

Policy Brief

The affordability of ICT services 2021

Summary

After years of steady decline, the share of income spent on telecommunication and Internet services increased globally in 2021. This is mainly the result of the global economic downturn triggered by the COVID-19 pandemic. In many economies, the long-standing trend of gradually declining prices for such services was outweighed by a steep drop in average gross national income (GNI) levels in 2020.

The yawning gap in affordability between high-income economies and the rest of the world persisted: the share of income that entry-level fixed and mobile broadband represents for users in low- and middle-income economies is typically five to six times greater than in high-income economies, thus contributing to perpetuating the digital divide (see Box 1 for methodology). These developments highlight the digital vulnerability of poorer communities, where people face a hard choice between having connectivity, which has become an even greater necessity in the pandemic, and meeting other basic needs. The affordability target set by the United Nations Broadband Commission for Sustainable Development – to bring the cost of entry-level broadband services below 2 per cent of monthly GNI per capita by 2025 – remains elusive.

Apart from the price, the actual value for money associated with the benchmark baskets also differed greatly across economies. The most striking example is in the advertised speed included in the benchmark

fixed broadband plans: that gap between high-income economies and the rest of the world nearly doubled in 2021.






The COVID-19 pandemic brought about two main counteracting trends in 2021 that influenced affordability. On the one hand, as digital replaced many physical interactions and the global demand for data usage surged, operators and regulators worked to ensure that access was maintained with a variety of measures: boosting capacity, increasing zero-rated services, providing temporary subsidies and so on. On the other hand, the real economic impact of the pandemic on national income levels in 2020 made information and communication technology (ICT) services less affordable for many users.

The fact that the demand for broadband services increased in the past two years, even as they became less affordable, shows that Internet access is not a luxury but a necessity. The risk is that a significant portion of the world's population will be left behind: those who face a trade-off between purchasing Internet access and meeting other basic needs.

This brief, produced by the International Telecommunication Union (ITU) and the Alliance for Affordable Internet (A4AI), gives a high-level overview of the results from the 2021 price data collection exercise, focusing on changes in the affordability of five representative ICT price baskets listed in Box 1.

BOX 1: What are the five ICT price baskets covered in this brief?

The [Expert Group on Telecommunication/ICT Indicators](#) (EGTI) of ITU has defined five baskets of ICT services to benchmark the cheapest price plans for five categories of services across economies. The baskets are revised from time to time to adjust for changes in the global market for ICT services. The figure below provides a simplified overview of the baskets used in the 2021 data collection. Details on the data collection methodology¹ are available on the ITU website, while a summary of changes with respect to 2021 is given in Box 3.

ICT price baskets		Minimum monthly allowance		
		Voice (minutes)	SMS (#)	Data
1	Data-only mobile-broadband basket 	-	-	2 GB
2	Mobile data and voice low-consumption basket 	70	20	500 MB
3	Mobile data and voice high-consumption basket 	140	70	2 GB
4	Mobile-cellular low-usage basket 	70	20	-
5	Fixed-broadband basket 	-	-	5 GB

For the global comparison, prices collected in local currency were converted to three different units: US dollars (USD), international dollars (adjusted for purchasing power differences, PPP\$), and a percentage of monthly GNI per capita (% GNI p.c.). The latter is the main measure of affordability, and hence the unit used primarily in this Policy Brief. The brief focuses on broad trends for high-level aggregates of economies: the regional grouping used by the [ITU Telecommunication Development Sector](#), the [M49 groups](#) of the United Nations, and the World Bank 2021 [income groups](#). Detailed data for nearly 200 economies worldwide for 2021 and previous years are available in the [online visualization app](#).

¹ ITU price data collection rules applied from May 2021 can be found at https://www.itu.int/en/ITU-D/Statistics/Documents/datacollection/IPB_Rules_2022.pdf.

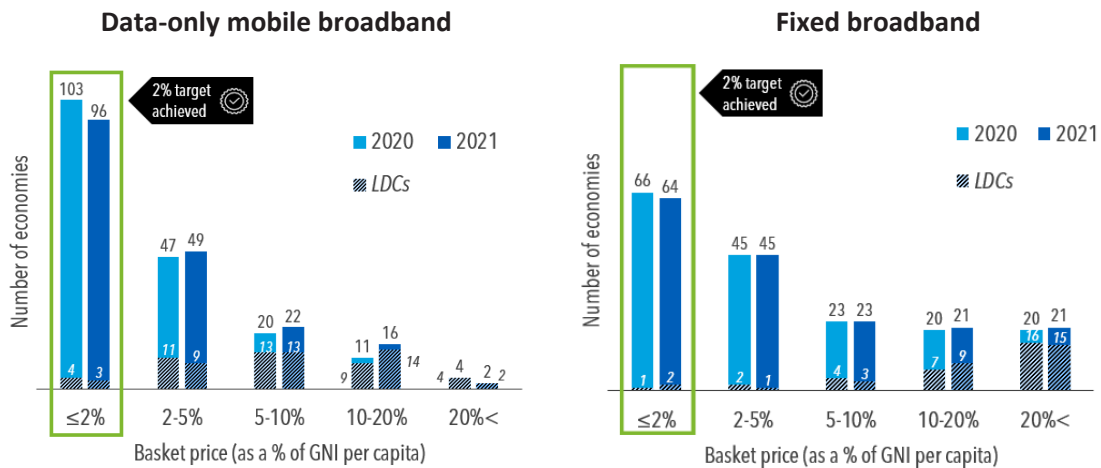
Progress towards the UN Broadband Commission target

In 2018, the UN Broadband Commission for Sustainable Development set its updated affordability target: to bring prices for entry-level broadband services below 2 per cent of monthly GNI per capita by 2025¹.

¹ See the Broadband Commission targets at <https://www.broadbandcommission.org/broadband-targets>.

Among the economies for which data are available for both 2020 and 2021, fewer met the 2 per cent affordability target in 2021 than in 2020, across the different types of service. Thus, only 96 economies met the target with regard to the *data-only mobile* broadband basket in 2021 (7 less than the previous year), and only 64 economies met the target with respect to the *fixed* broadband basket (down by 2 from the previous year), as shown in Figure 1. This reverses the trend of declining prices for the *data-only mobile* broadband basket observed in previous years.

Figure 1: Progress towards the UN Broadband Commission's target: number of economies by basket price class (expressed as % of GNI per capita)



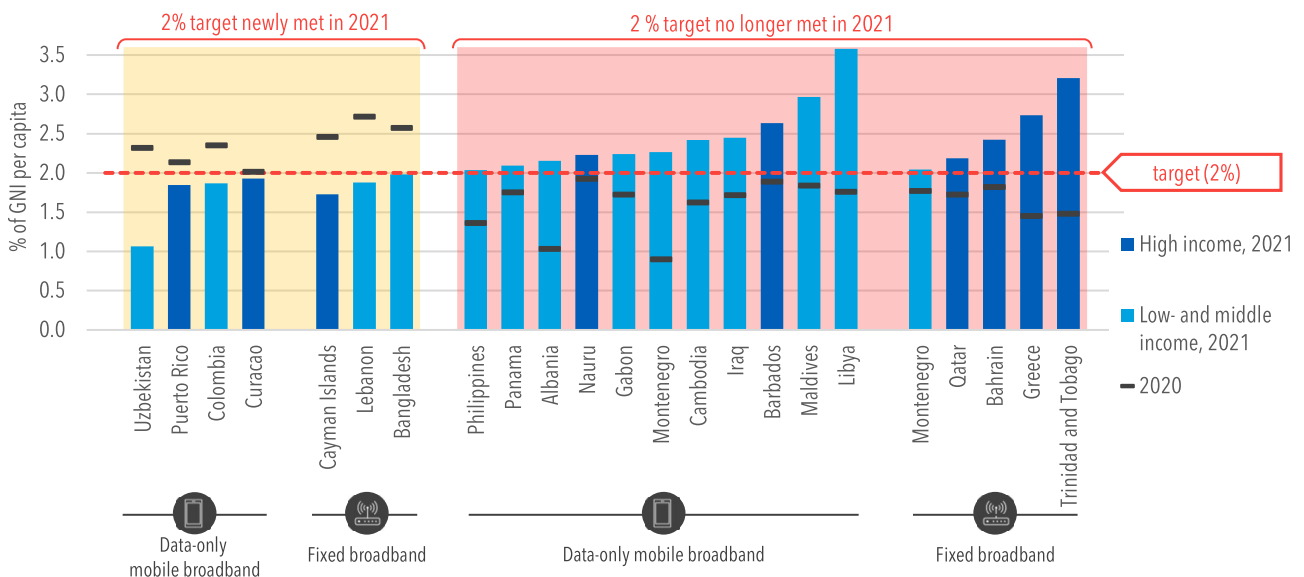
Note: The chart shows the distribution of economies by affordability class, defined by the price of the broadband basket in % GNI per capita. Only those economies that had basket data available for both years for mobile broadband (185 economies) and fixed broadband (174 economies) are considered. The LDC component in each class is shown hatched, with the number in italics. Source: ITU and A4AI.

The prices of broadband baskets remained far above the 2 per cent target for most of the least developed countries (LDCs). Of the 18 economies where mobile broadband Internet access cost more than 10 per cent of GNI per capita, 16 were LDCs. Only 4 LDCs – Bangladesh, Bhutan, Myanmar and the Republic of Nepal – met the broadband target in 2021. Bangladesh with both data-only mobile and fixed broadband baskets, Bhutan and Myanmar thanks to the affordability of data-only mobile broadband, and the Republic of Nepal due to fixed broadband.

Cambodia, a country that met the target in 2020, no longer did so in 2021. Box 2 gives further details about the main reasons behind the changes in affordability.

While fewer countries met the 2 per cent target in 2021, there were some positive developments. The list of countries that met the broadband targets in 2021 included three low-and middle-income countries for which none of the baskets was under 2 per cent the previous year: Uzbekistan, Colombia and Lebanon (Figure 2).

Figure 2: Developments between 2020 and 2021 with regard to the Broadband Commission's affordability target: new entrants and exiting economies

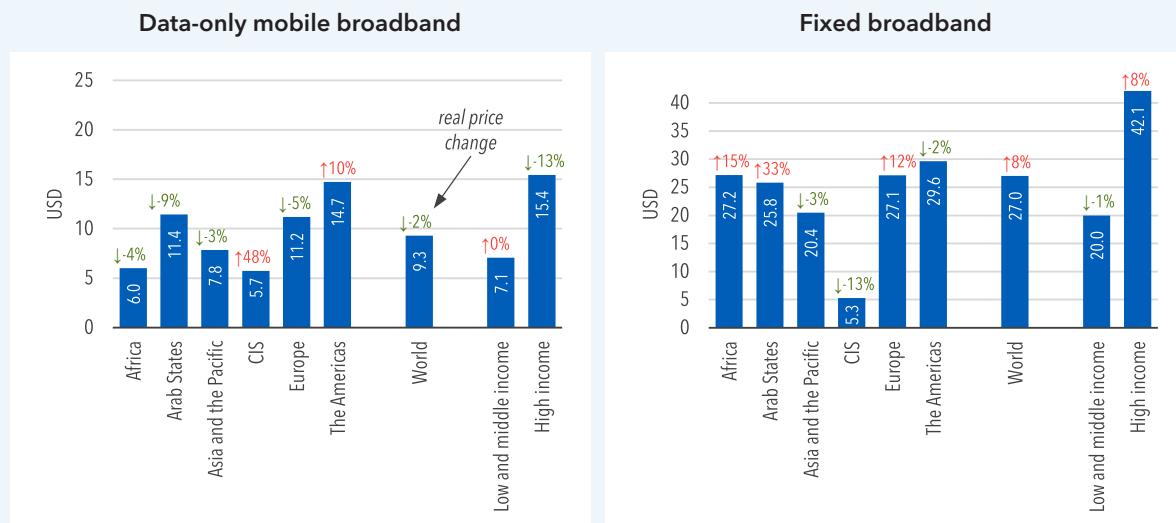


Note: Only those economies that had basket data available for both years for mobile broadband (185 economies) and fixed broadband (174) are considered. Economies are benchmarked according to the price of the entry-level data-only mobile broadband basket (defined as the cheapest data-only mobile broadband subscription available domestically, with a minimum of 1.5 GB monthly data allowance in 2020 and 2 GB in 2021, and a 3G technology or above) and the price of an entry-level fixed broadband basket (defined as the cheapest fixed Internet subscription available domestically, with a minimum of 5 GB monthly data allowance and an advertised download speed of at least 256 kbit/s). Source: ITU and A4AI.

BOX 2: Why did the broadband baskets become less affordable in 2021?

Changes in affordability can result from changes in prices (the numerator) or in average national income (denominator). While prices for ICT services expressed in US dollars have become cheaper in many parts of the world, once adjusted for inflation they reveal considerable differences between regions and between baskets (Figure 3). For instance, for the data-only mobile broadband basket, the world median price (adjusted for income) decreased by 2 per cent from 2020 to 2021. However, high-income countries saw a drop of 13 per cent, while in low- and middle-income economies it remained virtually unchanged. During the same period, the median price of the fixed broadband basket increased by 8 per cent, driven mostly by price growth in high-income economies. The income-adjusted price increased because the slight fall in USD prices was outweighed by the steep drop in GNI. In addition, while operators around the world offered special promotions responding to specific demands during the pandemic, the data collected were prices for standard, non-promotional plans, to ensure global comparability. Thus, a key factor behind the erosion of affordability observed in 2021 was the decrease in GNI levels observed in 2020. (GNI values lag by one year due to data availability issues.) This highlights that the affordability of the entry-level broadband services that are the focus of the Broadband Commission is very sensitive to changes in income levels. By the same token, the setbacks experienced in attempts to reach the affordability target may well prove temporary in economies whose income bounces back to pre-crisis levels. Nevertheless, meeting the Broadband Commission target by 2025 will require stepping up efforts to enhance affordability, rather than just relying on a return to pre-pandemic levels.

Figure 3: Broadband basket prices in 2021 in USD, and changes compared to previous year, adjusted for inflation



Note: The chart shows the median price in USD of the data-only mobile broadband basket, based on a 1.5 GB allowance in 2020 and 2 GB in 2021, and the fixed broadband basket with a 5 GB allowance. Only those economies for which GNI-adjusted data could be obtained for both years for mobile broadband (185 economies) and fixed broadband (176) are considered. Inflation-adjusted real price changes from 2020 to 2021 are indicated above the bars. Source: ITU and A4AI.

Main findings

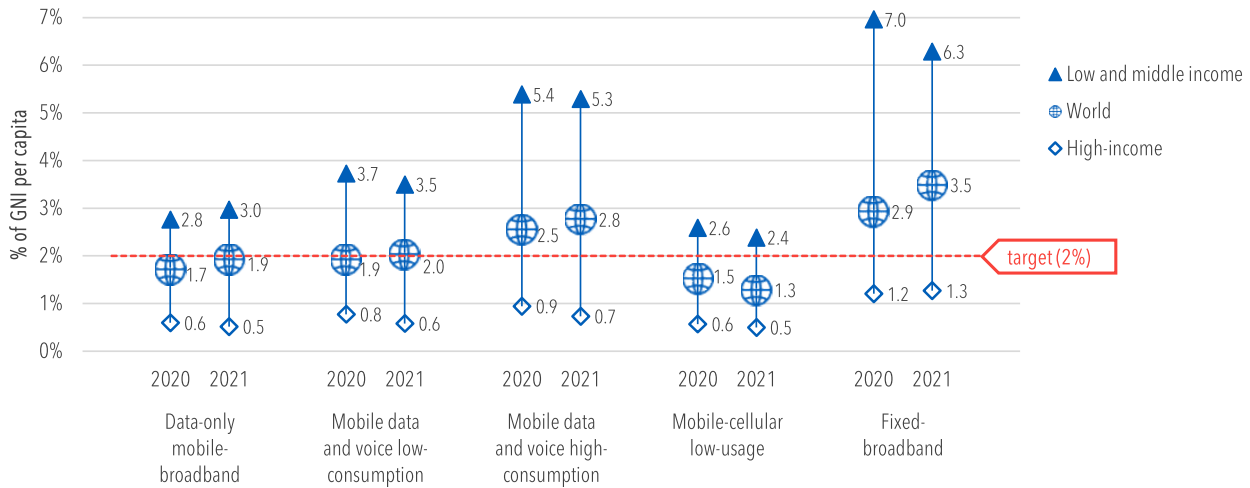
Overall, all four baskets that included data (fixed and mobile broadband) became less affordable in 2021. The gap between high-income economies and others (low- and middle-income) remained significant in 2021: relative to their income, consumers in low- and middle-income economies typically pay five to six times more for ICT services than do consumers in high-income economies. For the data-only mobile broadband basket and the mobile data and voice high-consumption basket, the gap widened in 2021. In the case of the fixed broadband basket, although it narrowed by 0.8 percentage points, the gap remains above 5 percentage points.

Data-only mobile broadband basket

Affordability of the entry-level mobile broadband basket is particularly relevant given that around 95 per cent of the world's population lives within range of at least a 3G mobile network.² Adjusted for GNI per capita, the world price of the basket increased by 0.2 percentage points in 2020, reaching 1.9 per cent in 2021, just below the affordability target set by the Broadband Commission. Affordability worsened slightly in two regions that had already failed to meet the target in 2020, Africa and the

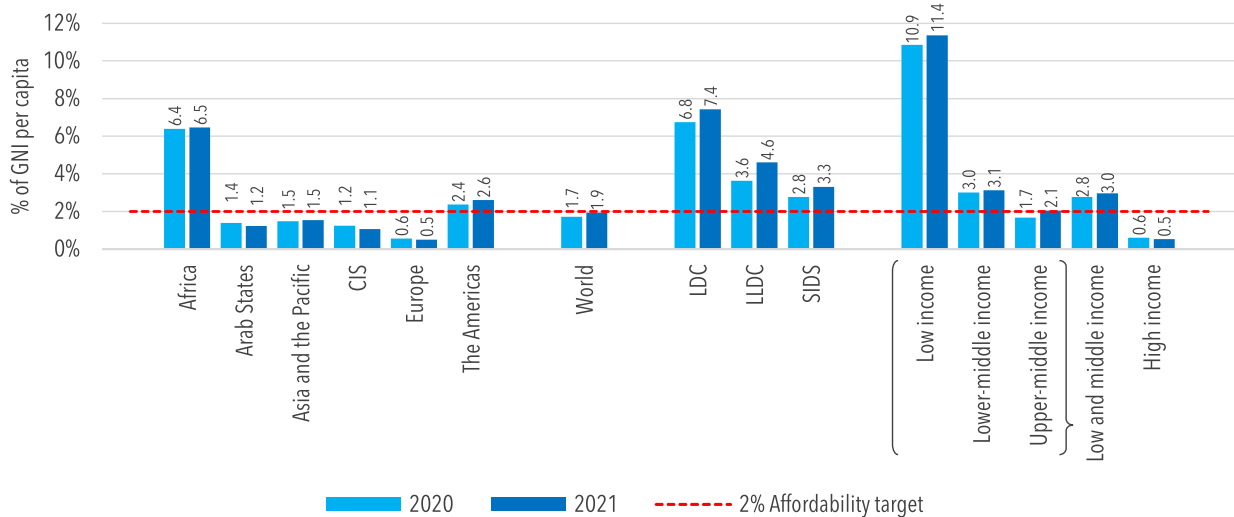
² ITU (2021) "Measuring digital development: Facts and figures 2021". Available at <https://www.itu.int/en/ITU-D/Statistics/Documents/facts/FactsFigures2021.pdf>.

Figure 4: Overview of basket prices, 2020-2021



Note: Median values per basket. Only those economies for which data were available for both years for mobile baskets (185 economies) and fixed broadband basket (176) are considered. Source: ITU and A4AI.

Figure 5: Data-only mobile broadband basket prices



Notes: By world region and level of development, expressed as a percentage of monthly GNI per capita, 2020-2021. Medians based on the 185 economies for which data were available for both years. Economies are benchmarked according to the price of an entry-level data-only basket, defined as the cheapest data-only mobile broadband subscription available domestically, with a 3G technology or above and a minimum monthly data allowance of 1.5 GB for 2020 and 2 GB for 2021. Source: ITU and A4AI.

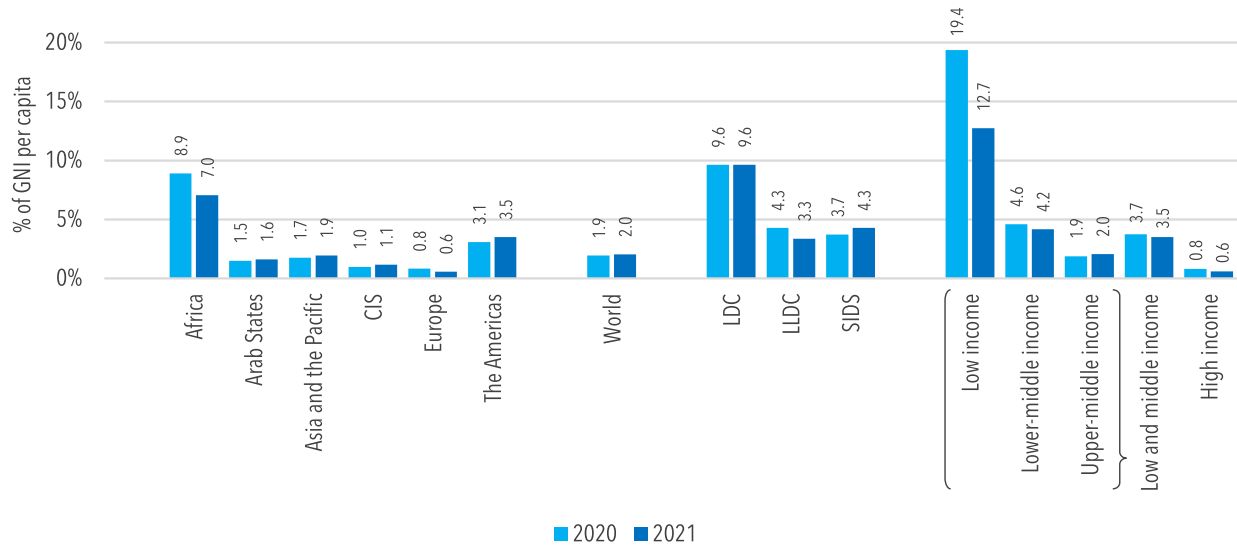
Americas, with Africa being far above the 2 per cent target (Figure 5).

The gap in affordability is at its most striking between countries with different income levels. Affordability worsened in all income groups, except the high-income economies. Low-income economies continue to face prohibitive prices for the benchmark of two gigabytes (2GB) of mobile data, with the median income-adjusted price in these countries four times as expensive as it was in the lower-middle-income economies and six times the global median price. The gap also increased between low and middle-income economies on the one hand and high-income economies on the other: in 2020, 2 GB of mobile data was five times as expensive for the former as it was for the latter; and rose to six times in 2021. The use of median values, of course, says nothing about the magnitude of

actual price variations. While there is a huge difference in affordability levels within the group of low-income economies (3.4 per cent of GNI per capita in Sudan versus 41 per cent in the Central African Republic), it is telling that the cheapest price within the group is still higher than the most expensive in the high-income economies (3.1 per cent of GNI per capita in Antigua). In LDCs, landlocked developing countries (LLDCs) and small island developing States (SIDS), affordability worsened between 2020 and 2021, especially in LLDCs where the price increased by a full percentage point.

Among the economies covered in the 2021 sample, the lowest prices for 2 GB of mobile data were those paid in Liechtenstein, Hong Kong (China), Macao (China), Luxembourg and Singapore, where they made up less than 0.2 per cent of monthly average GNI per capita.

Figure 6: Mobile data and voice low-consumption basket prices



Note: Medians based on the 185 economies for which data were available for the two years. Economies are benchmarked according to the price of an entry-level low-usage basket, defined as the cheapest mobile data and voice basket subscription available domestically, with a minimum of 70 minutes, 20 SMS and 500 MB monthly data allowance and a 3G technology or above. Source: ITU and A4AI.

Mobile data and voice baskets

Users around the world expect that a mobile broadband subscription will include traditional voice communications in addition to SMS messaging and Internet access (the latter often used for over-the-top (OTT) communication services). Given the differences in consumption practices between economies at different income levels, a low-consumption basket and a high-consumption basket have been defined. The low-consumption basket is based on the entry-level mobile-cellular basket allowance, 70 minutes of calls and 20 SMS messages, plus 500 MB of data usage. The high-consumption basket includes 140 minutes, 70 SMS and a data allowance at the same level as for the data-only mobile broadband basket, which is 2 GB as of 2021.³

Operators often market such services as bundles. However, the data collection rule for the baskets was to select the cheapest option from the representative operator that meets the basket allowance requirements. In some cases, this was a bundle, while in others it was a combination of a base plan with one or more add-ons.

In the case of the **mobile data and voice low-consumption basket**, the world median price in 2021 increased slightly, reaching 2 per cent of monthly GNI per capita. Affordability improved between 2020 and 2021 in all income groups, except the upper-middle income economies. Low-income economies saw the steepest GNI per capita price drop: almost 5 percentage points, reaching 12.7 per cent. This was primarily due to significant reductions in the most expensive basket prices in Africa. Regional disparities nevertheless persist: the median price of the basket in Africa was 7 per cent of monthly GNI per capita, even after the improvement of nearly 2 percentage points. The benchmark plan was 12

times as expensive in Africa as in Europe, the cheapest region. Consumers in the Americas faced relatively higher prices, with a deteriorating trend. After a 0.4 percentage point increase, in 2021 the price for the basket reached 3.5 per cent of monthly GNI per capita. In the remaining regions, the median basket price was at or below 2 per cent of GNI per capita. In SIDS, the basket became less affordable, increasing to 4.3 per cent of monthly GNI per capita, whereas consumers in LLDCs saw a 1 percentage point improvement.

The basket was most affordable in Luxembourg, Liechtenstein, Hong Kong (China), Macao (China), Israel, and Austria (in that order), ranging from 0.13 to 0.24 per cent of GNI per capita.

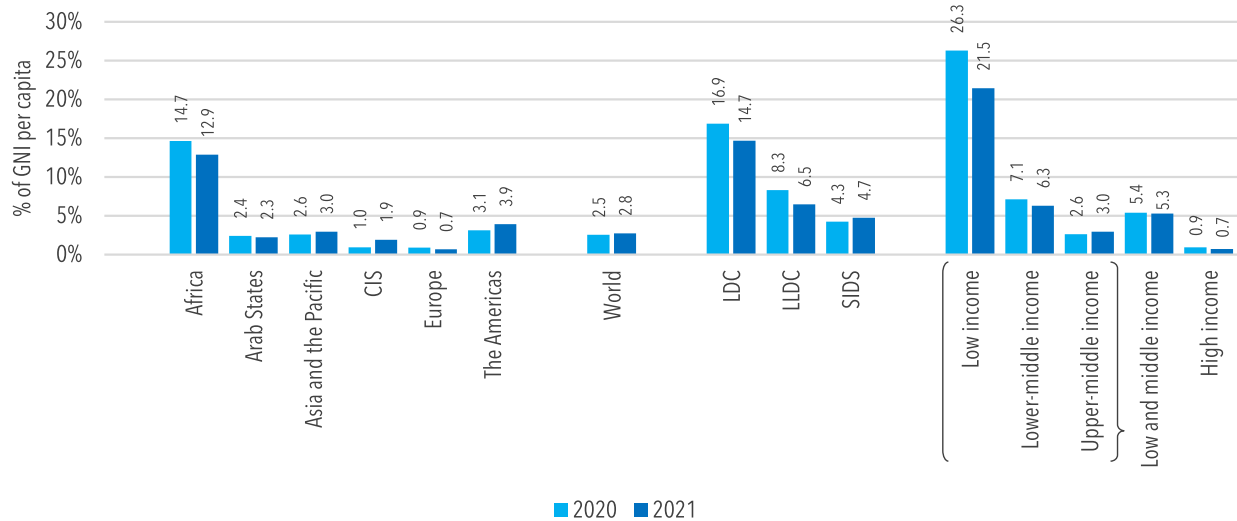
The median price of the **mobile data and voice high-consumption basket** decreased in all income groups except upper-middle-income economies. While the median for this group only increased by 0.4 percentage points, 15 upper-middle-income economies saw steep price increases, over 3 percentage points in some cases. The price increases in about a third of the economies monitored raised the world median from 2.5 to 2.8 per cent of monthly GNI per capita in 2021.

Although the median price paid for this basket in low-income economies fell by nearly 5 percentage points, it remains unaffordable at 21.5 per cent of monthly GNI per capita. Even in the cheapest economy in this group (Sudan) the basket remained above 7 per cent of GNI per capita, far above the price in the most expensive high-income economy (Nauru, at 4.9 per cent of GNI per capita).

Similarly, despite significant affordability improvements, in LDCs the basket cost 14.7 per cent of monthly GNI per capita. This hides significant variation, from 2 per cent in Bangladesh to 56.9 per cent in Burundi. While affordability in the Arab States and Europe has continued with slight improvements in 2021, it significantly worsened in Asia and the Pacific, the Commonwealth of Independent States

³ Following market trends, EGTI agreed in 2020 to increase the 1.5 GB data allowance used between 2018 and 2020 to 2 GB. See also Box 3 below.

Figure 7: Mobile data and voice high-consumption basket prices



Note: Medians based on the 185 economies for which data were available for the two years. Economies are benchmarked according to the price of an entry-level high-usage basket, defined as the cheapest data and voice basket subscription available domestically, with a minimum of 140 minutes, 70 SMS and 1.5 GB (for 2020) and 2 GB (for 2021) monthly data allowance and a 3G technology or above.
Source: ITU and A4AI.

(CIS) and the Americas, as well as in SIDS. A positive development was the decrease in the highest prices in all four of these groups.

The economies which had the lowest prices for the high-consumption basket were the same as for the low-consumption basket: Liechtenstein, Luxembourg, Macao (China), Israel, and Austria (in that order), with prices ranging between 0.13 and 0.24 per cent of GNI per capita.

Even as the price of the two data and voice baskets decreased in low-income economies, in terms of affordability a big gap separates the high and the low-consumption baskets (Figure 8). To enjoy the higher allowance thresholds of the high-consumption basket (twice as many minutes, over three times as many SMSs and four times as much Internet data), consumers in low-income economies must pay around 70 per cent more (almost 9 percentage points). In high-income economies, the high-consumption premium is a mere 0.1 percentage point.

Mobile-cellular low-usage basket

The world median price for the mobile-cellular low-usage basket dropped from 1.5 per cent to a historical low of 1.3 per cent of monthly GNI per capita in 2021 (see Figure 9). This basket has become more affordable across all income groups. Nevertheless, in low-income economies—where this service, representing the bare minimum of mobile communication without data usage, is still widespread—it costs the equivalent of a staggering 9.3 per cent of the average monthly income. The median hides a huge range of variation among the low-income economies: from 1.4 per cent of GNI per capita in Ethiopia to 26 per cent in the Central African Republic. In middle-income economies, the price for this basket is less prohibitive, although the median remains above 3 per cent of monthly GNI per capita, going as high as 5 to 10 per cent in twelve economies, and actually reaching 19.5 per cent in one (Nicaragua).

Regional differences persist: while consumers in Africa saw a significant drop, from 6.1 to 4.6 per cent of GNI per capita, prices increased in the Arab States, CIS countries and the Americas. The price hike is most worrisome for this latter region: the median increased from 2 to 2.2 per cent of monthly GNI per capita. The main reason behind this trend is a combination of more costly plans and lower GNI.

In the LDCs, prices dropped from 6.6 to 5.6 per cent of monthly GNI per capita, while they remained stable at 2.9 per cent in LLDCs. Consumers in SIDS faced a rather sharp increase, from 2.0 to 3.1 per cent of monthly GNI per capita.

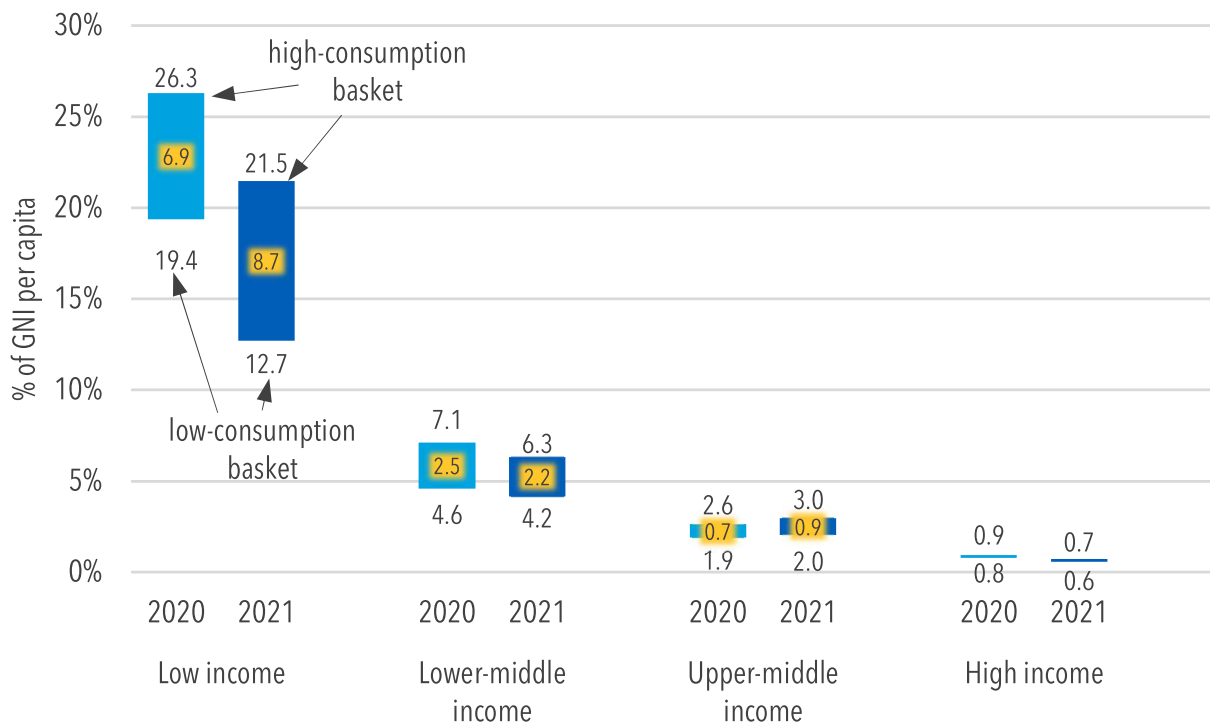
The basket was most affordable in Hong Kong (China), Macao (China), Austria, United Arab Emirates, Luxembourg, and Liechtenstein (in that order), ranging between 0.05 and 0.13 per cent of GNI per capita.

Fixed broadband basket

Of the five baskets monitored, the fixed broadband (5 GB) basket exhibited the largest price increase between 2020 and 2021. It also remains by far the most expensive basket, and the one with the largest disparities across income groups. Consumers in low-income countries must pay 28 times more, in relative terms, than those in high-income economies (Figure 10). Indeed, entry-level fixed broadband Internet remains unaffordable for a majority of the world's population.

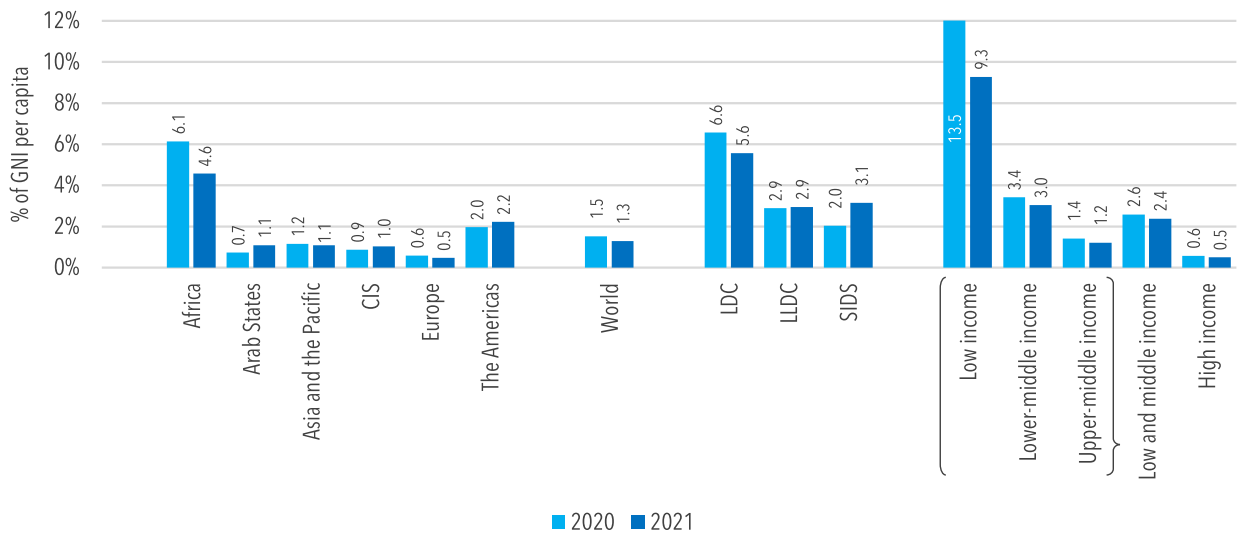
Globally, the median price for the basket went from 2.9 to 3.5 per cent of monthly GNI per capita, 1.5 per cent above the Broadband Commission's affordability target. Unlike the other baskets, where worsening affordability is to a large extent the result of lower GNI, globally the fixed broadband basket has become more expensive in terms of USD (see Figure 3 in Box 2) or even when adjusted for purchasing power parity (PPP).

Figure 8: The affordability gap between the mobile data and voice low and high-consumption baskets



Note: Medians based on the 185 economies for which data were available for both baskets in the two years. Source: ITU and A4AI.

Figure 9: Mobile-cellular low-usage basket prices



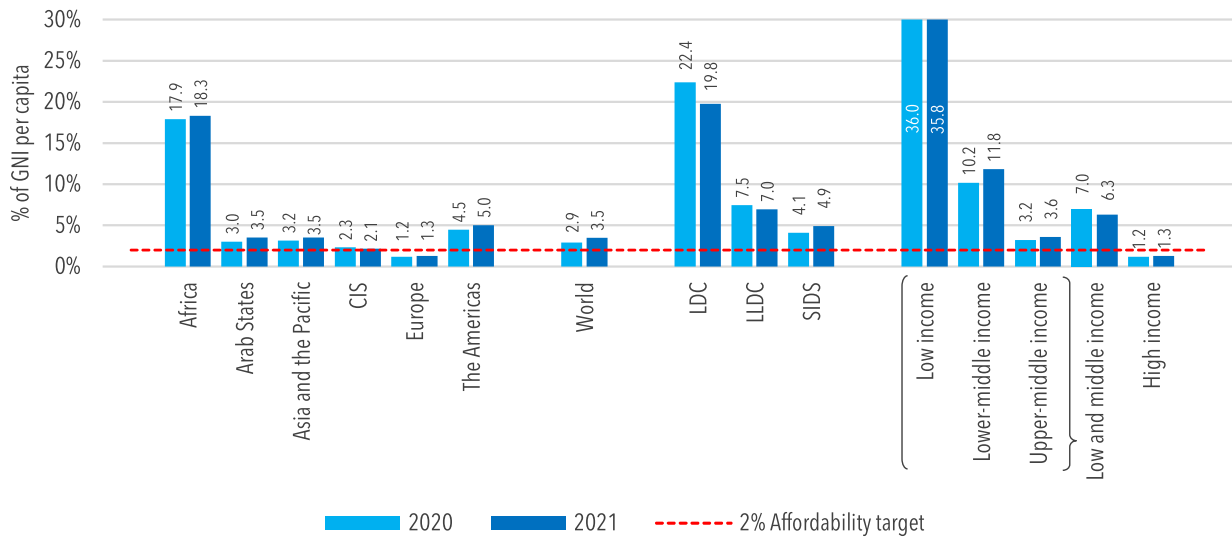
Note: medians based on the 185 economies for which data were available for the two years. The basket is defined as the cheapest mobile-cellular option that offers at least 70 minutes of voice calls and 20 SMS messages. Source: ITU and A4AI.

Europe is currently the only region that meets the 2 per cent affordability target for this basket. In all other regions prices increased, with the exception of the CIS, where the price decreased by 0.2 percentage points to 2.1 per cent of monthly income (owing mostly to price drops in Kyrgyzstan and Turkmenistan). In Africa, the price of the basket in 2021 was 18.3 per cent of monthly income, five times the world median. It actually increased by 0.4 percentage points from the previous year, mostly because

of declining income levels. It is particularly worrisome that in 15 economies of the region the basket costs more than 20 per cent of GNI per capita, and more than 50 per cent in 4 economies, putting fixed broadband out of reach for most of the population.

In addition to the affordability divide, there is also a significant quality gap between high-income economies and the rest of the world, considering the advertised

Figure 10: Fixed broadband basket prices



Note: By world regions and level of development as a percentage of monthly GNI per capita, 2020-2021. Medians based on the 176 economies for which data were available for the two years. Economies are benchmarked according to the price of an entry-level fixed broadband basket, defined as the cheapest fixed Internet subscription available domestically, with a minimum of 5 GB monthly data allowance and an advertised download speed of at least 256 kbit/s. Source: ITU and A4AI.

speed included in the entry-level fixed broadband plan (see Figure 12).

On a positive note, prices for fixed broadband Internet in LDCs and LLDCs decreased in 2021, although for the most part they remained prohibitively expensive.

Among the markets covered in the 2021 sample, the lowest prices for 5 GB of fixed broadband were found in Liechtenstein, Macao (China), China, Hong Kong (China), and the United Arab Emirates. In each case, the cheapest available plan represented less than 0.3 per cent of the monthly average national income.

More and cheaper data, faster speeds?

In many economies, the cheapest available plan from the representative operator often "overshot" the minimum 2 GB data allowance requirement of the data-only mobile broadband basket. The median data allowance was already 2.5 GB in 2020, and in 2021 it increased to 3 GB.⁴

The growth in the data allowance implies an improvement in value for money, and indeed between 2020 and 2021 the median price per GB of data in the plans selected for

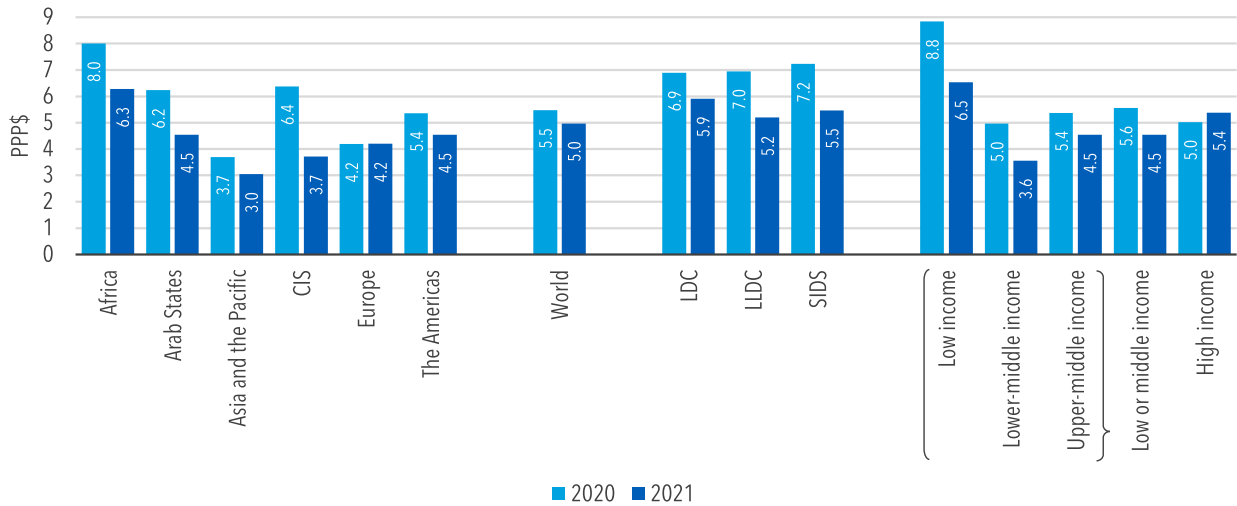
the basket decreased from 5.5 to 5.0 in PPP\$.⁵ The decline was seen in all groups, except the high-income economies and Europe (Figure 11). As a result, the price gap inverted: in PPP\$ terms, 1 GB of mobile data was cheaper in low- and middle-income economies than in high-income economies in 2021. Most notable is the price drop in low-income economies, with LLDCs and SIDS contributing to a narrowing in the data affordability gap between economies. However, regional differences persist: 1 GB of data in Africa cost more than twice as much as it did in the cheapest region, Asia and the Pacific.

Many of the operators performed quality upgrades on their fixed broadband networks, which allowed them to advertise higher speeds for the entry-level fixed broadband baskets. The world median speed accordingly increased from 10 to 13.5 Mbit/s (Figure 12). However, the improvement was concentrated in high-income economies and in two regions (Europe and the Americas), while the rest of the world saw hardly any change, further widening the gap in terms of value for money and quality of experience. The median advertised speed of 50 Mbit/s included in the entry-level fixed broadband plan for users in high-income economies was 25 times that in LDCs or LLDCs.

⁴ This is reassuring, as it confirms that the impact of the new allowance threshold used for the 2021 data collection (2 GB as opposed to 1.5 GB) is negligible, since the median was 2 GB or higher in 2020 in all the country groups considered.

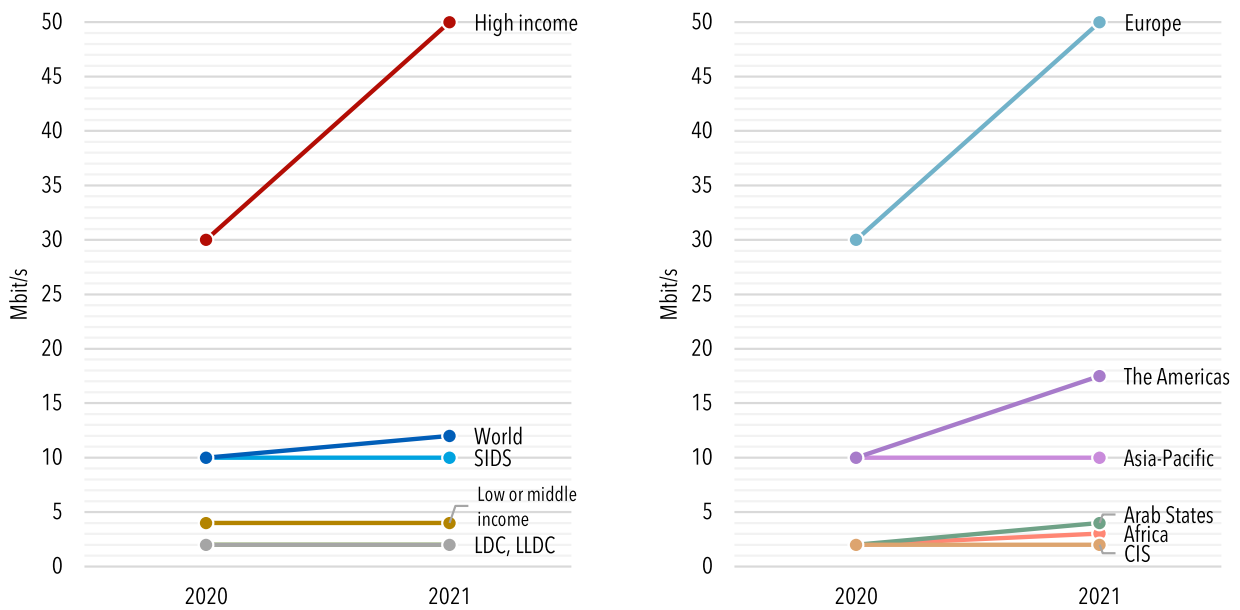
⁵ It is important to highlight that this comparison is based on the benchmark basket; comparing plans with a minimum of 1 GB data would likely lead to a different result.

Figure 11: Value for money of the mobile broadband baskets: median price of 1 GB data, in PPP\$



Note: Median price per GB in international dollars (PPP\$), based on the actual allowance for a basket including at least 1.5 GB data in 2020 and 2 GB data in 2021. (For example: in Colombia in 2020 the cheapest basket over the 1.5 GB threshold actually included 1.8 GB data and cost 27.1 PPP\$, thus the price per GB was 15.1 PPP\$, while in 2021 the corresponding basket over the 2 GB threshold had an actual allowance of 6.5 GB and cost 19.7 PPP\$, so the price per GB fell to 3 PPP\$.) Differences in connection speed are not taken into consideration. Source: ITU and A4AI.

Figure 12: Changes in median download speeds for entry-level fixed broadband baskets for income groups and regions, 2020-2021



Note: Medians based on available speed data for 2020-2021. Source: ITU and A4AI.

Conclusions

Historically, demand for broadband services has reacted elastically to changes in pricing. That changed in 2021: paradoxically, as the different broadband baskets were becoming less affordable, data usage and subscriptions increased, for fixed and mobile broadband alike⁶. Users reacted to higher prices by cutting their spending elsewhere so as to protect connectivity, which is often vital. Governments and operators around the world were obliged to take steps to increase capacity and improve affordability. A turning point appears to have been reached: COVID-19 pandemic conditions have revealed that broadband services have become a necessity for

communication, teleworking, online education, e-services, etc. This effect is particularly pronounced for fixed broadband services, the importance of which increased starkly, and which saw the largest worldwide price increases. Meanwhile, those who cannot afford broadband connections are increasingly left behind in the accelerated pace of digitalization.

Around 2.9 billion people around the world remain offline. Theoretically, 95 per cent of the world's population could access mobile broadband Internet, given that they live within range of a 3G mobile network. These latest ICT price statistics, and especially those on the entry-level mobile broadband basket, clearly show how a lack of affordability contributes to keeping those populations offline. These latest affordability trends should be a warning. The target date of 2025 is edging ever closer, but significant improvement is needed to meet the affordability target of the Broadband Commission.

⁶ ITU (2021) Measuring digital development: Facts and figures 2021. <https://www.itu.int/en/ITU-D/Statistics/Documents/facts/FactsFigures2021.pdf>.

BOX 3: Overview of methodological changes

In 2020, the Expert Group on Telecommunication/ICT Indicators agreed to update the data collection rules from 2021 onwards for the mobile-cellular and broadband price baskets to better reflect the latest global market developments. Full details are provided in the methodology report, but two main points are highlighted here. First, the allowance threshold has been increased from 1.5 to 2 GB for the data-only mobile broadband and mobile data and voice high-consumption baskets. Second, the contract modality requirement has been relaxed for mobile baskets, so that the cheapest available plan meeting the allowance thresholds is selected from the representative operator, irrespective of whether it is prepaid or postpaid (rather than the dominant modality in an economy). At the same time, early termination fees for postpaid plans with annual or longer commitment periods are now also being taken into consideration. Country-level analysis indicates that for the majority of the economies, the impact of these changes is marginal.

Due to changes in the classification of economies and changing data availability, the 2020 values reported in this brief may slightly differ from those reported in [The affordability of ICT services 2020 Policy Brief](#). Thus, the [annual update](#) of the World Bank income groups means that some economies have been put in different categories. Furthermore, Vanuatu has graduated and is no longer in the LDC group for 2021. Statistics are no longer calculated for developing and developed regions, following the removal of this grouping from the UN M49 classification. As an alternative with more analytical traction, a special aggregate of low- and middle-income economies was calculated which can be contrasted with high-income economies. Finally, readers should bear in mind that, by definition, median values are affected by the number of economies considered. To allow year-on-year comparison, 2020 medians reported in this Policy Brief were recomputed for the set of economies with data available both for 2020 and 2021, which may differ from the medians computed the previous year, which were based on the set of economies for which data were available for 2019 and 2020.

For further information, visit www.itu.int/ictprices or write to indicators@itu.int and a4ai@webfoundation.org.

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