day	Plans with limited hours of use will not be considered.
Technology, speed	Prices should be collected for the fixed-broadband (access) technology with the greatest number of subscriptions in the country or economy (FTTH, DSL, cable, fixed wireless, etc.).
Recurrent fees	The fixed broadband monthly subscription charge should include all associated monthly charges for fixed-broadband access. If the ISP charge (the price of accessing Internet content and applications) is separate from the network charge (the price of establishing the physical connection to the Internet), these should be added. If a monthly rental of a fixed-telephone line is required, even though telephone service will not be used, this should be explained in a note. Equipment rentals should also be excluded (e.g., modem). Where plans include other features such as free telephone calls, inclusion of the telephone-line rental or free video programming, it may not be possible to identify the price of broadband Internet access. In that case, it is important to explain in a note what other services are included with the broadband subscription.
Non-recurrent fees	Even though installation or set-up fees (non-recurrent charges) are not included in the calculation of the fixed-broadband basket, these prices should still be collected and recorded as reference information.
Currency	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. Any change/development in the local currency (e.g., devaluation, new denomination) should be specified in a note from the time of its effect.
Taxes	Prices should include all applicable taxes . If the advertised price does not already reflect those taxes, the full amount (including taxes) must be incorporated so that the final recorded price aligns with actual consumer prices.
CLARIFICATION AND SCOPE	The basket focuses on residential, single-user prices, typically collected in the largest or capital city of the country or economy, over a standardized 30-day (or four-week) period.
OPERATIONAL ISSUES	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).

4. Step-by-Step Calculation of ICT Price Statistics

40. This section provides a detailed explanation of the methodological steps involved in compiling ICT price statistics, ensuring consistency and accuracy across diverse economic and technological contexts. It begins with a comprehensive overview of the data collection process, outlining the selection of reference operators based on market share and the identification of the most affordable plans that meet predefined criteria. Various plan configurations, including add-ons, pay-as-you-go options, and multi-plan combinations, are considered to ensure affordability calculations accurately reflect consumer choices (see Figure 2).



Figure 2 Workflow for the Calculation of ICT Price Statistics

Source: ITU

4.1. Data collection

- 41. The process of data collection (Phase 1 in Figure 2) is a foundational step in compiling ICT price statistics, ensuring the accuracy and comparability of affordability metrics across different economies. The selection of the reference operator (Step 1 of Phase 1, in Figure 2) is critical in this process and is based on identifying the service provider with the largest market share, measured by the number of active subscriptions. This ensures that the analysis reflects the offerings most accessible to the majority of consumers. By standardizing the selection of the reference operator, the methodology aligns with the overarching goal of comparability, while prioritizing data that is representative of the consumer experience in each country.
- 42. Once the reference operator is determined (Step 1 of Phase 1 in Figure 2), the next step (Step 2 of Phase 1 in Figure 2) involves exploring available plans to identify the cheapest nonpromotional solution that meets the specified rules, including validity periods and allowance thresholds. Plans are evaluated to ensure they provide at least the minimum requirements for data, voice, and SMS allowances, as defined for each ICT price basket. However, it is also permissible to select plans that exceed these minimum thresholds if they are the most priceeffective option. For instance, a plan offering 8 GB of data may be selected for a basket requiring 5 GB if it is cheaper than alternative plans that strictly meet the minimum requirement. It is also important to note that it is not necessary to select a plan that exactly matches the data, voice, or SMS allowances; instead, the plan chosen must be the cheapest that meets each basket's requirements. For example, if a plan with 1.3 GB for 7 days is the cheapest option, it must be chosen over a plan with 5 GB for the same validity period, provided it fulfills the basket's requirements.
- 43. The concept of a "solution" is deliberately flexible to reflect the diverse range of consumer options available in global markets. Solutions can take the form of a single base plan, with or

without add-ons, or a combination of plans and pricing models. For example, a solution might include a base plan supplemented with pay-as-you-go pricing for additional services, multiple weekly plans to meet monthly thresholds, or a combination of plans and add-ons that collectively satisfy the basket's requirements. This flexibility ensures that the methodology captures the true affordability of services as experienced by consumers.

- 44. In calculating the total price of the basket, all relevant prices must be considered, including fees for add-ons or excess usage charges. For plans with shorter validity periods (e.g., weekly plans), the price of purchasing multiple iterations to cover a full month must be included. The total price of the basket is calculated in the local currency to provide an accurate representation of affordability within the local economic context.
- 45. Moreover, the methodology excludes promotional offers and discounts, as these are often temporary and may not represent the true price of services. Instead, regular plans are used to provide a consistent basis for comparison across time and markets. Taxes and other mandatory fees included in the advertised prices are accounted for, ensuring that the calculated prices reflect the full consumer expenditure required to access ICT services.
- 46. By combining these elements (Phase 1 and Phase 2 in Figure 2), the data collection process establishes a rigorous framework for identifying and evaluating ICT service prices, facilitating comparability in heterogeneous telecommunications markets. The use of standardized rules and flexible definitions ensures that the methodology remains robust and adaptable to diverse market conditions, while maintaining the precision and consistency required for reliable international comparisons. This systematic approach underpins the standardization of ICT price statistics, supporting their use in policymaking and research aimed at promoting digital inclusion.

5. Data Entry and Validation

47. Accurate data entry (Step 4 of Phase 1, in Figure 2) and validation (Phase 2, in Figure 2) are critical steps in ensuring the reliability and consistency of ICT price statistics. This section provides detailed guidelines for inputting data into the ITU's online data collection system, emphasizing adherence to standardized procedures and rules. It addresses the challenges that may arise when selected plans do not meet minimum thresholds for data allowances or validity periods, offering clear instructions to maintain uniformity across countries. By ensuring rigorous data entry and validation practices, this section supports the production of high-quality, ICT price statistics for global analysis.

5.1. Data Entry Guidelines

- 48. The ITU's online data collection system (accessible for statistical focal points by invitation) has been updated in 2024 to enhance user experience and streamline the data entry process. Key improvements include more intuitive navigation and a clearer overview of the survey, ensuring that users can efficiently complete their submissions. The system now asks only for relevant indicators, avoiding unnecessary inputs, such as excluding pay-as-you-go (PAYG) tariffs if they are not applicable. Redundancies have also been eliminated, with operator and tax data requested only once to reduce duplication. Additionally, statistics compilers now have the option to upload supporting evidence, such as screenshots or documentation of plans, to enhance data transparency. The system also includes automated calculations for the total price of each basket and provides comparisons with the previous year's data, enabling contributors to validate and verify their entries more effectively. These updates significantly improve the efficiency and accuracy of the data collection process.
- 49. Entering data into the ITU's online data collection system requires strict adherence to standardized procedures, ensuring that the information captured is consistent, accurate, and comparable across countries. The process begins with identifying the operator with the largest market share to ensure the data represents the most widely accessible services for consumers. Following this, the cheapest available plan that meets the predefined criteria for each ICT price basket is selected. Regardless of the configuration (a single plan, a plan with an add-on, a pay as you go option), the priority remains selecting the lowest-price solution, ensuring affordability is accurately reflected.
- 50. The ITU's online system includes fields to capture all relevant plan details, such as the name of the operator, plan modality (prepaid or postpaid), data allowance, voice and SMS thresholds, pricing structure, and validity period. When plans exceed minimum thresholds, such as offering higher data allowances than required, this information must also be recorded to contextualize the affordability calculations. Importantly, any adjustments made to calculate the total price, such as prorating prices for shorter validity periods or adding fees for additional data, must be explicitly noted in the system. This ensures that all price elements are traceable and aligned with the rules outlined in the ICT price basket methodology.
- 51. Special instructions apply to cases where the selected option does not meet the minimum thresholds for data or validity. In such scenarios, the system allows for entering combinations of plans that collectively satisfy the requirements. For example, if a basket requires 5 GB of data and no single plan provides this allowance, multiple smaller plans or a combination of a base plan and data add-ons may be used. Similarly, for plans with validity periods shorter than the 30-day standard, the price of extending the plan must be calculated and entered as part of the total monthly price. These adjustments ensure that the data entered reflects a practical and realistic measure of affordability, while maintaining consistency across submissions.
- 52. The data entry process also includes mechanisms for flagging and asking respondents to verify inconsistencies, which are critical for ensuring the integrity of the dataset. The online tool is designed to highlight discrepancies, such as mismatches between the selected plan's description and its recorded allowances or pricing. Additionally, operators' market share information is cross-verified to confirm that the data reflects the largest provider, as stipulated in the methodology. Any flagged issues must be resolved before finalizing the submission to ensure that the data adheres to ITU standards and is suitable for international comparison.

- 53. The timing of data entry is critical to maintaining the relevance and accuracy of ICT price statistics. Data should be collected and entered into the system during the designated reporting period to ensure it reflects the most current market conditions and pricing structures. Delays in data entry can result in outdated or inconsistent information, undermining the comparability of the statistics across countries and over time. Additionally, operators may adjust their plans and pricing frequently, emphasizing the importance of aligning the data collection and entry process with the reporting schedule. Adhering to the specified timeline ensures that the final dataset accurately captures the affordability and accessibility of ICT services as they are experienced by consumers during the reporting period.
- 54. Finally, as updates to the ITU's online data collection system are planned, users must stay informed about new features and functionalities. These updates aim to streamline the data entry process, enhance validation mechanisms, and improve user experience. By maintaining robust and transparent data entry practices, this process supports the production of high-quality ICT price statistics that are essential for global benchmarking and policymaking.

6. International Comparison of Basket Prices

55. The calculation of ICT basket prices and international benchmarking involves the application of standardized formulas to convert collected price data into internationally comparable units (Phase 3 in Figure 3). These are expressed in various forms, including nominal USD, PPP, and as a percentage of monthly GNI per capita. These units allow for a nuanced analysis of affordability across countries, accounting for differences in exchange rates, price of living, and income levels. This section provides an overview of the formulas and methodologies used to derive these comparable values, ensuring clarity and consistency in their application.



Figure 3. Workflow for Calculation of ICT Price Statistics

Source: ITU

- 56. When ICT services are offered as part of bundled plans¹⁶ that combine multiple services, such as broadband, voice, and television under a single price, the methodology prefers to identify the standalone price of the specific service whenever it is separately available and not artificially packaged. However, if a bundled offer is the cheapest solution that meets the basket's thresholds, the full bundle price should be used rather than attempting to isolate individual components. This approach ensures that the calculated internationally basket prices in comparable units accurately represent the true price of the relevant ICT service, rather than relying on averaged or estimated values derived from the bundle. By focusing on separating the components of bundled offerings, the methodology upholds the precision and comparability of the price data, ensuring consistency across different markets and service configurations.
- 57. Once the local currency prices are finalized, they are converted into USD and PPP units to facilitate international comparison. Nominal USD values are derived using the average exchange rate for the data collection period. PPP values are calculated using conversion factors (using World Bank conversion factors) that adjust for differences in purchasing power across countries, ensuring that the basket prices reflect the real economic effort required to access ICT services. Finally, basket prices expressed as a percentage of monthly GNI per capita provide a direct measure of affordability by relating service prices to national income levels. This unit emphasizes the economic burden of ICT services relative to average earnings, offering critical insights for policy interventions aimed at reducing prices. To further illustrate these calculations, the annex to this manual includes specific numerical examples from various

¹⁶ See the IMF *Consumer Price Index Manual*, paragraph 11.250 (p. 269), which highlights the rapid evolution of the telecommunications sector and its impact on pricing structures–particularly the increasing use of bundled service contracts aimed at attracting different consumer segments.

regions, such as the Americas, Africa, Europe, Arab States, and Asia Pacific. These examples showcase the application of formulas in diverse contexts, highlighting the methodology's adaptability and relevance across different economic environments.

Annex I

Acronyms

CDMA2000	Code Division Multiple Access 2000
DSL	Digital Subscriber Line
EGTI	Expert Group on Telecommunications/ICT Indicators
FTTH	Fiber to the Home
GDP	Gross Domestic Product
GNI	Gross National Income
GSMA	GSM Association
HSDPA	High-Speed Downlink Packet Access
ІСТ	Information and Communication Technology
IMF	International Monetary Fund
ITU	International Telecommunication Union
PAYG	Pay-as-you-go
PPP	Purchasing Power Parity
SNA	System of National Accounts
UMC	Universal and Meaningful Connectivity
UMTS	Universal Mobile Telecommunications System
UN	United Nations
WiMAX/WirelessMAN	Worldwide Interoperability for Microwave Access / Wireless Metropolitan Area Network

Glossary of Key Terms

Add-on	A supplementary service or data package that can be purchased in addition to a base plan. Add-ons are used to extend or enhance the allowances of the main plan, such as adding extra data, voice minutes, or SMS.
Base plan	The primary subscription or tariff plan offered by a service provider, which includes a fixed set of allowances for data, voice, and/or SMS. Additional services, such as add-ons, can be layered on top of the base plan to meet specific needs.
Basket	A standardized set of consumption profiles designed to measure the affordability of ICT services. Baskets are created to represent typical usage patterns.
Bundle	A combined offering of multiple ICT services, such as voice, SMS, and data. Bundles may also include non-ICT services, like online streaming or television content.
Off-net	Refers to communications (voice/SMS) made to a different network or service provider.
On-net	Refers to communications (voice/SMS) made within the same network or service provider.
Pay-as-you-go (PAYG)	A pricing model where users pay for services as they consume them, rather than subscribing to a plan with a specified allowance. PAYG is commonly used for prepaid services and allows users to purchase data, voice, or SMS allowances in small increments.

Plan	A predefined service package offered by an ICT provider that specifies allowances for data, voice, and/or SMS over a fixed validity period.
Regulatory Maturity	The extent to which a regulatory environment is developed, transparent, and capable of enforcing rules that promote competition, consumer protection, and market efficiency.
Throttling (of speed)	A practice where a service provider reduces the Internet speed of a user after a certain data threshold is reached, often as part of a "fair usage policy".
Zero-rated service	A service or application that is excluded from a user's data allowance, meaning the data used to access the service does not count toward their overall limit. Examples include social media platforms or messaging apps that are offered without data charges as part of certain plans.

Discontinued: The Mobile Cellular Low-usage Basket

- 58. The low-usage mobile cellular basket, defined by 70 minutes of voice and 20 SMS per month, was historically included in ICT price statistics to measure the affordability of basic mobile communication services. This basket reflected the entry-level consumption patterns of users in many economies during its initial implementation. By capturing the prices associated with minimal voice and SMS usage, it provided valuable insights into the accessibility of essential mobile services, particularly for lower-income populations.
- 59. However, the removal of this basket from data collection marks a significant methodological update, reflecting a shift in global communication trends. The decision to retire the low-usage basket recognizes the critical role of mobile data in today's digital ecosystems, where Internetbased messaging and voice applications dominate. As mobile data has become an indispensable component of connectivity, the relevance of a voice-and-SMS-centric basket has diminished. The exclusion of this basket aligns the methodology with modern consumption patterns, ensuring that ICT price statistics remain responsive to technological advancements and the evolving needs of users worldwide.

Temporary data collection: The Mobile-broadband data and voice high-consumption basket, according to the 2021-2024 definition

60. The EGTI Meeting in September 2024 decided that while data allowance should change for the Mobile-broadband data and voice high-consumption basket, data should also be collected, on a temporary basis, according to the old definition to ensure continuity for this basket that is used in international indices. Data collection rules for this basket will be identical to that of the 2025 revision of the Mobile-broadband data and voice high-consumption basket, but different thresholds will apply (140 minutes, 70 SMS and 2 GB data).

Annex II Examples - Calculation of basket prices

- 61. This annex presents fifteen numerical and visual examples in a narrative format, illustrating the calculation procedures for each of the revised ICT baskets. By offering concrete scenarios and accompanying explanations, it aims to provide users with a clear understanding of the methodologies applied. Specifically, the annex includes four examples for the Data-Only Mobile-broadband Basket (Cabo Verde, Oman, Chile and Macedonia), four for the Mobile-broadband Data and Voice Low Consumption Basket (Philippines, Oman, Tanzania and Chile), four for the Mobile-broadband Data and Voice High Consumption Basket (Oman, Tanzania, Chile and Malta), and three for the Fixed-broadband basket (Chile, San Marino and Australia).
- 62. These cases have been carefully selected to represent diverse market conditions, illustrating how the same fundamental principles can be adapted to different economic environments. Each example offers a detailed breakdown of the relevant components–such as minimum data requirements, voice and SMS allowances, and price adjustments for varying validity periods– so that practitioners can replicate the calculations accurately in their own contexts. The goal is to ensure that the process of identifying and evaluating the most price-effective plans, as well as reconciling them with the basket definitions, is both transparent and replicable across a range of countries and ICT infrastructures.
- 63. Real-world plan prices were taken from operator websites for educational purposes. These examples aim to provide a practical demonstration of the methodology, highlighting the selection and calculation process for each basket. To ensure clarity, only a reduced version of the essential information is provided in the graphical examples.

A.II.1 Data-only mobile-broadband basket (5GB)

EXAMPLE 1. CABO VERDE: DATA-ONLY MOBILE-BROADBAND BASKET (5 GB)

- 64. The first example illustrates the principle that preference should be given to the cheapest available package, even if it is bundled with other services, such as voice and SMS services. It demonstrates the selection process and price calculation for a data-only mobile-broadband basket in Cabo Verde, reflecting the updated threshold of 5 GB of data.
- 65. In this scenario, two options are available:
 - A data-only plan offering 6 GB of data for CVE 1650 per month.
 - A bundled package combining 7 GB of data (7000 MB) with unlimited minutes of voice calls and SMSs for CVE 1000 per month.
- 66. The example shows how the bundled option (Option 2), despite including additional voice services and SMS, is chosen as it represents the cheaper solution that meets the basket's criteria. This approach ensures affordability remains the guiding principle, aligning with ITU's methodology for data collection and analysis (see Graphic 1).

OPTION 1: Data Only Plan			OPTION 2: Bundled Plan				
			D'Kel Good Morning	D'Kel Good Weekly			
Volume	Time	Price	\$ 100 xay	\$ 300 /met.			
			🗸 300 MB	🗸 2.000 MB			
25 MB	24 hours	CVE 40	 Unlimited calls within the Alou Mobile Network, except Powa Swag 	 Unlimited calls within the Alou Mobile Network, except Powa Swag 			
			 Unlimited SMS within the Alou Mobile Network 	 Unlimited SMS within the Alou Mobile Network 			
500 MB	30 days	CVE 350	✓ Validity 24 hours	Validity 7 days			
			How to activate >	How to activate 🤌			
1 GB	30 days	CVE 490					
			D'Kel Good Month 1	D'Kel Good Month 2			
3 GB	30 days	CVE 850	\$ 700 math	\$ 1,000 Josefi			
	70.1	01/54/50	✓ 5,000 M8	7,000 M8			
6 GB	30 days	CVE 1650	 Unlimited calls within the Alou Mobile Network, except Powa Swag 	 Unlimited calls/SMS's within the Alou Mobile Network 			
40.00	70.1	01/5 0500	Unlimited SMS within the Alou Mobile Network	15 min cells to other networks			
10 GB	30 days	CVE 2500	Validity 30 days	Validity 30 days			
			How to activate >	How to activate >			
			How to activate >	How to activate >			

Graphic 1 Cabo Verde Example: Data-Only Mobile-broadband Basket (5 GB)

Source: Alou Cabo Verde website (retreived: January 2025)

EXAMPLE 2. OMAN: DATA-ONLY MOBILE-BROADBAND BASKET (5 GB)

- 67. Secondly, the Oman example illustrates the application of ITU's methodology for selecting the most affordable solution for a data-only mobile-broadband basket that meets the updated 2024 threshold of 5 GB of data. This process demonstrates the importance of comparing various plan configurations to identify the cheapest option, ensuring that affordability remains central to ICT price basket calculations.
- 68. In this example, the options include a mix of daily, weekly, and monthly data plans, with different volumes and validity periods. The methodology considers the cumulative price of meeting the 5 GB threshold when plans are combined, prorated, or supplemented with addons to achieve the minimum time requirement. The analysis highlights how larger bundled options can sometimes offer better value than standalone packages. Ultimately, the selected option (the one highlighted in green) aligns with ITU's guiding principle to prioritize affordability while ensuring comparability across countries (see Graphic 2).



Graphic 2 Oman Example: Data-Only Mobile-broadband Basket (5 GB)

Source: Ooredoo Oman website (retreived: January 2025)

EXAMPLE 3. CHILE: DATA-ONLY MOBILE-BROADBAND BASKET (5 GB)

- 69. The third example is the one from Chile, that demonstrates the flexibility of ITU's methodology in selecting the most affordable solution for a data-only mobile-broadband basket, even when the chosen plan exceeds the minimum threshold of 5 GB. This approach highlights the importance of evaluating all available options, including plans that offer higher data volumes, to identify the cheapest solution that meets the basket requirements.
- 70. In this scenario, the available options include plans with varying data allowances, ranging from 600 MB to 10 GB, along with different validity periods and prices. The methodology emphasizes that if a plan with a larger data allowance (e.g., 10 GB) is more price-effective than plans that are closer to the 5 GB threshold, the larger plan should be selected. This ensures that affordability remains the primary consideration, enabling users to access more data without additional price (see Graphic 3).



Graphic 3 Chile Example: Data-only mobile-broadband basket (5GB)

Source: Entel Chile website (retreived: January 2025)

EXAMPLE 4. NORTH MACEDONIA: DATA-ONLY MOBILE-BROADBAND BASKET (5 GB)

71. Finally, the North Macedonia example underscores the importance of adhering to ITU's methodology when selecting plans for the data-only mobile-broadband basket. According to the guidelines, promotional additional data should not be considered. Prices must reflect regular, non-promotional plans, excluding any temporary discounts or offers. This ensures that the affordability calculations are based on stable and comparable pricing across different markets.

Graphic 4 North Macedonia Example: Data-only mobile-broadband basket (5 GB)



Source: Telekom North Macedonia website (retreived: January 2025)

- 72. In this case, six options are available, ranging from Weekly Internet S at 59 Denars for 500 MB to Monthly Internet L at 499 Denars for 8 GB. A simple analysis of the options shows that meeting the 5 GB threshold at the lowest price could be achieved by selecting Weekly Internet M five times for a total of 495 Denars. This approach meets the data requirement while maintaining simplicity, as the plan offers 1 GB per week without add-ons or combinations.
- 73. However, further analysis highlights an even better solution: combining Weekly Internet M three times (3 x 1 GB = 3 GB, for 297 Denars) with Weekly Internet L once (2 GB for 129 Denars). This combination totals 426 Denars for 5 GB, making it the most affordable option. This demonstrates the flexibility of ITU's methodology in considering combinations of plans to minimize prices while meeting basket requirements (see Graphic 4).

A.II.2 Mobile-broadband data and voice low-consumption basket (70min 50SMS 1GB)

EXAMPLE 5. THE PHILIPPINES: MOBILE-BROADBAND DATA AND VOICE LOW-CONSUMPTION BASKET

- 74. The Philippines example illustrates the importance of systematically evaluating all available plans, especially when considering daily or weekly options that might need to be multiplied to meet the monthly data requirements. While all the plans in this example offer unlimited calls and SMSs, the deciding factor for selecting the most price-effective option lies in the data allowance provided by each plan.
- 75. Among the six options analyzed, plans like GoUNLI20 and GoUNLI30 may initially appear affordable. However, meeting the low consumption basket threshold of one month or 28 days requires multiplying these plans across the validity period, significantly increasing their total price. For instance, the GoUNLI20 plan would need to be purchased 28 times to meet the requirement, resulting in a total price of PHP 560. Similarly, weekly plans like GoUNLI95, which need to be repeated four times, accumulate price that are higher than other alternatives. Ultimately, the GoUNLI350 plan, offering 3 GB of data for PHP 350 over a 30-day period, emerges as the best choice. This example demonstrates the importance of evaluating all available plans (see Graphic 5).

Promo	Validity	Features	Price				
		Unlimited Calls to All Networks				Unlimited Calls to All Networks	
GoUNLI20	1 day	Unlimited Texts to All Networks	P20	GoUNLI95	7 days	Unlimited Texts to All Networks	P95
P 560 / 2	8x / 1.4GB	50MB of mobile internet		P 380 / 4	4x / 4 <mark>GB</mark>	1GB of mobile internet	
		Unlimited Calls to All Networks				Unlimited Calls to All Networks	
GoUNLI30	2 days	Unlimited Texts to All Networks	P30	GoUNLI180	15 days	Unlimited Texts to All Networks	P180
<mark>P 420 / 1</mark>	4x / 1.4GB	100 MB of mobile internet		<mark>P 360 / 2</mark>	x / <mark>4</mark> GB	2GB of mobile internet	
		Unlimited Calls to All Networks				Unlimited Calls to All Networks	
GoUNLI50	3 days	Unlimited Texts to All Networks	P50	GoUNLI350	30 days	Unlimited Texts to All Networks	P350
P 500 /	10x / 5GB	500 MB of mobile		P 350 / 1	1x / 3 <mark>GB</mark>	3GB of mobile	

Graphic 5 Philippines Example: Mobile-broadband data and voice low-consumption basket

Source: Globe Philippines website (retreived: January 2025)

EXAMPLE 6. OMAN: MOBILE-BROADBAND DATA AND VOICE LOW-CONSUMPTION BASKET

- 76. The second example, based on Oman, highlights the flexibility of ITU's methodology by showing how combining a bundle with a "pay as you go" approach can yield the most price-effective solution. This example emphasizes the importance of evaluating plans not just for their bundled features but also for how additional prices, such as SMS charges, can be incorporated efficiently.
- 77. In this scenario, three main bundles are available: Hala OMR 4, which includes 3 GB of data and 100 local minutes; Hala OMR 7, offering 7 GB of data and 200 local minutes; and Hala OMR 10, which provides 12 GB of data and 300 local minutes. For the low-consumption basket requirements, the Hala OMR 4 bundle emerges as a strong candidate, covering the data and voice needs for just OMR 4, but the plan is not including the 50 SMS of the basket.
- 78. The best alternative involves combining the Hala OMR 4 bundle with a "pay as you go" approach for SMS. At OMR 0.105 per SMS, sending the required 50 SMS adds OMR 5.25, bringing the total price to OMR 9.25. This combination provides the most economical solution while fulfilling the basket criteria. This case highlights the importance of assessing both bundled plans and supplemental pricing structures to identify the most affordable option (see Graphic 6).

Hala* OMR 4 S GB 3 GB 2 GE (C ? O C S C) - 100 Local Minutes - Data Rollovery (use any remaining open data the following month) - Valid for 4 Weeks - Sim Charge OMR 1 includes VAT - Terms and conditions anoty - Terms and conditions anoty - Buy Now	Hala* OMR 7 • 10 GB 2 GB 2 GB 2 GB 2 GB • 2 Ob Local Minutes • Data Rollover (use any remaining open data the following month) • Valid for 4 Weeks • Valid for 4 Weeks • Sim Charge OMR 1 includes VAT • Items and conditions andy: • Items and conditions andy: • Buy Now	Hala* OMR 10 • 16 GB 12 GB Rosa+ GC() 4 GB (P * O * P * O * P * O * P * O * O * P * O * O	BEST ALTERNATIVE:
Local Rates Price (RO)	Internation	PAYG	Hala OMR 4 + Pay as you go for SMS: OMR4 for the bundle + 50 * OMR 0.105 for SMS= OMR 9.25
Data (MB) SMS (local)		42 BZ/ MIN 10.5 BZ/MB 10.5 BZ/SMS	
MMS (local) Video Call (local)		47 Bz/MMS 58 Bz/min	
IMPOR	TANT INFO: Prices include 5% VA1	r	

Graphic 6 Oman Example: Mobile-broadband data and voice low consumption basket

Source: Ooredoo Oman website (retreived: January 2025)

EXAMPLE 7. TANZANIA: MOBILE-BROADBAND DATA AND VOICE LOW-CONSUMPTION BASKET

- 79. Thirdly, the Tanzanian example showcases a scenario where a PAYG approach is more economical than any of the available bundles for meeting the requirements of the low consumption basket. This case emphasizes the importance of carefully analyzing PAYG rates, which can sometimes provide greater affordability than bundled options.
- 80. In this scenario, the requirements include 1 GB of data, 70 minutes of voice calls, and 50 SMS. While multiple bundles are offered, such as monthly packages providing up to 10 GB and 500 SMS and more than 1000 voice minutes, these are either over-provisioned or priced significantly higher than the PAYG solution. PAYG rates for data are TZS 0.0091 per KB, for SMS are TZS 8 per message, and for voice calls are TZS 0.50 per second. Calculations reveal that PAYG would require TZS 9542 for 1 GB of data, TZS 400 for 50 SMS, and TZS 2100 for 70 minutes of calls, totaling TZS 12042. This example underscores the need to evaluate both

bundled and PAYG options to identify the most affordable solution for ICT price baskets (see Graphic 7).



Graphic 7 Tanzania Example: Mobile-broadband data and voice low consumption basket

Source: Vodacom Tanzania website (retreived: January 2025)

EXAMPLE 8. CHILE: MOBILE-BROADBAND DATA AND VOICE LOW-CONSUMPTION BASKET

- 81. Finally, the Chile example demonstrates how the same bundle selected for the data-only mobile-broadband basket can also serve as the foundation for meeting the requirements of the mobile-broadband data and voice low consumption basket, with the addition of a "pay as you go" option for SMS. In this case, the CHL 5000 plan, which provides 10 GB of data and 250 minutes of voice for 30 days, was already selected for the data-only basket due to its affordability and high data allowance. To meet the requirements of this low consumption basket, which includes 50 SMS, an additional "pay as you go" option for SMS is required. At a rate of CHL 50 per SMS, sending 50 SMS adds a supplementary charge of CHL 2500, making the combined total for this solution CHL 7500.
- 82. This approach underscores the possibility of leveraging a single, well-structured bundle while adding a tailored solution for unmet criteria, such as SMS. By combining the CHL 5000 data and voice plan with the pay as you go SMS option, the methodology ensures that the basket's requirements are satisfied while keeping the total expenditure within an economical range (see Graphic 8).



Graphic 8 Chile Example: Mobile-broadband data and voice low consumption basket

Source: Entel Chile website (retreived: January 2025)

A.II.3 Mobile-broadband data and voice high-consumption basket (140min 20SMS 5GB)

EXAMPLE 9. OMAN: MOBILE-BROADBAND DATA AND VOICE HIGH-CONSUMPTION BASKET

83. The Oman example demonstrates the importance of evaluating each plan carefully to ensure compliance with basket requirements, particularly when promotional allowances are included. In this case, the Hala OMR 4 plan, while seemingly affordable, is not valid for the high consumption basket as it includes 2 GB of promotional data, leaving only 3 GB available for regular use. Since the high consumption basket requires a minimum of 5 GB of data, the Hala OMR 4 plan does not meet the criteria (also, don't meet the criteria of the 140 minutes).

Graphic 9 Oman Example: Mobile-broadband data and voice high consumption basket



Source: Ooredoo Oman website (retreived: January 2025)

84. The Hala OMR 7 plan, however, satisfies the basket requirements. It provides 7 GB of data for free use, along with 200 local minutes. To fulfill the SMS requirement for the high consumption basket, an additional "pay as you go" approach is necessary. At a rate of OMR 0.105 per SMS,

the price of 20 SMS totals OMR 2.10, which, when added to the bundle price of OMR 7, results in a total of OMR 9.10. This example highlights the importance of distinguishing between promotional and regular allowances when selecting plans. By combining the Hala OMR 7 bundle with the "pay as you go" option for SMS, this approach ensures compliance with basket criteria while maintaining price efficiency (see Graphic 9).

EXAMPLE 10. TANZANIA: MOBILE-BROADBAND DATA AND VOICE HIGH-CONSUMPTION BASKET

- 85. Secondly, the Tanzanian example highlights how the choice between bundles and PAYG depends on each case. Unlike the low consumption basket, where PAYG proved to be the more economical option, the high consumption basket demonstrates that selecting a bundle is the better alternative for this scenario.
- 86. For the high consumption basket, the requirements include 5 GB of data, 140 minutes of voice calls, and 20 SMS. Calculating the PAYG rates for this consumption shows a total expenditure of TZS 52,070: TZS 47,710 for data, TZS 4,200 for voice calls, and TZS 160 for SMS. This total far exceeds the price of the TZS 30,000 monthly bundle, which provides 10 GB of data, 1280 minutes of voice calls, and 500 SMS. This bundle not only fulfills the basket's requirements but also provides a significant surplus in all categories. This case underscores the importance of assessing the basket's specific consumption requirements when deciding between PAYG and bundled plans (see Graphic 10).

Daily 30 Minutes Allnet, 20 SMS TZS 500 Daily 150 Minutes Allnet, 20 SMS TZS 1000 150 Minutes Allnet, 20 SMS, 490MB TZS 2000 Daily 200 Minutes Allnet, 50 SMS Weekly TZS 2500 1000 Minutes Allnet, 50 SMS Weekly TZS 5000 Weekly 460 Minutes Allnet, 50 SMS TZS 3000 550 Minutes Allnet, 100 SMS, 3GB Weekly TZS 10.000 Weekly 200 Minutes Allnet, 50 SMS (Autorenewal) TZS 2500 Weekly 460 Minutes Allnet, 50 SMS (Autorenewal) TZS 3000 1000 Minutes Allnet, 50 SMS (Autorenewal) Weekly TZS 5000 Monthly 1200 Minutes Allnet, 100 SMS TZS 10.000 Monthly 3000 Minutes Allnet, 100 SMS TZS 20.000 Monthly 1280 Minutes Allnet, 500 SMS, 10GB TZS 30,000 Monthly 1200 Minutes Allnet, 500 SMS, 19.9GB TZS 50.000 Monthly 1200 Minutes Allnet, 100 SMS (Autorenewal) TZS 10.000 Monthly 3000 Minutes Allnet, 100 SMS (Autorenewal) TZS 20.000 CHEKA ALL NETWORK SMS PAYG GB= 5*1024*1024*0.0091=477 Pav as You Go Calls without bundle to Vodacom will be charged Tsh 0.50 per second and Vodacom to other network Tsh 0.50 per second 20 SMS=8*20=160 Data browsing without bundle will be charged Tsh 0.0091 per KB 140 minutes=0.50*60*140=420 All local SMS without bundle will be charged Tsh 8 per SMS to any network TOTAL= TZS 52070 * All charges are Tax Inclusive

Graphic 10 Tanzania Example: Mobile-broadband data and voice high consumption basket

Source: Vodacom Tanzania website (retreived: January 2025)

EXAMPLE 11. CHILE: MOBILE-BROADBAND DATA AND VOICE HIGH-CONSUMPTION BASKET

87. Thirdly, the Chile example demonstrates the versatility of ITU's methodology, as the plan selected for the low consumption basket can also be applied to the high consumption basket, provided it meets the basket requirements and remains the most economical option. For the high consumption basket, the requirements include 5 GB of data, 140 minutes of voice, and 20 SMS. The CHL 5000 plan, which provides 10 GB of data and 250 minutes of voice for 30 days, fulfills these criteria, just as it did for the low consumption basket. To meet the SMS requirement, the "pay as you go" option is again utilized, with 20 SMS having an additional price of CHL 1000. This brings the total expenditure for the high consumption basket to CHL 6000, making it both compliant and price efficient.

88. Interestingly, the high consumption basket in this case proves to be less expensive than the low consumption basket, which required 50 SMS and totaled CHL 7500. This is due to the reduced SMS requirement for the high consumption basket, highlighting how differences in basket criteria can affect overall price (see Graphic 11).



Graphic 11 Chile Example: Mobile-broadband data and voice high consumption basket

Source: Entel Chile website (retreived: January 2025)

EXAMPLE 12. MALTA: MOBILE-BROADBAND DATA AND VOICE HIGH-CONSUMPTION BASKET

89. Lastly, the Malta example underscores the importance of thoroughly examining all available plans, including the detailed legal and service descriptions provided by the operator, to ensure accurate selection of the most price-effective option. This case demonstrates how essential it is to carefully interpret the specifics of each plan to determine whether it meets the requirements of the high consumption basket.

Epic Top-Up Plan & Packs		Date: 28.05.2024					CEPIC Level 6, SkyParks Business Centre Malta International Airport			
Epic Communications Limited		F	Plan Sumr	nary			Luqa LQA 4	1000 – Ma	lta	
This plan summary provides the main elements of this s information about the Service is provided in other docum Services and Equipment: Mobile Voice Telephony with following Monthly Bundle	ervice offer ients	as requir Data	ed by EU	Law*. It help	s to make a Minutes	comparisor	n between s	ervice offe SMS	rs. Complet	
	Top-Up Value Pack	Top-up Data	Top-up Talk	Top-Up Value Pack	Top-up Data	Top-up Talk	Top-Up Value Pack	Top-up Data	Top-up Talk	
Usage in Malta	9CB	ACB	100MB	200 Mins	N/A	100 Mine	200 SMS	N/A	100 SMS	
Usage in EU/UK (Roaming in EU/UK)	000	400		200 101113	N/A	100 101113	200 31413	19/25	100 31013	
Usage in Non-EU/UK (Roaming in Non-EU/UK)			in a s		N/A	80				
If Applicable: Care Benefits / Equipment		Not Applicable								
Speed of Internet and Remedies The mobile data speeds are up to 45Mbps Upload Spe or other quality measurements.) Price	eed & 270M	bps Dow	nload Spe	ed (Visit one	of our store	s in the ever	nt of regular	discrepan	cy in speed	
Monthly Price										
			1							

Graphic 12 Malta Example: Mobile-broadband data and voice high consumption basket

90. In this scenario, the Top-Up Value Pack emerges as the optimal choice. Priced at €9.99, it

Source: Epic Malta website (retreived: January 2025)

includes 8 GB of data, 200 minutes, and 200 SMS, exceeding the high consumption basket's minimum thresholds of 5 GB of data, 140 minutes, and 20 SMS. This example highlights the necessity of reviewing the fine print of service offers when compiling ICT price baskets. It ensures not only that the selected plan meets the defined criteria but also that there are no hidden restrictions or conditions that could disqualify it from consideration (see Graphic 12).

A.II.4 Fixed-broadband basket (5GB)

EXAMPLE 13. CHILE: FIXED-BROADBAND BASKET

91. The Chilean example for the Fixed-broadband basket highlights the importance of distinguishing between promotional pricing and the regular price that applies after the promotional period ends. In this case, the Internet plans offered by Movistar Chile display discounted prices for the first 12 months, such as CLP 12,990 for the 600 Mbps plan and CLP 15,990 for the 800 Mbps plan. However, these prices increase significantly after the first year, with the 600 Mbps plan rising to CLP 20,990 per month and the 800 Mbps plan to CLP 27,990 per month. The regular, non-promotional price must be used for ICT price basket calculations to ensure consistency and comparability.



Graphic 13 Chile Example: Fixed-broadband basket

Source: Movistar Chile website

92. This approach ensures that affordability assessments are not distorted by temporary discounts, which may not represent the true price of the service in the long term. For the Fixed-broadband basket, the regular price of CLP 20,990 for the 600 Mbps plan is selected, as it is the cheapest option that meets the minimum threshold of 5 GB of data per month at broadband speeds (see Graphic 13).

EXAMPLE 14. SAN MARINO: FIXED-BROADBAND BASKET

- 93. The San Marino example for the Fixed-broadband basket illustrates a common scenario where the most affordable option includes a bundle of services beyond just Internet access. In this case, Telecom Italia's "Internet Flash" plan offers up to 200 Mbps download speed and 20 Mbps upload speed, along with additional features such as a VOIP telephone line, unlimited free calls to local numbers within San Marino, and calls to Italy at discounted rates. The plan also includes a modem/router on loan and is priced at €35.90 per month.
- 94. While the primary focus of the Fixed-broadband basket is to assess the price of fixed broadband access, bundled services are often the most economical solution, as seen in this case. ITU's methodology ensures that the entire price of the bundle is considered, regardless of whether additional features like telephone services or equipment are included (see Graphic 14).



Graphic 14 San Marino Example: Fixed-broadband basket

Source: Telecom Italia (San Marino) website

EXAMPLE 15. AUSTRALIA: FIXED-BROADBAND BASKET

- 95. The Australia example highlights the importance of distinguishing between fixed broadband plans and mobile-broadband plans, particularly as 5G mobile-broadband options are often advertised alongside fixed broadband offerings. In this case, is display a mobile-broadband plan using 5G technology as alternative to traditional fixed broadband. While these plans may offer competitive speeds and pricing, they are categorized differently in the ICT price basket methodology.
- 96. For the purposes of the Fixed-broadband basket, the selected plan must come from the fixedbroadband technology with the highest number of subscriptions in the country. In this case, the best option is a plan offering a download speed of 25 Mbps at a monthly price of AUD 89, which meets the Fixed-broadband basket criteria (see Graphic 15).



Graphic 15 Australia Example: Fixed-broadband basket

Source: Telstra Australia website

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