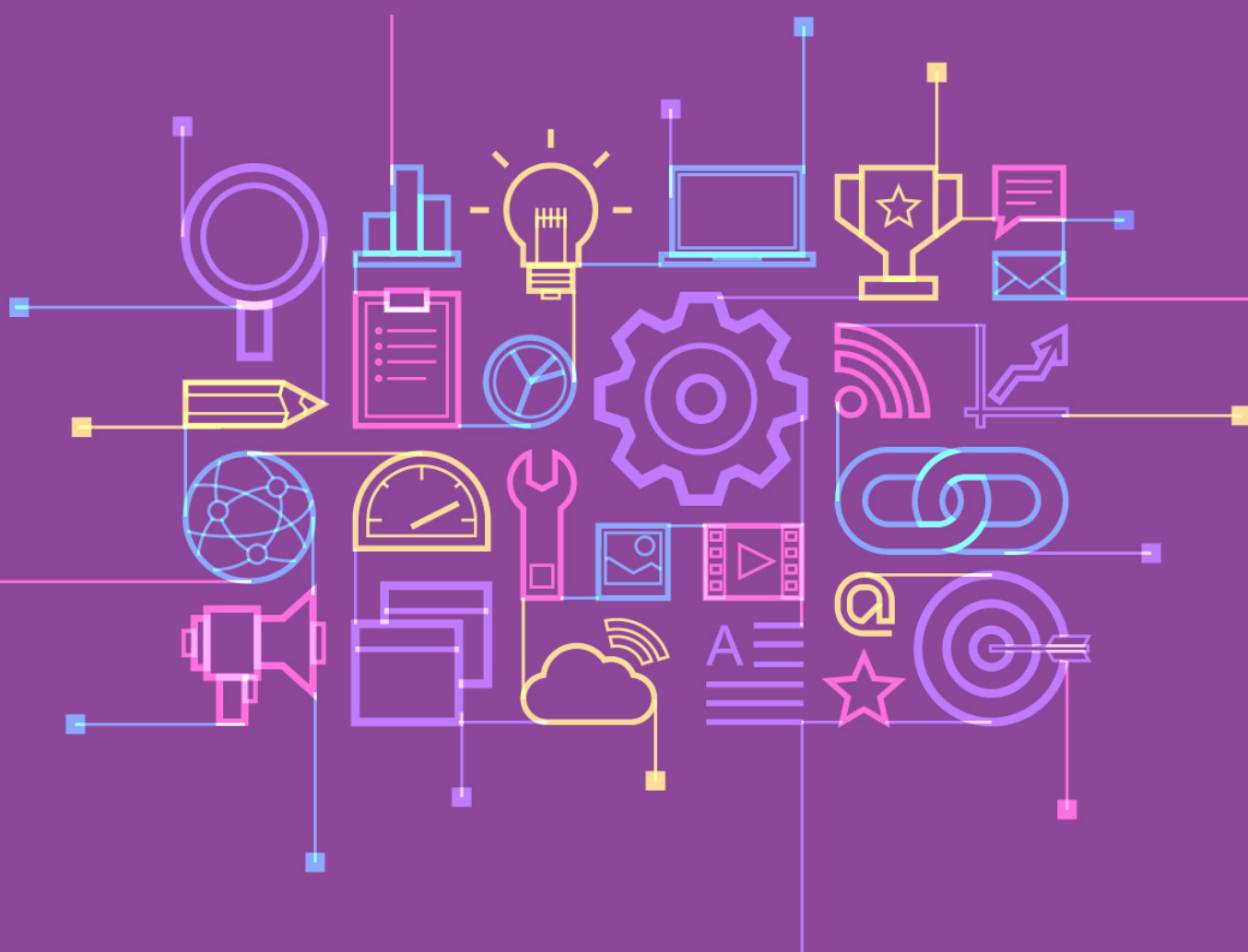Measuring digital development

State of digital development and trends in Asia and the Pacific: Challenges and opportunities

March 2025

Measuring digital development

State of digital development and trends in Asia and the Pacific: Challenges and opportunities

March 2025

Disclaimer

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the International Telecommunication Union (ITU) or of the ITU secretariat concerning the legal status of any country, territory, city, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by ITU in preference to others of a similar nature that are not mentioned. Errors and omissions excepted; the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by ITU to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader.

The opinions, findings and conclusions expressed in this publication do not necessarily reflect the views of ITU or its membership.

Please consider the environment before printing this report.

Foreword

Asia and the Pacific has long been a key driver of global economic growth, with digital transformation playing a critical role in shaping its development. Expanding connectivity, innovative digital services, and technology-driven industries are fueling economic opportunities, boosting productivity, and reshaping entire sectors.

Yet, as this report highlights, challenges remain. While mobile broadband covers over 95 per cent of the population, disparities persist. High-income economies lead in 5G deployment and innovation, while lower-income countries face infrastructure, affordability, and digital literacy gaps. The urban-rural divide remains, and women and marginalized communities still encounter barriers to digital inclusion. Closing these gaps is both an economic necessity and a social imperative, as digital transformation expands access to services and strengthens resilience.

Small island developing States (SIDS) in the Pacific face distinct challenges due to their geographic isolation, small populations, and vulnerability to climate change. Reliable connectivity is crucial for economic development, disaster resilience, and access to essential services.

To sustain the region's momentum, achieving universal and meaningful connectivity (UMC) is a policy imperative. UMC enables people to access knowledge, build livelihoods, and connect with their communities while also driving economic growth through digital trade, e-commerce, and innovation. Achieving this goal requires strengthened digital skills, improved regulatory frameworks, resilient infrastructure, and inclusive innovation ecosystems.

In the pursuit of UMC, the environmental impact of ICT must be carefully managed. The rapid expansion of digital technologies presents challenges, including increasing energy consumption and amounts of e-waste. Sustainable policies and responsible practices are needed to ensure that digital transformation supports both people and the planet.

Digital strategies must be all-encompassing and involve all stakeholders. They must be informed by evidence and by data. However, there is a lack of timely, granular, and comprehensive data. Investing in better data collection and analysis is an investment in UMC itself, enabling targeted interventions, efficient resource allocation, and the ability to measure progress effectively.

As we approach the World Telecommunication Development Conference 2025, I trust this publication will prove useful to all members of the ITU family and beyond in shaping the region's digital future. By working together, we can harness digital technologies to drive economic growth, expand opportunities, and build a more inclusive, sustainable, and connected future.

Dr Cosmas Luckyson Zavazava
Director of the Telecommunication Development Bureau
International Telecommunication Union

Table of contents

Introduction

Launched in the context of the preparation of the ITU World Telecommunication Development Conference 2025, this publication provides an overview of the state of digital connectivity in Asia and the Pacific through key indicators (Part 1) and showcases impactful case studies from the region (Part 2).[1]

Universal and meaningful connectivity is a policy imperative. The concept of universal and meaningful connectivity (UMC) has emerged as a vital policy objective. UMC is defined as enabling everyone to enjoy a safe, enriching, and productive online experience at an affordable cost. UMC does not mean everyone must be connected all the time but describes a situation where everyone can access the Internet optimally and affordably whenever and wherever needed. While the Asia and the Pacific region is making notable progress toward UMC, significant challenges remain.

The region is marked by significant contrasts in digital development. Home to 41 Member States, including Palau, the latest to join the Union in 2024, the region encompasses a wide range of countries, including some of the most technologically advanced nations as well as countries still striving to bridge multiple connectivity gaps. This diversity is reflected in vastly different levels of digital development across countries—but also within countries.

Thanks to rapid growth in coverage, universal access is within reach. Mobile network coverage in the Asia-Pacific region has expanded faster than in most regions, with 96 per cent of the population covered by a 4G network or better. Although some remote areas still face significant coverage gaps, these gains bring universal access—the ability for everyone to connect to the Internet—within reach. The focus must now shift to overcoming barriers to usage and enabling meaningful connectivity.

Connection quality shapes the digital experience across the region. While mobile network coverage has expanded significantly, the availability and quality of infrastructure vary widely, directly influencing how people access and use the Internet. 5G is advancing rapidly in high-income economies but remains limited in several low-income countries. Differences in fixed broadband infrastructure and international bandwidth capacity mean that some users enjoy high-speed, reliable connections, while others face slower, less reliable service. These disparities are reflected in vastly different patterns of data consumption. Addressing these inequalities requires investments in network capacity, attractive spectrum pricing, backhaul expansion, and policies to enhance service quality and affordability.

Affordability and digital skills are essential enablers of UMC. Broadband prices have been dropping across the Asia and the Pacific region, and entry-level mobile broadband is now affordable in most countries. The region's average mobile broadband price is now below the global average. Fixed broadband prices have also been decreasing, yet this technology remains unaffordable in nearly half of the countries. Moreover, disparities in digital literacy limit

---

[1] As of February 2025, the Asia and the Pacific region, as defined by ITU, consists of the following 41 economies: Afghanistan; Australia; Bangladesh; Bhutan; Brunei Darussalam; Cambodia; China; Dem. People's Rep. of Korea; Fiji; Hong Kong, China; India; Indonesia; Iran (Islamic Republic of); Japan; Kiribati; Korea (Rep. of); Lao P.D.R.; Macao, China; Malaysia; Maldives; Marshall Islands; Micronesia; Mongolia; Myanmar; Nauru; Nepal (Republic of); New Zealand; Pakistan; Palau; Papua New Guinea; Philippines; Samoa; Singapore; Solomon Islands; Sri Lanka; Thailand; Timor-Leste; Tonga; Tuvalu; Vanuatu; and Viet Nam.

individuals' ability to benefit fully from connectivity. Digital skills vary widely across the region, even if one looks only at those who actually use the Internet. Digital content creation, problem solving, and safety skills generally lag far behind communication and collaboration skills.

Sound ICT policies and regulations are key for digital transformation. Sound and comprehensive regulations and policies are essential for fostering investment, competition and innovation in the ICT sector. The Asia and the Pacific region exhibits a broad spectrum of regulatory maturity, with some economies having highly developed ICT policies while others are still in the process of establishing independent regulatory authorities. Countries with advanced regulatory environments have seen greater progress in broadband expansion and digital service adoption, while regulatory gaps in some areas continue to impede investment and market growth.

Investment in ICT infrastructure is a key driver of economic growth. Investment in ICT infrastructure deployment and upgrading is essential for UMC and digital transformation. The telecom sector is a significant source of revenue across the region, yet capital expenditures remain uneven, with higher-income countries leading in network expansion while others struggle with financial and regulatory constraints.

Insufficient collection and recycling hinder the circular economy for electronics. The rapid growth of digital technologies has led to a significant increase in electronic waste (e-waste), posing environmental and regulatory challenges. The region's e-waste recycling rate is one-half the global average. While some countries have implemented national e-waste management policies and recycling initiatives, many still lack formal collection systems and extended producer responsibility frameworks. The disparity in e-waste policies underscores the need for stronger regulations, investment in recycling infrastructure, and regional cooperation to promote e-waste management.

Cybersecurity frameworks are essential for digital trust and resilience. With increasing connectivity comes the need for robust cybersecurity policies and data governance frameworks. The Asia and the Pacific region has seen a growing focus on cybersecurity, with many economies adopting national cybersecurity strategies and enhancing digital resilience measures. However, cybersecurity preparedness remains extremely uneven, with some countries ranking among the global leaders while others face substantial vulnerabilities. Strengthening regional collaboration and national incident response capabilities will be crucial to ensuring a secure regional digital landscape.

Reliable data is essential for achieving UMC. Accurate, granular, and timely data is crucial for identifying gaps, designing interventions, and measuring progress. However, many Asia and the Pacific countries lack comprehensive, up-to-date ICT statistics, and most do not disaggregate data by socio-economic attributes. This hampers evidence-based policymaking and hinders progress towards UMC.

Impactful initiatives demonstrate the power of digital connectivity. The second part of this report presents a selection of projects and initiatives supported by the ITU Telecommunication Development Bureau (BDT) in collaboration with regional stakeholders. These case studies highlight how digital technologies are transforming education, healthcare, entrepreneurship, and rural development, and fostering digital innovation. The examples illustrate how targeted interventions can drive meaningful change and create opportunities for communities across the Asia and the Pacific region.

The region has made great strides but the journey towards UMC is still long. The digital journey has been remarkable in the Asia and the Pacific region, but universal access is only one milestone. Achieving meaningful connectivity for everyone and enabling digital transformation in all countries will require a multi-faceted approach, including infrastructure investments, policy reforms, capacity building and regional cooperation.

Part 1. The state of digital connectivity in Asia and the Pacific and recent trends
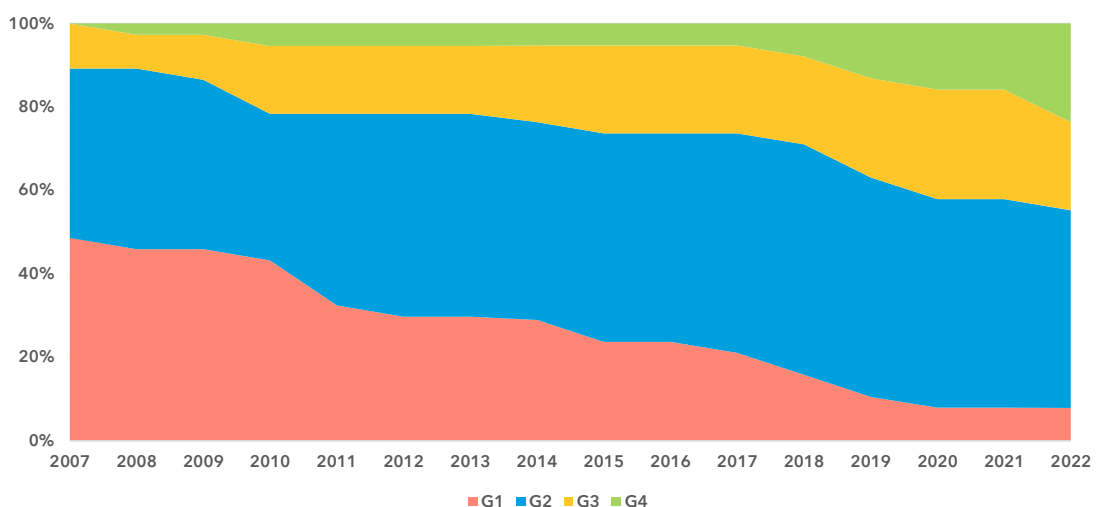
ICT regulation and digital policy frameworks

The evolving landscape of ICT regulation and digital policy frameworks plays a critical role in driving an inclusive and sustainable digital transformation and fostering thriving digital economies. To ensure national frameworks remain effective and adaptive, it is crucial to assess progress, identify best practices and address gaps.

ICT regulation in Asia and the Pacific has advanced positively, but key reforms remain outstanding

ICT regulation in the Asia and the Pacific region has undergone transformative changes over the past fifteen years, driven by the need to align with global best practices and keep pace with market evolution and rapid technological innovation. In 2007, in 90 per cent of countries in the region, the state of ICT regulatory maturity was rated Generation 1 (G1) or Generation 2 (G2), the least advanced levels. Australia became the first country in the region to achieve Generation 4 (G4), the most advanced level, in 2008, joining a select group of five G4 countries globally at the time.

Today, one-quarter of the 39 countries studied in the region have improved that rating to G4, with only three languishing at G1. Two-thirds remain at G2 and G3. The urgency to address gaps and enhance regulatory maturity is evident.

Evolution of the generations of ICT regulation in Asia and the Pacific

Note: The 'Generations of ICT regulation' provides a high-level conceptual framework for assessing the overall development of national legal instruments, policies and governance for the ICT and digital sectors. Generations 1 through 4 are based on ICT Regulatory Tracker scores:
G1 – Command and control approach: score between 0 and 40
G2 – Early open markets: score between 40 and 70

G3 – Enabling investment and access: score between 70 and 85
G4 – Integrated telecommunication regulation: score between 85 and 100
Data for 2021 is unavailable; 2020 data is used as a proxy for 2021.
Source: ITU

Progress varies within the region, reflecting the diverse development profiles of countries. The region-wide average for ICT regulatory maturity stands at 66 per cent, compared with 56 per cent for least developed countries (LDCs) and 55 per cent for small island developing States (SIDS) in the region. All remain below the global average of 72 per cent, revealing a need for focused reforms to bolster ICT regulatory frameworks – which are also the foundation of digital readiness and market take-up.

Mixed progress in digital governance

The Asia and the Pacific region is home to several countries which are leaders with respect to digital governance frameworks. In 2023, 7 of the 19 countries in the "Leading" tier of the G5 Benchmark were in the region: Australia, India, the Republic of Korea, Malaysia, New Zealand, and Philippines, with Singapore ranking highest in the region and third globally. Only Europe has more, at eight leading countries. But the region also includes the country with the world's lowest readiness – a member of the SIDS group – underscoring significant disparities between LDCs and SIDS and all other countries.

Despite notable policy advances since 2021, assessments of the digital governance frameworks in the region continue to lag the global average. Two-thirds of countries remain at the "Limited" or "Transitioning" level, lacking a solid foundation for inclusive, accelerated and sustainable digital transformation.

Gaps in readiness of national frameworks in the region

At the national and regional level, a high degree of readiness for the digital transformation of policy, legal and governance frameworks, underpinned by robust ICT regulation and adaptive digital governance, is essential for achieving meaningful digital inclusion and a successful transition to digital economies. To enable digital transformation across all sectors, countries must establish consistent and balanced national frameworks and implement them effectively. These are also key for regional harmonization and economic integration, positioning both ICT and digital policies as top priorities for national and regional development agendas.

Legal, policy and governance frameworks for digital transformation, 2023
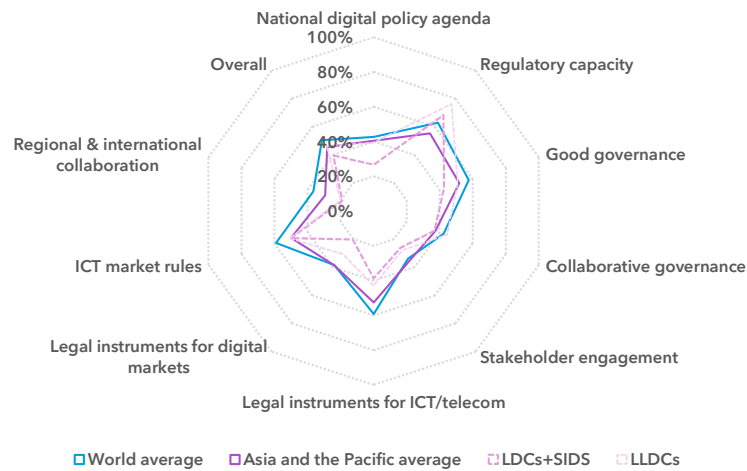
Note: The nine thematic benchmarks shown each comprise a subset of indicators, as part of the ITU Unified Framework for the readiness of national policy, legal and governance frameworks for digital transformation.
The chart shows progress on the nine benchmarks for the Asia-Pacific region (average for the group) compared to the world average and the average for LDCs and SIDS in the region (21 countries, including 4 which are members of both the SIDS and the LDCs group). The percentage of achievement shown for each benchmark indicates the proportion of met versus unmet targets on indicators in each benchmark.
Source: ITU

The overall readiness of frameworks for digital transformation in the region is assessed at 45 per cent, 6 percentage points below the world average, reflecting significant gaps across all nine thematic benchmarks. Intra-regional disparities are prominent, with LDCs and SIDS in the region underperforming by 6 to 18 percentage points on six benchmarks in 2023. Compared to the overall average for the region, LLDCs perform at a similar level or better on six of the nine thematic benchmarks, notably exceeding the regional average for the regulatory capacity benchmark by 21 percentage points.

The region performs best in regulatory capacity, achieving 55 per cent, though this remains below the world average. Remarkably, LDCs and SIDS outperform the regional average in this area, with a rating of 68 per cent, exceeding the global average of 63 per cent. This strength can be attributed to substantial international development aid and capacity-building over the past decade, providing a solid institutional foundation to foster digital technologies and services. However, to fully harness their potential, these countries must now focus on actively developing digital economies while mitigating risks for governments, businesses and consumers.

On the good governance benchmark, LDCs and SIDS scored 43 per cent, lagging significantly behind the regional and world averages of 52 and 58 per cent respectively. Their performance on collaborative governance aligns with the regional average, just 5 percentage points below the global figure of 42 per cent. This relative strength presents an opportunity to drive essential reforms in ICT and digital markets and leverage regional frameworks for digital transformation of public and private sectors.

Traditional areas of regulatory oversight in the region remain underdeveloped relative to global standards. On the benchmark for legal instruments for ICT markets, the regional average is 53 per cent, compared to a world average of 59 per cent, and LDCs and SIDS trail even further behind at 39 per cent. Likewise, on market rules, the averages for the region as well as for LDCs and SIDS stand at 50 per cent, 9 points below the global benchmark. These shortcomings also

hinder the development of efficient and inclusive digital markets, underscoring the urgent need for further reforms.

The region scores even lower in the area of legal instruments for digital markets, scoring just 39 per cent. LDCs and SIDS are particularly disadvantaged, with only 20 per cent of this benchmark achieved. This regulatory deficit undermines their readiness for digital transformation, threatening to stall broader development prospects.

Another critical gap lies in regional and international cooperation, where the region is assessed at just 29 per cent, below the already low world average of 38 per cent. This shortfall hampers the region's ability to scale digital innovation and adopt transformative technologies to advance development across the board. Nonetheless, notable regional initiatives exist that demonstrate a strong potential for progress across the region. They include the ASEAN Digital Integration Framework Action Plan (DIFAP), the ITU-ASEAN Digital Government Technical Framework, the APEC Digital Economy Work Program, the Digital Silk Road initiative under the Belt and Road Initiative (BRI), the Digital Transformation Agenda of the Pacific Islands Forum (PIF), and ICT and digital initiatives of the Asia-Pacific Telecommunity (APT) and the South Asian Association for Regional Cooperation (SAARC).

These initiatives offer concrete mechanisms to strengthen national policy, legal, and governance frameworks for digital transformation while supporting LDCs and SIDS in overcoming structural barriers. By prioritizing regional harmonization and targeted interventions, the region can drive inclusive and sustainable growth through digital transformation.

Policies driving digital inclusion are advancing rapidly though unevenly

Rapid advancements in technology and business models have outpaced governance frameworks in most countries across the region, leaving critical gaps in public policies aimed at fostering digital inclusion.

Broad, multi-sector policy instruments are key to aligning market and government stakeholders with digital inclusion goals, such as leaving no one behind. While Asia and the Pacific show a high level of adoption of national digital strategies, with 71 per cent of countries exceeding the world average, this figure drops to just 48 per cent for LDCs and SIDS in the region. Over half of the countries in the region, and 80 per cent of LLDCs, have introduced universal access and service policies that include broadband as an essential service, well above the global average of 38 per cent. However, LDCs and SIDS need to expedite the implementation of these frameworks by developing clear roadmaps and identifying funding mechanisms for universal access initiatives. Additionally, to ensure inclusivity, it is crucial for the region to advance digital inclusion strategies targeting specific groups, such as persons with disabilities. Currently, such strategies are only to be found in 16 per cent of countries in the region, and they are virtually absent in LDCs, LLDCs, and SIDS. Encouragingly, some SIDS are taking steps to address these policy gaps.

Digital inclusion policy instruments, Asia and the Pacific, 2023
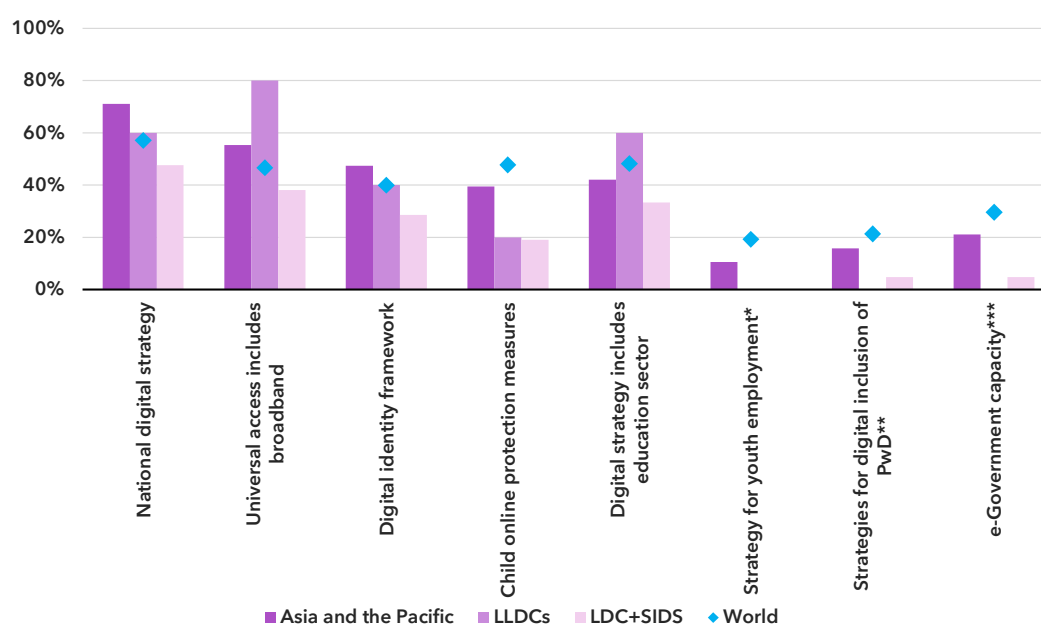
* Based on SDG Target 8.b Develop and operationalize global strategy for youth employment and to implement the Global Jobs Pact of the ILO
** Persons with disabilities
*** Based on the UNDESA E-Government Development Index
Note: The region's average scores for key indicators in the national digital agenda and legal instruments for digital markets under the ITU Unified Framework are compared to the averages for LDCs and SIDS (combined) and LLDCs in the region, and the world average.
Source: ITU, based on data from ITU, SDG Indicators and the E-Government Development Index

Digital identity frameworks play a pivotal role in promoting digital inclusion too, providing citizens with secure, reliable and universally accessible means to access essential public services and participate in the digital economy. While 47 per cent of countries in the region have established such systems – more than the global average – LDCs and SIDS are significantly behind. This gap is partly due to low e-government capacity in 80 per cent of the region's countries, with LDCs, LLDCs and SIDS particularly disadvantaged.

Digital inclusion for youth is especially important for unlocking learning, economic opportunities and civic engagement. LLDCs are leading in the adoption of digital strategies for transforming education, with 60 per cent of countries implementing such policies. In contrast, the region as a whole does not reach the world average of 42 per cent and only one-third of LDCs and SIDS have policies to mainstream digital tools in education. Efforts to prepare youth for future employment in the digital economy remain limited: only 10 per cent of countries in the region have adopted strategies for youth employment, and none among the 26 LDCs, LLDCs and SIDS. Similarly, child online protection measures are present in just 40 per cent of countries in the region, and only 20 per cent of LDCs, LLDCs, and SIDS.

Broader policy initiatives are needed to ensure digital inclusion for all and build a digitally competent workforce for the future across the region and in particular in the most vulnerable and least developed countries. Focused investments in digital skills, workforce readiness for digital economies and inclusive governance can transform the region's population dividend into a robust digital dividend.

LDCs, LLDCs and SIDS lag in leveraging emerging technologies

Digital economy policy agendas in Asia and the Pacific are less advanced than the global average. Much of the region has been slow in building comprehensive, agile frameworks to support digital transformation across economic sectors.

Several key instruments are required in the policy toolbox of every country to ensure governance keeps pace with rapidly emerging technological shifts in the region.

Innovation policies play a critical role in leveraging emerging technologies to drive economic prosperity. They help to create an environment that fosters digital innovation, technology development and digital value creation. The scores assessed for the Asia and the Pacific region as a whole, and for the subset of LLDCs, is close to the world average of 48 per cent. This is in stark contrast to the SIDS and LDCs in the region, only 14 per cent of which have an innovation policy.

Targeted policies on emerging technologies can enable developing countries to transform their economies, create new entrepreneurship opportunities and enhance the efficiency of the public sector. In Asia and the Pacific, 42 per cent of countries have adopted regulations or standards for the Internet of Things (IoT), well above the world average of 30 per cent. The region also leads in cloud computing strategies, with 24 per cent adoption compared to the world average of 21 per cent, and it matches the global average for artificial intelligence policies at 16 per cent. Again, however, LDCs and SIDS in the region lag significantly, with only 10 per cent having a policy related to emerging technologies, signalling systemic gaps in responding to the fast-evolving challenges and opportunities in digital markets.

Pro-active government policies promoting digital innovation in commercial services and digital public goods can lower barriers to market entry, stimulate investment in emerging sectors and accelerate the growth of local innovation ecosystems. Regulatory experimentation mechanisms such as sandboxes have been adopted in 39 per cent of countries in Asia and the Pacific, closely aligning with the world average of 40 per cent. LDCs, LLDCs and SIDS in the region, however, are only half as likely to enable regulatory experimentation compared to the region as a whole. The proportion of countries exempt from sector-specific taxes on ICT and digital services in the region is relatively high at 47 per cent, though it remains below the world average of 56 per cent. In comparison, targeted incentives for ICT and digital market players are present in only 18 per cent of countries in the region and are entirely absent from the LDCs, LLDCs and SIDS, underscoring the lack of agile strategies to accelerate the digital economy agendas in these countries.

Enabling environment for emerging technologies, Asia and the Pacific, 2023
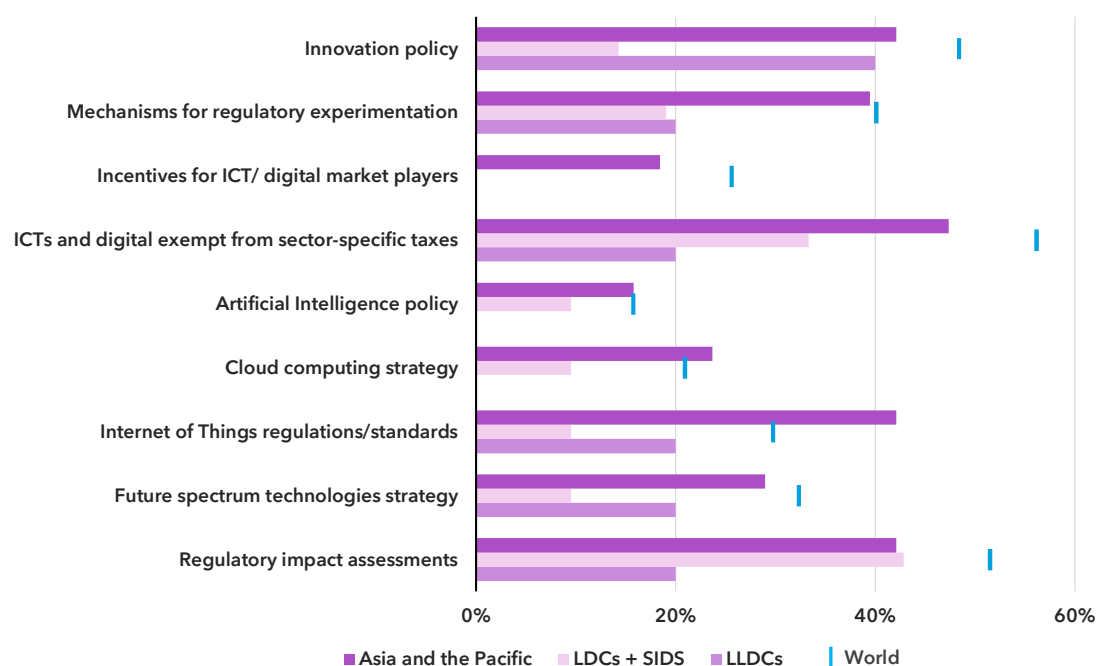
Note: The regions' average scores for key indicators in the national digital agenda, legal instruments for digital markets, stakeholder engagement and good governance under the ITU Unified Framework are compared to the averages for LDCs and SIDS (combined) and for LLDCs in the region, and to the world average.
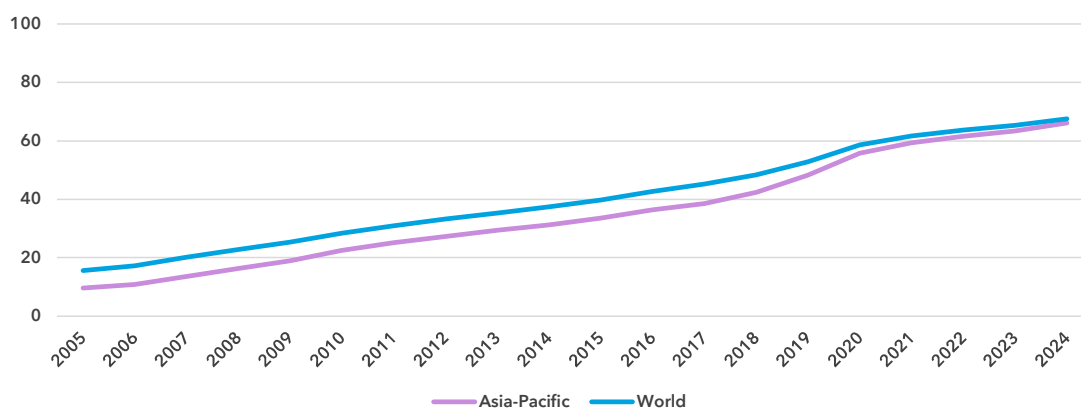Source: ITU

Incentivizing digital innovation and advancing emerging technology development stand as key priorities for strengthening digital governance in Asia and the Pacific. Targeted and regionalized reforms are essential to attract investment in digital ecosystems, drive economic development and accelerate regional integration.

Internet use

Internet use in Asia and the Pacific on par with global average

Percentage of individuals using the Internet
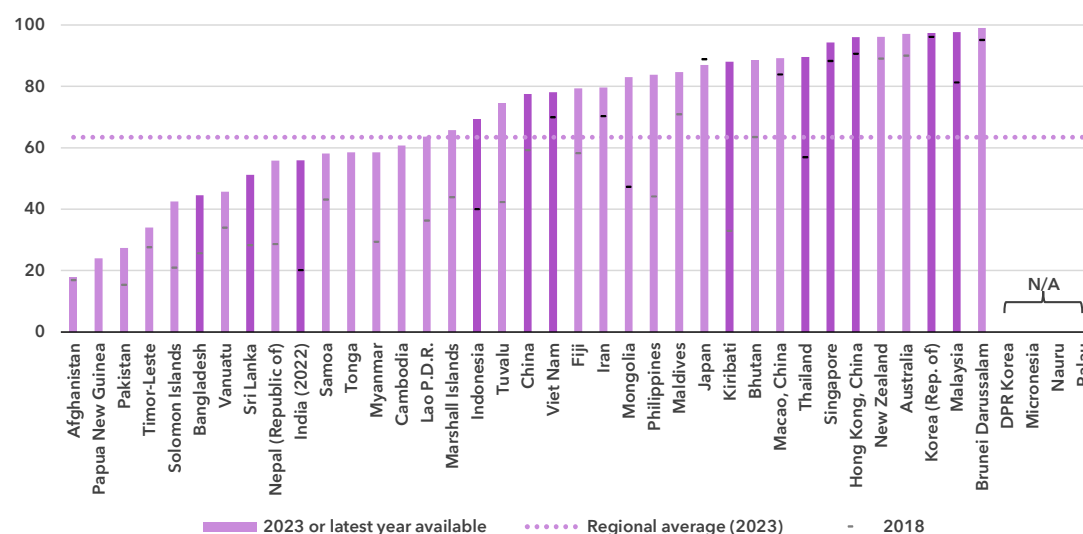

Source: ITU

The proportion of people online in Asia and the Pacific stood at 66 per cent in 2024, just two percentage points below the global average. Since 2005, the average annual growth rate of Internet penetration in the region has been 10.7 per cent, against 8 per cent globally. Over the last ten years, growth has tapered off, and now stands at 7.8 and 6.1 per cent respectively.

Percentage of individuals using the Internet in Asia and the Pacific, 2023 or latest year available [2]

Note: Figures based on official national statistics are shaded dark to distinguish them from figures based on non-official data.
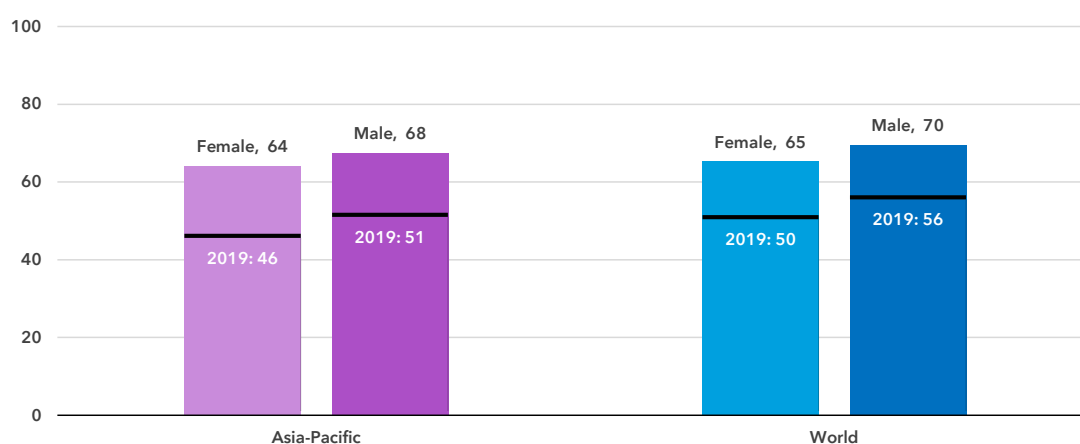Source: ITU

Asia and the Pacific is a very heterogeneous region with countries that include tiny Pacific islands as well as the biggest and most populous countries in the world. The region also contains economies situated throughout the development spectrum, from least developed to high-income economies. This heterogeneity is reflected in the country-level data on Internet use, where penetration levels range between 18 and 99 per cent. Indeed, in six of the economies, universal use has been reached.[3]

---

[2] In this publication, for figures reporting economy-level data, all economies are shown. Countries are sorted by value of the indicator. A data point is only shown if it is for the year 2020 or later, otherwise it is marked as not available (N/A), or excluded altogether (when data are not available for many countries). In addition, a marker shows the data point for the year 2018, if available. Data are extracted from the ITU DataHub, based on the data release of February 2025. Since country-level data are available for the year 2023 at best, for comparison purposes, the regional average for the year 2023 is reported as well, as published in Facts and Figures 2024. To save space in these figures, "DPR Korea" is used instead of "Dem. People's Rep. of Korea" and "Iran" instead of "Iran (Islamic Republic of)".

[3] Considering that some people may never want to connect, as a matter of convention universality is taken to mean an Internet penetration rate of at least 95 per cent.

Gender parity in Internet use is improving

Percentage of individuals using the Internet, by gender, 2024
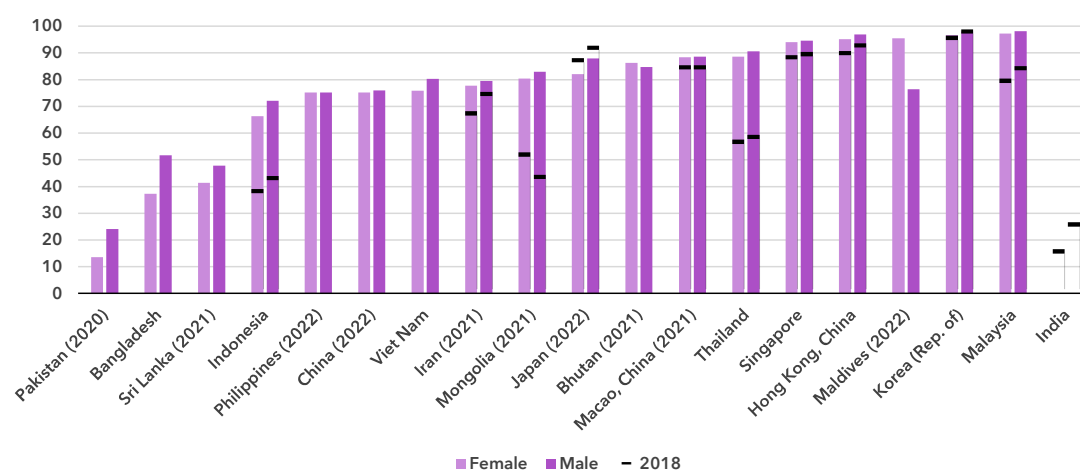

Source: ITU

In 2024, 68 per cent of men in Asia and the Pacific were online, against 64 per cent of women. This converts into a gender parity score (GPS)[4] of 0.95, just ahead of the global GPS of 0.94. It marks a significant improvement, in the last five years, from 0.89 to 0.95.

Gender parity is closely linked to a country's overall development level and Internet penetration. The three countries in the region with the lowest Internet penetration levels also have the lowest GPS. All other countries are close to, or have achieved gender parity, except for the Maldives, where Internet use is heavily biased in favour of women.

Percentage of individuals using the Internet, by gender, 2023 or latest year available
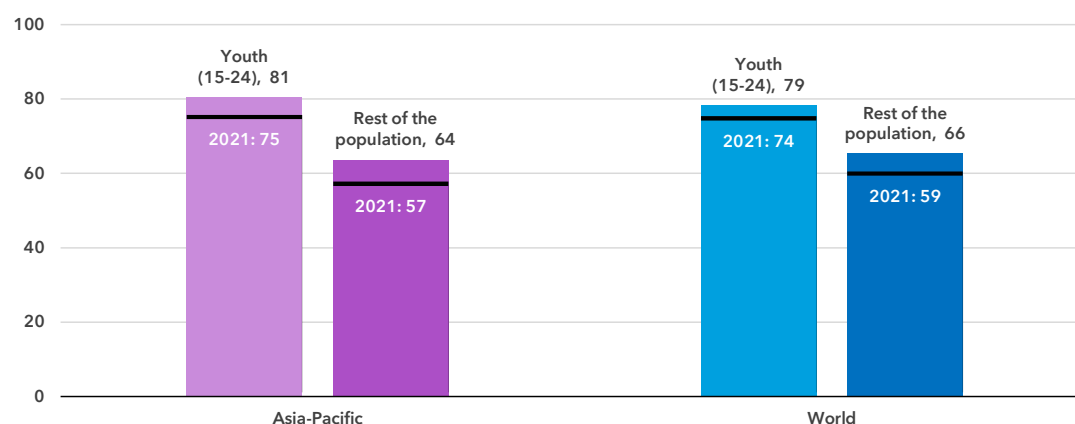

Source: ITU

---

4   The gender parity score is calculated as the proportion of women who use the Internet divided by the proportion of men who use the Internet. A value less than one indicates that men are more likely to use the Internet than women, while a value greater than one indicates the opposite. Gender parity is considered achieved if the value lies between 0.98 and 1.02.

The generational gap is larger in Asia and the Pacific than globally

Percentage of individuals aged between 15 and 24 years using the Internet, 2024

Source: ITU

In 2024 among young people aged 15 to 24 Internet users made up 81 per cent, compared to 66 per cent for the rest of the population. The generational gap in this region—measured as the ratio of Internet users between these two groups—is higher than the global average. The gap has been shrinking in the region over the last four years, in line with a global trend.

In most countries for which data are available, the percentage of young people online is very high. This stands in sharp contrast with the proportion of the elderly (those 75 years and older) using the Internet, which is low or very low in all but one of the economies in the region.

Percentage of individuals using the Internet by age group, 2023 or latest year available
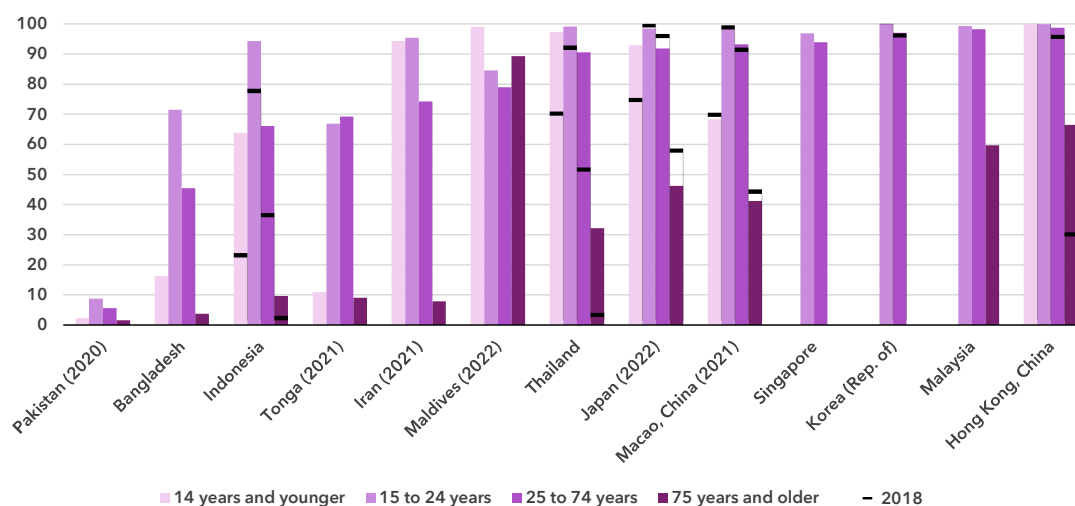
Source: ITU

Internet use in rural areas trails behind that in urban areas

Percentage of individuals using the Internet, by location, 2024
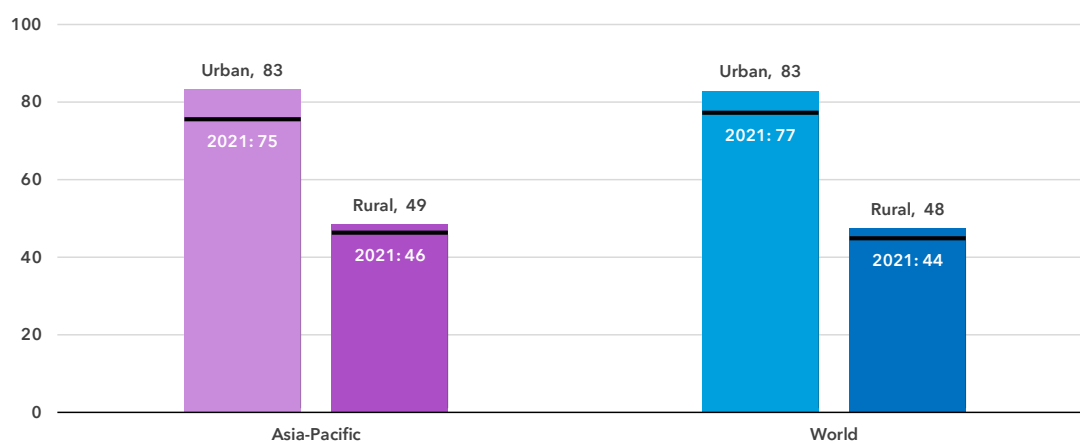
Source: ITU

In Asia and the Pacific, 83 per cent of the population living in urban areas used the Internet in 2024, the same as the global average. This starkly contrasts with the region's rural areas, where only 49 per cent of the population used the Internet; though, again, this is in line with the global average.

Generally, in countries with high overall Internet penetration, the urban-rural gap was much smaller than in countries with a lower Internet use percentage

Percentage of individuals using the Internet by location, 2023 or latest year available
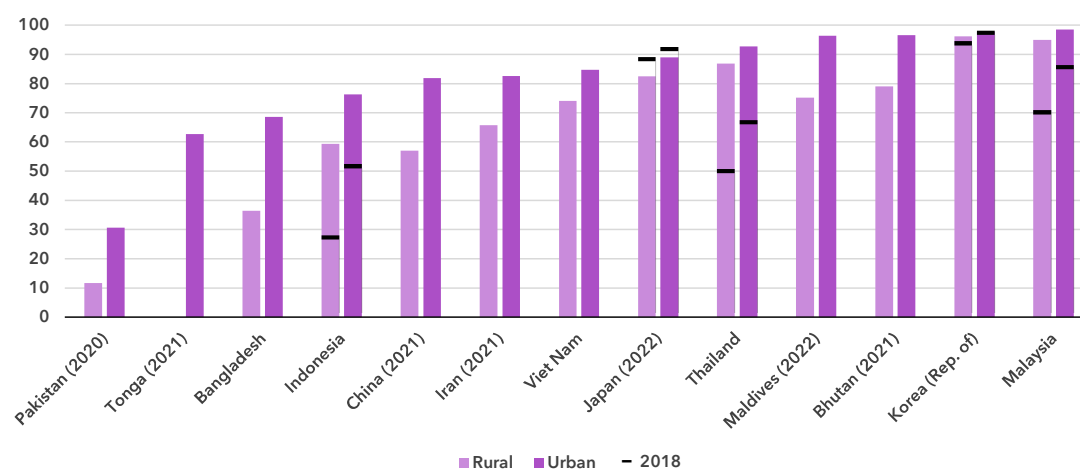
Source: ITU

Broadband subscriptions

In lower income countries, mobile broadband is important for access to the Internet

Broadband subscriptions per 100 inhabitants
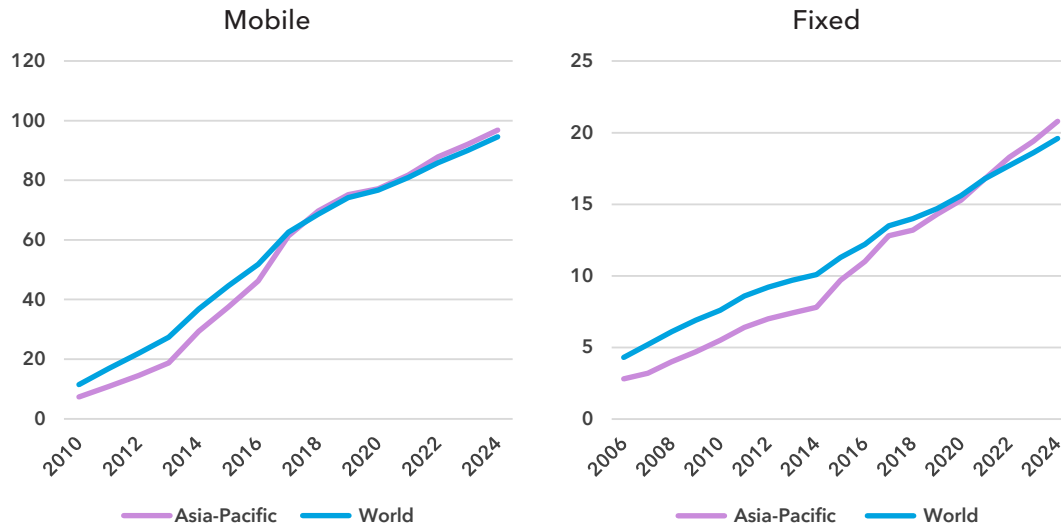
Source: ITU

In 2024, there were 97 mobile broadband subscriptions per 100 inhabitants in Asia and the Pacific. After trailing until 2017, the region overtook the global average in 2018 and is now two subscriptions per 100 inhabitants ahead. Similarly, for fixed broadband subscriptions the region overtook the world average in 2022, reaching 21 subscriptions per 100 inhabitants in 2024, one more than the global average.

Active mobile broadband subscriptions per 100 inhabitants, 2023 or latest year available
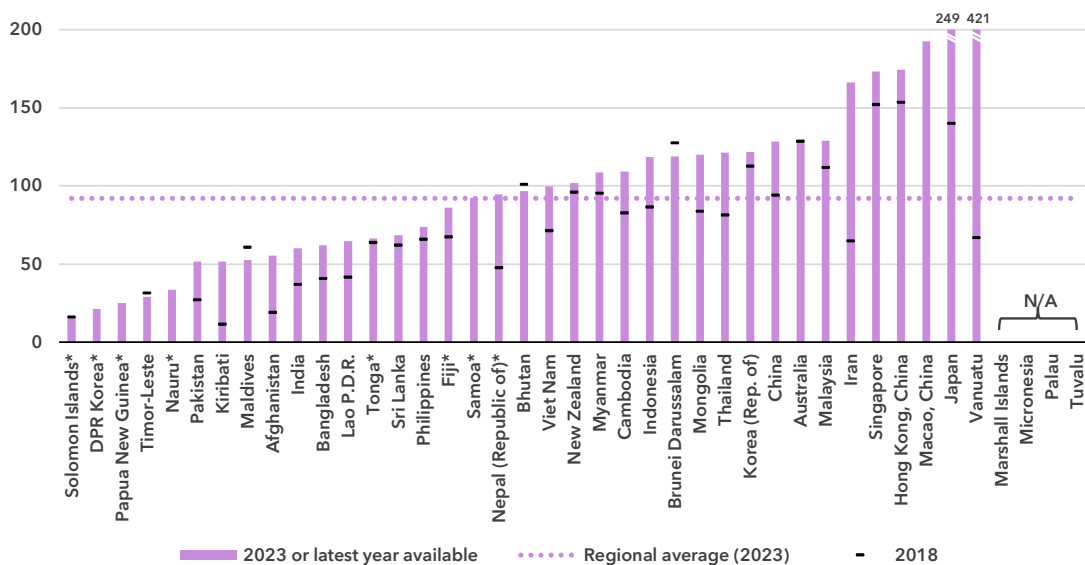
* Data are ITU estimates.
Source: ITU

The prevalence of mobile broadband subscriptions is quite high and continues to grow in most economies of the region, underscoring the importance of mobile broadband as a gateway to the Internet. However, there is a significant disparity between the lowest figure (11 subscriptions per 100 inhabitants) and the highest (421 subscriptions per 100 inhabitants).

The heterogeneity of the region is also reflected in the country-level numbers of fixed broadband subscriptions. High income economies have high levels of fixed broadband subscriptions per 100 inhabitants, while in the lower income economies these are often very low. Furthermore, among economies with high levels of fixed broadband subscriptions broadband speeds tend to be more than 10 Mbit/s, which is not true for economies with low subscription levels.

Fixed broadband subscriptions per 100 inhabitants, 2023 or latest year available

Legend: 256 kbit/s to <2 Mbit/s; 2 Mbit/s to <10 Mbit/s; >=10 Mbit/s; Speed not available; Regional average (2023); 2018 (all speeds)
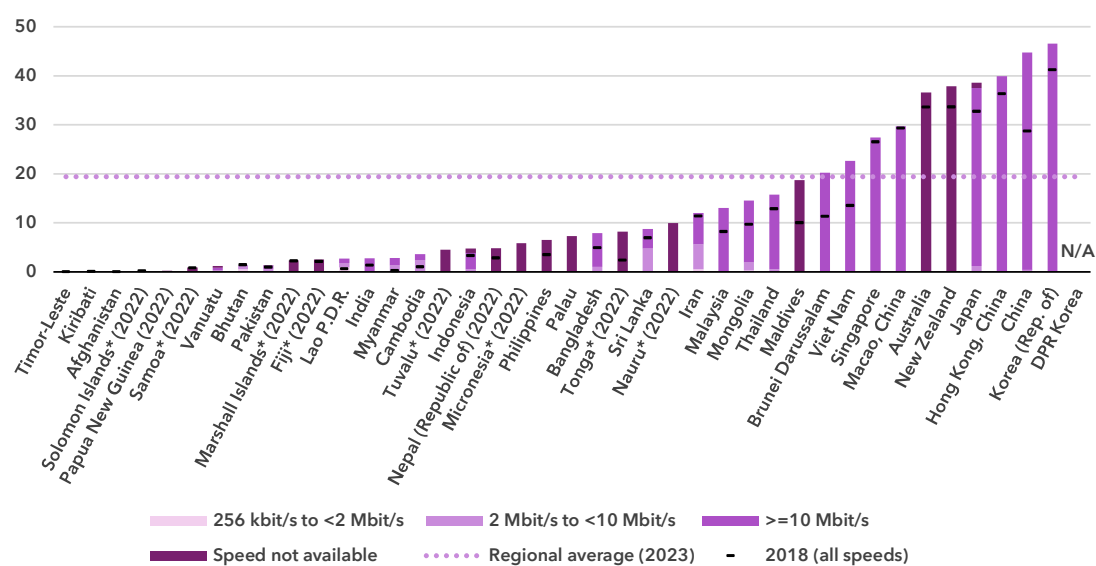
* Data are ITU estimates.
Source: ITU

Mobile network coverage

5G network roll-out is progressing well

Percentage of population covered by type of mobile network
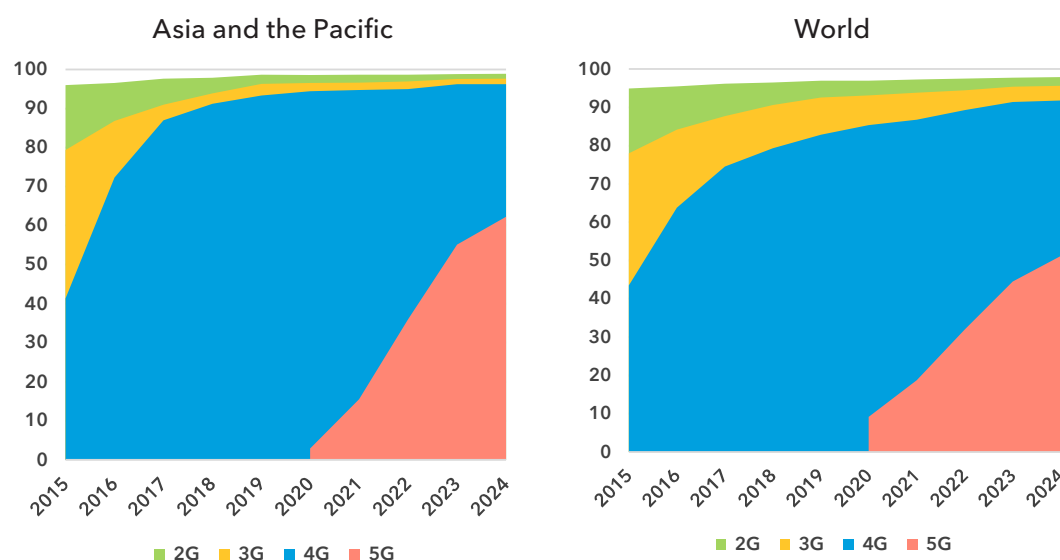
Asia and the Pacific

World

Note: The values for 2G, 3G and 4G networks show the incremental percentage of the population that is not covered by a more advanced technology network (e.g. in 2024, 96 per cent of the world population is covered by a 3G network or better, that is 4 per cent + 41 per cent + 51 per cent). There are insufficient data to produce estimates for 5G coverage prior to 2020.
Source: ITU

Between 2020 and 2024, 5G mobile network coverage in the region increased from 3 to 62 per cent of the population. This was much faster growth than the global coverage, which increased from 9 to 51 per cent over the same period. In the region, 4G mobile networks covered 96 per cent of the population in 2024, also above the global average of 92 per cent. Furthermore, 98 per cent of the population in Asia and the Pacific had access to at least a 3G mobile broadband network, leaving only 2 per cent without access to a mobile broadband network and therefore without any possibility of accessing the Internet. This coverage gap was two percentage points smaller than the global average.

Percentage of population covered by type of mobile network, 2023 or latest year available

* Data are ITU estimates.
** Data for 5G coverage are ITU estimates.
Note: The values for 2G, 3G and 4G networks show the incremental percentage of the population that is not covered by a more advanced technology network (e.g. in 2023, 99 per cent of the population in Thailand is covered by a 4G network or better, that is 89 per cent + 10 per cent).
Source: ITU

The region's diversity is evident again in the roll-out of mobile networks. In 13 countries, more than half the population had access to a 5G network. In stark contrast, 5G was not available at all in 23 out of 41 economies, where 4G remained the most advanced technology as of 2024.

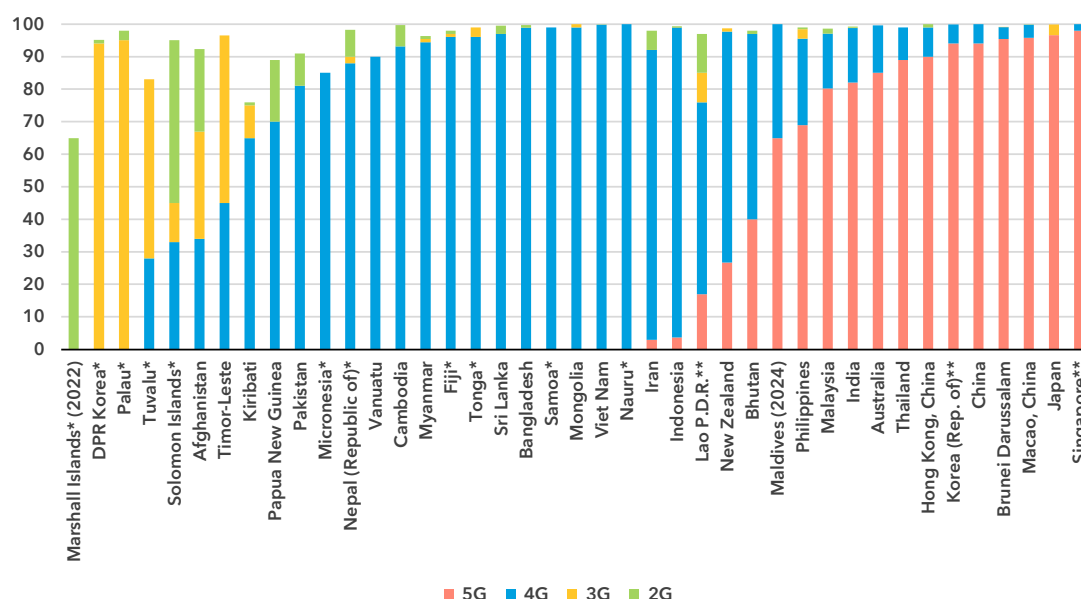## Population coverage by type of mobile network and location, 2024
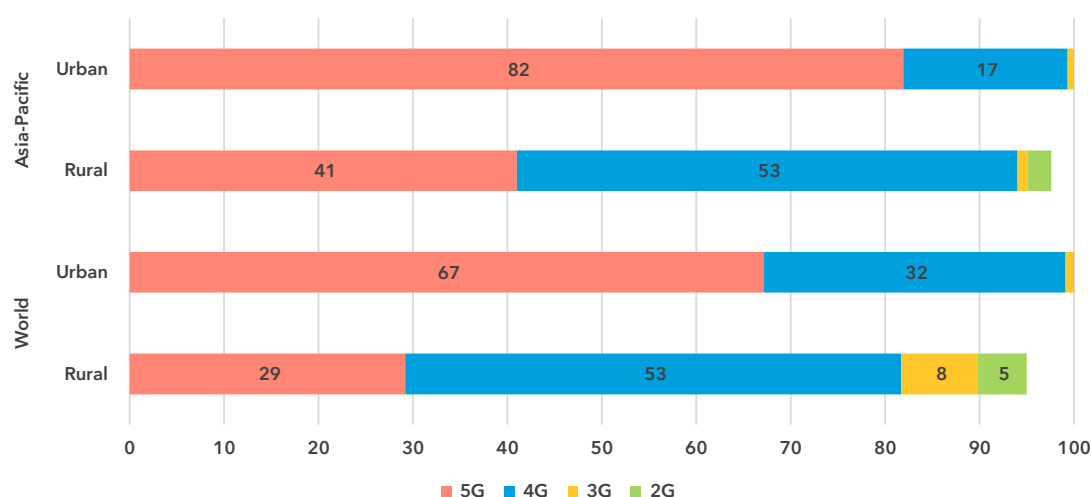
Note: The values for 2G, 3G and 4G networks show the incremental percentage of the population that is not covered by a more advanced technology network (e.g. 90 per cent of the world's rural population is covered by a 3G network or better, that is 29 per cent + 53 per cent + 8 per cent).
Source: ITU

As with Internet use, there is a significant gap in network availability between rural and urban areas. In 2024, 5G covered 82 per cent of the urban population in Asia and the Pacific, but only 41 per cent in rural areas. The disparity also existed for 4G networks, but to a much smaller extent, with 99 per cent of the urban population covered compared with 94 per cent in rural areas. When including 3G networks, coverage reached 100 per cent in urban areas but only 95 per cent in rural parts. This means that while every urban resident in the region had access to a mobile broadband network, 5 per cent of the rural population remained off the grid, less than the global average (10 per cent).

Availability of fixed broadband infrastructure

Only one-quarter of the population lives within 10 km of a fibre-optic node

Fixed broadband infrastructure forms the backbone of the Internet and is a cornerstone of digital transformation efforts. As part of ongoing research at ITU, the broadband map initiative provides an overview of fixed broadband infrastructure placement. Overlaying this data with demographic data makes it possible to infer the availability and proximity of fixed broadband to populations. This is essential for planning – costly – infrastructure projects and helps to ensure that networks have the necessary capacity and reach.

Map of transmission networks and submarine cables for the Asia and the Pacific region
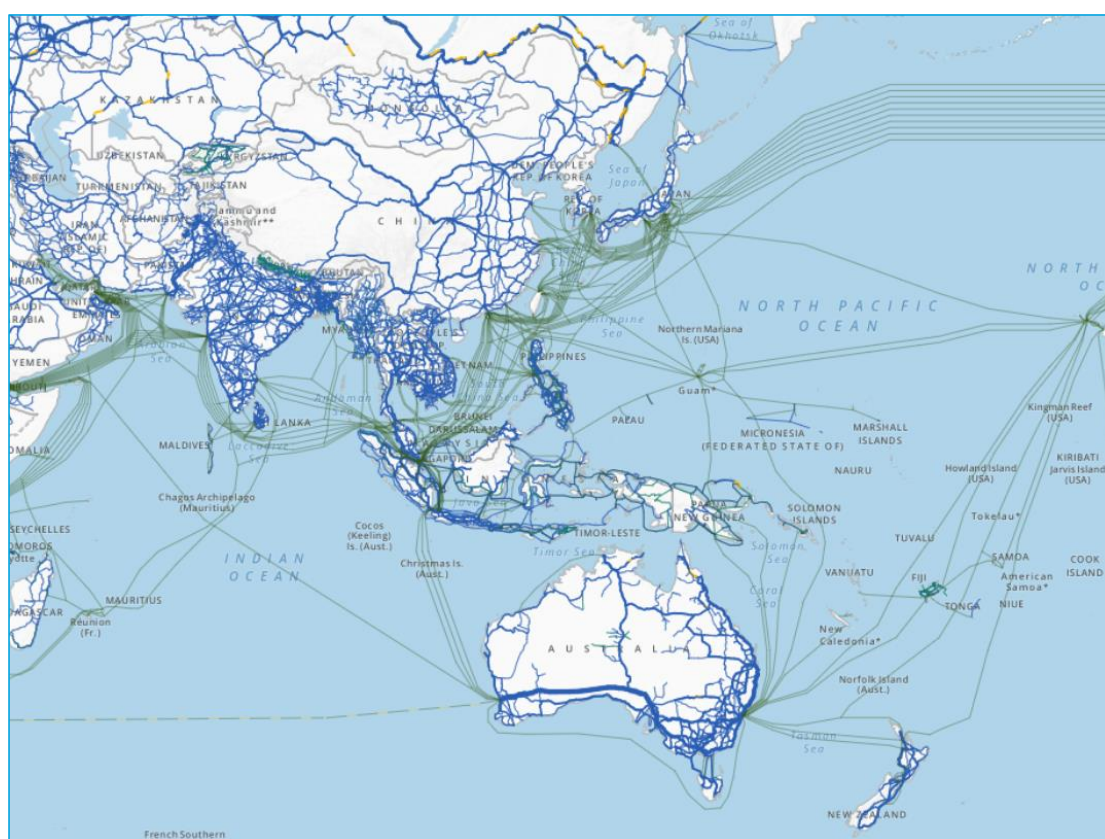
Note: The map shows active and planned submarine cables, and operational, planned and under-construction transmission networks (fibre-optic cable and microwave).
The designations employed and the presentation of material on the map do not imply the expression of any opinion whatsoever on the part of ITU or its secretariat concerning the legal status of any country, territory, city or area or its authorities, or concerning the delimitation of frontiers or boundaries.
Source: ITU, https://bbmaps.itu.int/app

Proximity to a fibre-optic node is a crucial metric for transformative connectivity as it directly impacts connection performance, reliability and scalability. It reduces latency, improves connection stability and lowers deployment costs, making broadband access more affordable and efficient. Additionally, it facilitates upgrades to support growing bandwidth demands, ensuring networks remain future-ready.

As of 2023, 25 per cent of the population of the Asia and the Pacific region lived within 10 km of a fibre-optic node. More than half of the population (56 per cent) lived within 25 km, 74 per cent within 50 km and 88 per cent within 100 km of a node.

Percentage of population within reach of a fibre-optic node, 2023
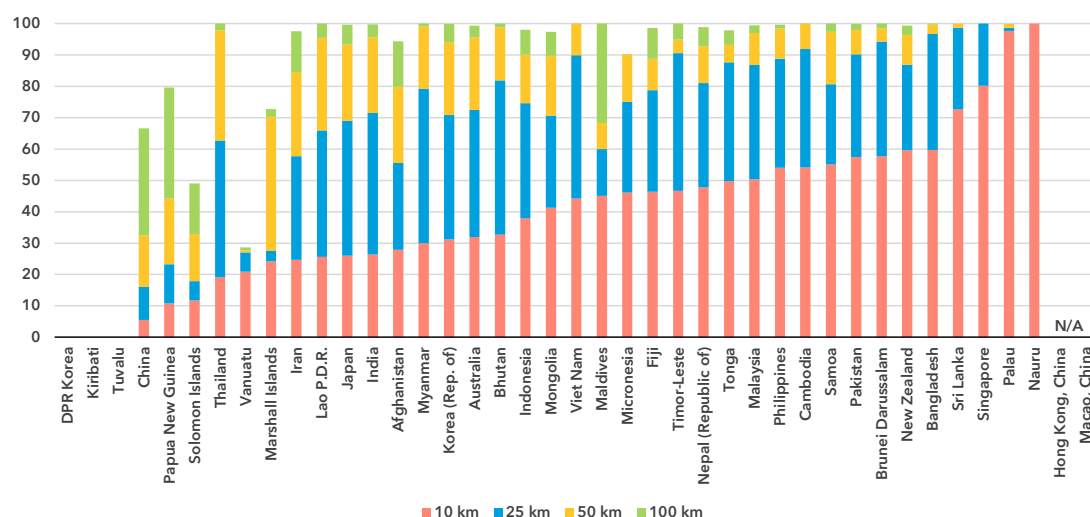
Note: The percentage of the population within reach of transmission networks refers to the percentage of people that are within physical reach of nodes on core terrestrial transmission networks for a given distance (see https://bbmaps .itu.int/indicators-bbmaps).
Source: ITU

Internet traffic and international bandwidth

Mobile Internet traffic in Asia and the Pacific is higher than the global average, fixed traffic lower

Broadband Internet traffic per subscription per month (GB)
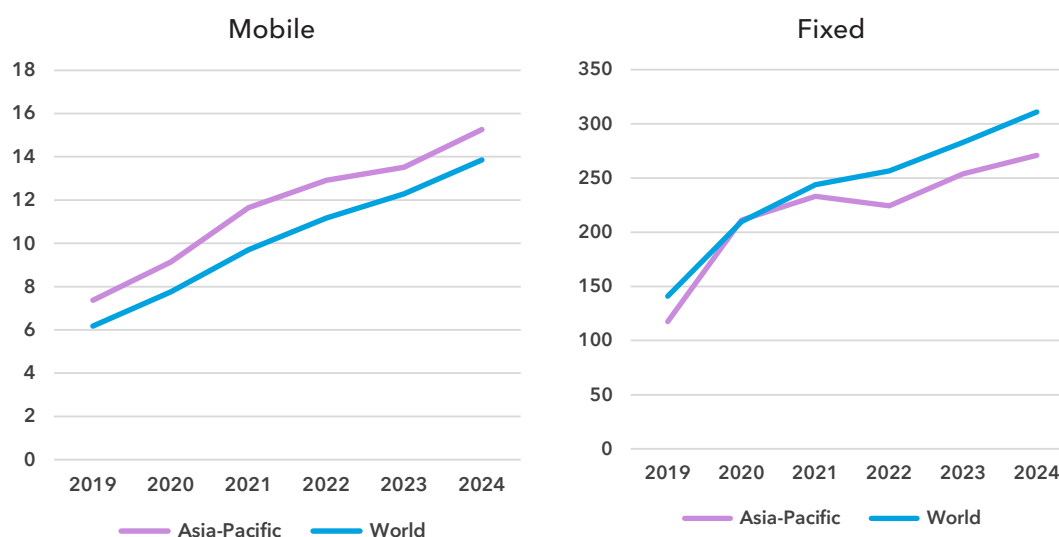
Source: ITU

Internet traffic measures the total volume of data downloaded or uploaded by end users over a given period. For ease of interpretation, figures presented refer to the average monthly traffic per fixed as well as mobile broadband subscription. Traffic levels are typically higher for fixed than mobile broadband, not only because subscriptions are shared by multiple users (e.g. in households), but also because it also includes mobile device traffic routed over Wi-Fi when available.

Between 2019 and 2024 monthly mobile broadband traffic in the region grew from 7 to 15 gigabytes (GB) per mobile broadband subscription, slightly ahead of global traffic (which went from 6 to 14 GB in that time). The situation was reversed for fixed broadband traffic, which in Asia and the Pacific increased from a monthly 117 GB to 271 GB per subscription, while globally it increased from 141 to 311 GB.

Mobile broadband Internet traffic (GB) per subscription per month, 2023 or latest year available
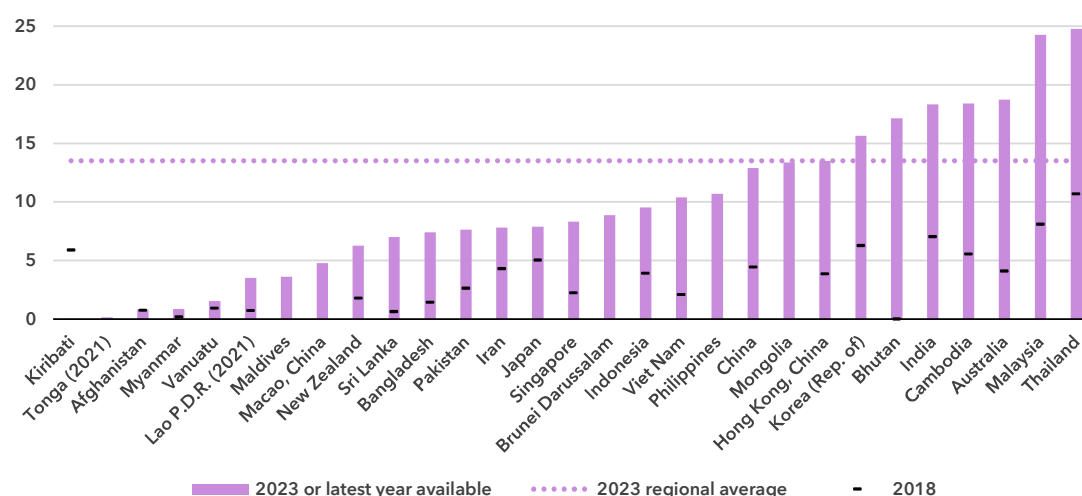
Note: Internet traffic originating within country.
Source: ITU

Here, too, the region exhibits enormous variability. Mobile broadband traffic per subscription per month ranged from less than 1 GB to 25 GB. For fixed broadband, the spread was from just 3 GB to 482 GB. Of note is that some countries with high mobile broadband traffic have only average fixed broadband traffic, and vice-versa.

Fixed broadband Internet traffic per subscription per month (GB), 2023 or latest year available

Source: ITU

Unlike the end-user Internet traffic measured above, international bandwidth usage is a throughput measure that refers to the annual average used capacity of international connections, typically carried over submarine or terrestrial fibre-optic cables or microwave links. It does not sum up incoming and outgoing traffic, but captures the larger of the two. For comparability, the figure for bandwidth is divided by the number of Internet users in the country.

International bandwidth per Internet user (kbit/s)
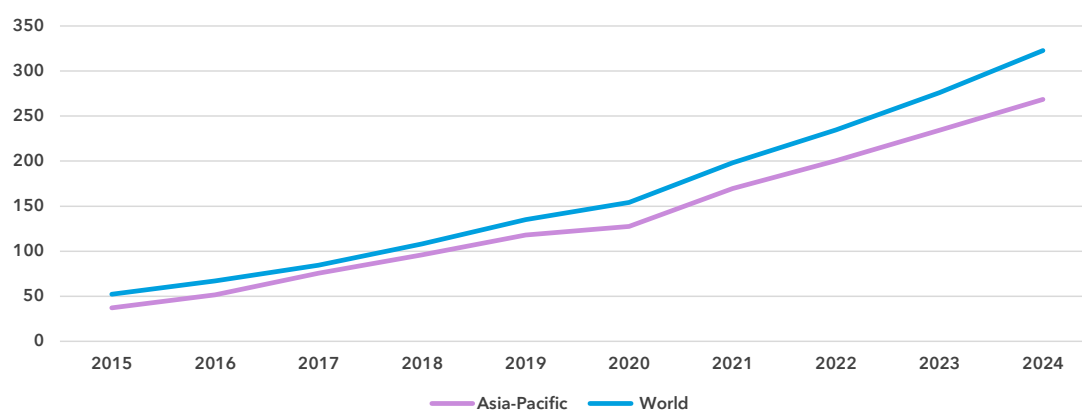
Source: ITU

International bandwidth usage in Asia and the Pacific stood at 265 kbit/s in 2024, 17 per cent below the global average of 323 kbit/s. However, this regional average includes data for Hong Kong, China, and Singapore, which are both transit hubs. Taking the median instead, which dampens the impact of outliers, gives a more representative measure of bandwidth in the region, which was just 99 kbit/s in 2023.

International bandwidth per Internet user (kbit/s), 2023 or latest year available
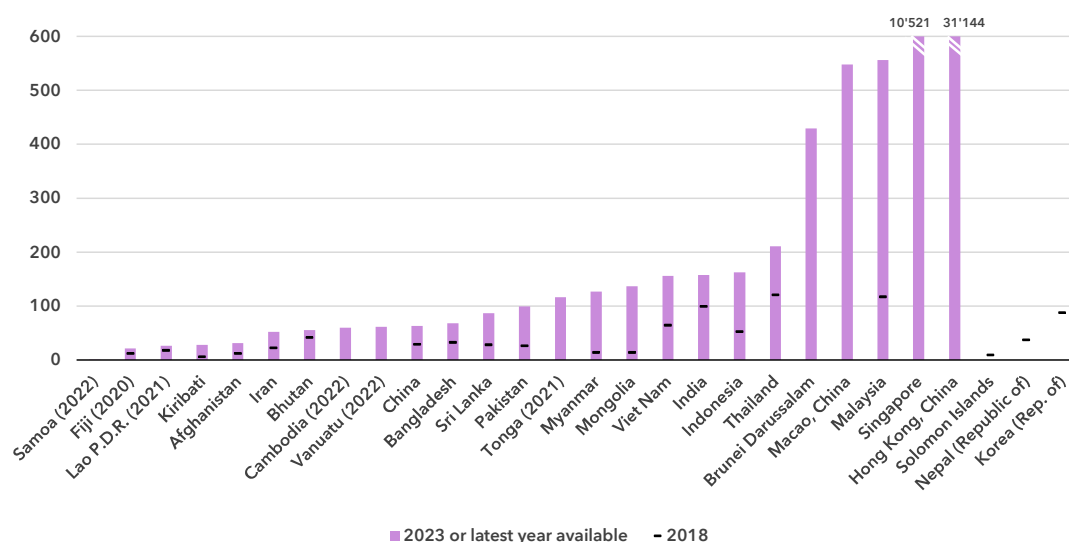
Source: ITU

International bandwidth usage reflects the state of international connectivity infrastructure (presence of submarine and overland cables, including redundancies) and the degree to which a country is connected to international data flows. Demand for international bandwidth depends on many country-specific factors, such as geographical location or the size and development of domestic middle-mile connectivity infrastructure. (Thus, small islands are dependent on international linkages, while larger countries, with a higher density of data centres and Internet exchange points, can have a correspondingly lower demand for international data exchange.) The limited data available from the region, about one-half of the countries, shows large variations. Five economies reported bandwidth usage exceeding 400 kbit/s, higher than the world average, while 13 countries reported bandwidth usage levels below 100 kbit/s, suggesting that limited international linkages may hamper universal and meaningful connectivity.

Affordability of ICT services

Mobile and fixed broadband are generally affordable in Asia, but expensive in many parts of the Pacific

Broadband basket prices as % of gross national income per capita, 2018-2024

Mobile (2 GB)	Fixed (5 GB)
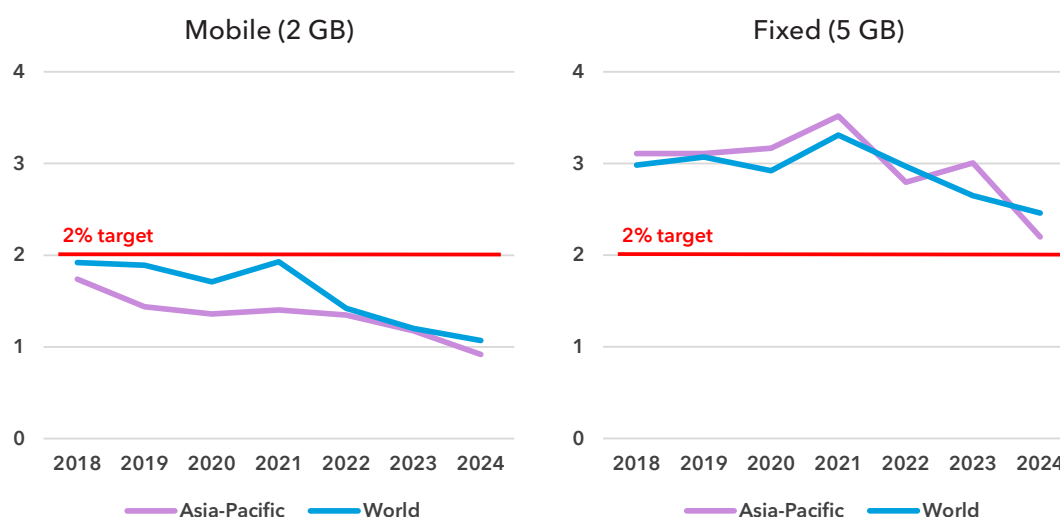
Note: Median values shown in the chart are calculated as a percentage of GNI per capita, for the set of economies for which data was available for all years from 2018 to 2024 for a given basket to adjust the effect of changing data availability.
Source: ITU

Internet cost is a barrier to Internet use and to meaningful connectivity. The United Nations Broadband Commission for Sustainable Development set up the goal of making broadband in developing countries affordable by 2025, affordability being defined as the availability of broadband at a price that is less than 2 per cent of monthly GNI per capita.

Entry-level data-only mobile broadband prices have gone down significantly in the region, from 1.7 per cent of GNI per capita in 2018 to 0.9 per cent in 2024, well below the Broadband Commission target.[5] For an entry-level fixed broadband service, the median price in 2024 was 2.2 per cent of GNI per capita. This was still above the Broadband Commission target, but if the current trend continues, prices in the region will drop below the target in the next few years.

---

[5]   Considering only those countries for which data was available for all years from 2018 to 2024.

Mobile broadband basket prices as % of gross national income per capita, 2024
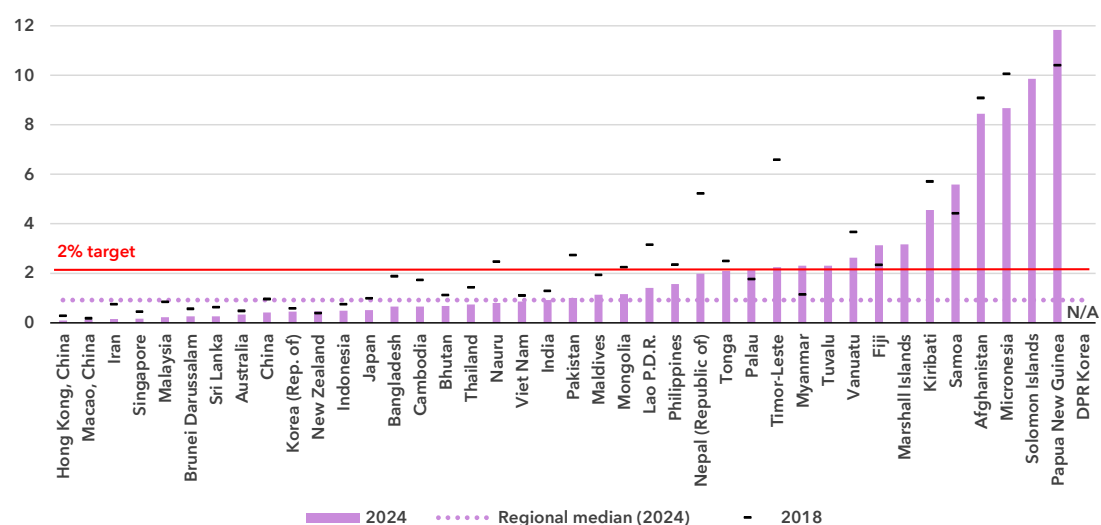
Source: ITU

In 14 of 40 countries, the mobile broadband price was above the Broadband Commission target of 2 per cent of GNI per capita. Ten of these countries are small Pacific islands. For fixed broadband, prices in 23 out 38 countries were above the 2 per cent target. This included seven Pacific islands, which all had prices above 5 per cent.

Fixed broadband basket prices as % of gross national income per capita, 2024 or latest year available
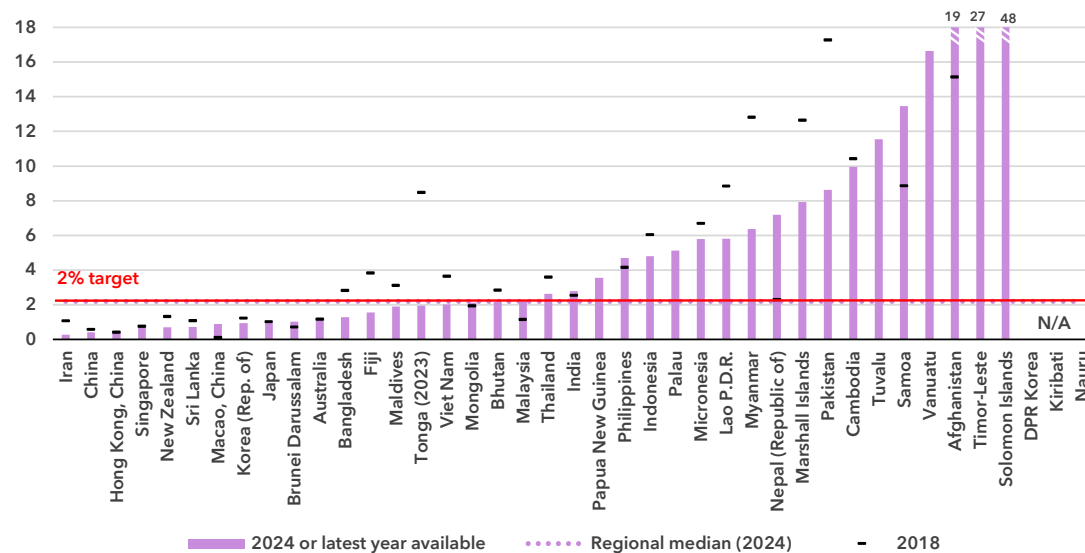
Source: ITU

Mobile phone ownership and subscriptions

Mobile phone ownership in the region is very high

Percentage of individuals owning a mobile phone
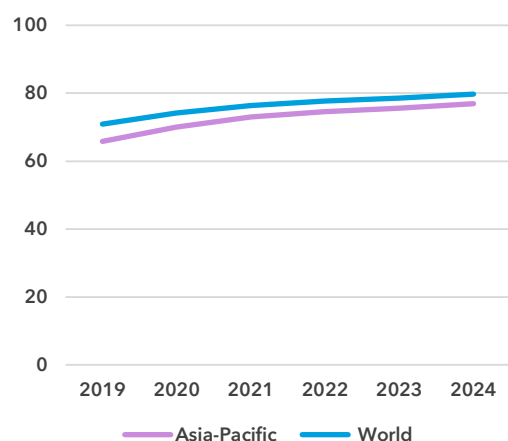
Percentage of individuals owning a mobile phone, by gender, 2024
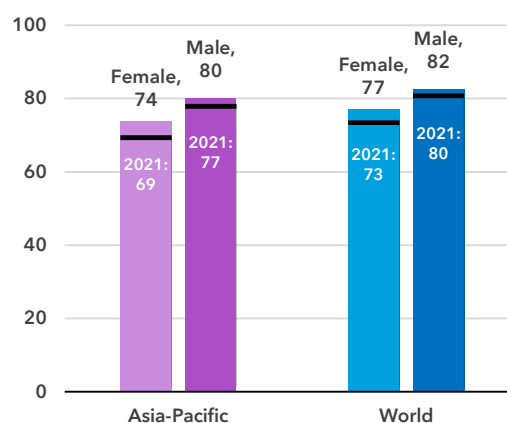
Note: Individuals aged 10 and older.
Source: ITU

In 2024, 77 per cent of individuals in Asia and the Pacific aged 10 and older owned a mobile phone, three percentage points less than the global average. Growth over the last five years has been modest, which is not surprising considering the level is already quite high. The gender parity score for ownership stood at 0.92, improving from 0.89 in 2021. For comparison, the global score also improved slightly during that period, from 0.91 to 0.93.

Percentage of individuals owning a mobile phone, 2023
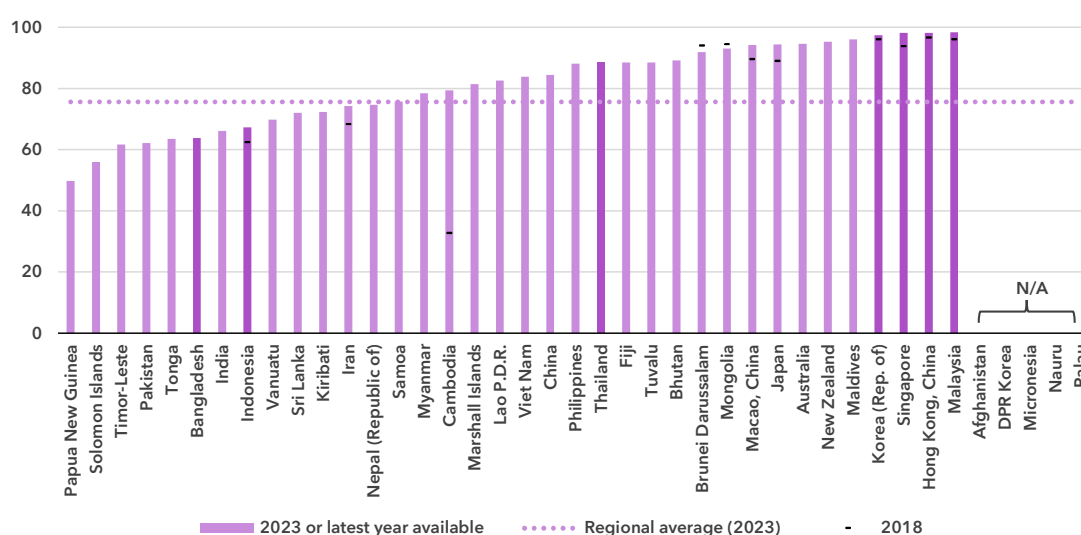
2023 or latest year available   ••••• **Regional average (2023)**   - **2018**

Notes: Figures based on official national statistics are shaded dark to distinguish them from figures based on non-official data.
Source: ITU

In 16 countries out of the 36 reported on here, mobile phone ownership was below 80 per cent of the population, including 5 Pacific islands. In the 12 countries for which data are available for a recent year, gender parity was reached in 7.

Percentage of individuals owning a mobile phone, by gender, 2023 or latest year available
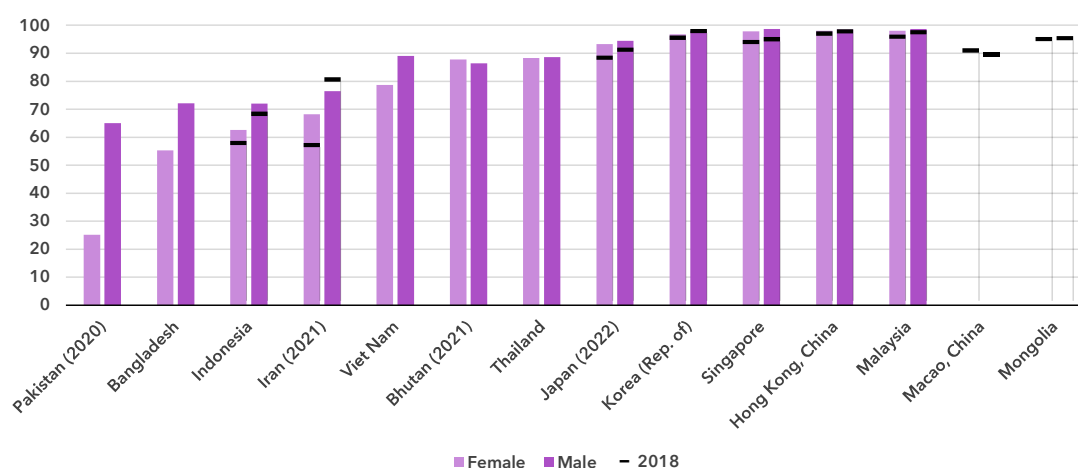
Source: ITU

To use a mobile phone, a mobile cellular or mobile broadband subscription is needed. In Asia and the Pacific, there were 112 mobile cellular subscriptions per 100 inhabitants in 2024, the same as the global average. This indicator is starting to plateau, as it has increased only very modestly in the last five years.

Mobile cellular subscriptions per 100 inhabitants
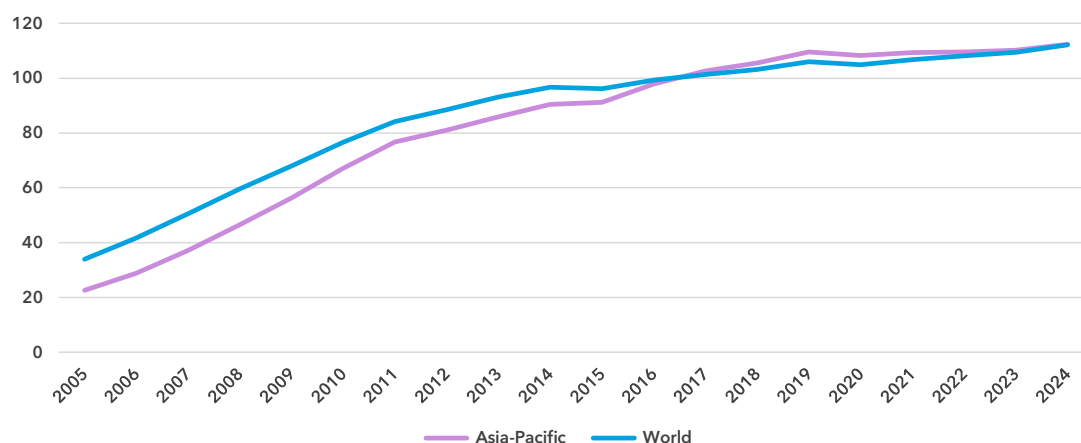
Source: ITU

At the country level, however, there was still a significant gap between the economies with the least and those with the highest number of subscriptions, at 20 and 319 respectively. Of the 16 countries below the regional average, 9 were small Pacific islands.

Mobile cellular subscriptions per 100 inhabitants, 2023 or latest year available
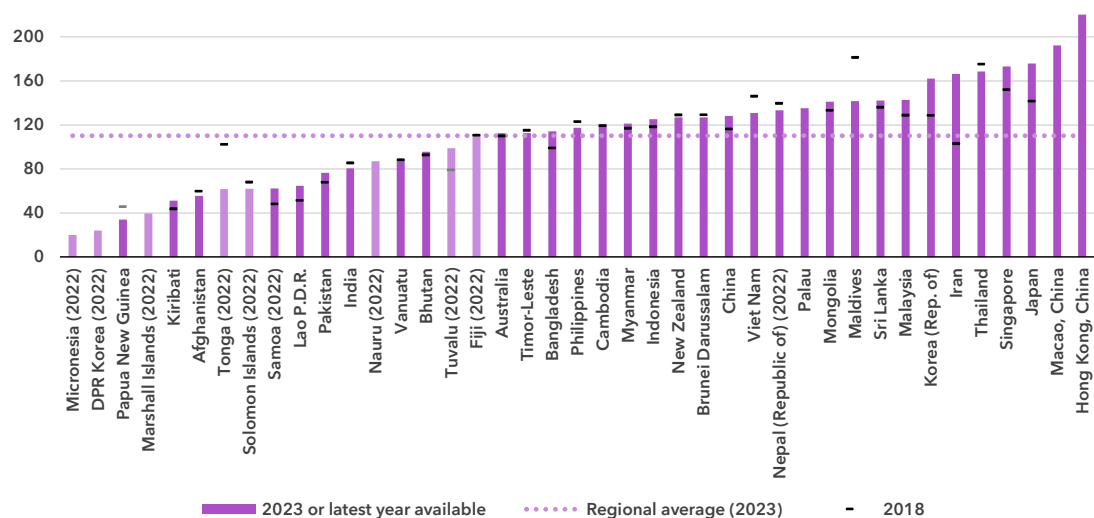
Notes: Figures based on official national statistics are shaded dark to distinguish them from figures based on non-official data.
Source: ITU

ICT skills

Large variations in ICT skills among Internet users

Because self-reporting of individuals' ICT skills is subjective, ICT skills are measured based on household surveys asking whether an individual has recently performed certain activities. Performing these activities presupposes a degree of proficiency in relevant digital skills. The activities are grouped into five areas: information and data literacy; communication and collaboration; digital content creation; safety; and problem solving.

While the importance of digital skills in leveraging ICTs for economic prosperity and social well-being is well-documented, data remain very scant, with only 13 countries in Asia and the Pacific having submitted data recently, i.e. since 2020. Even fewer – just six countries – provided (at least some) comparable data on ICT skill levels (see box for details on the methodology for calculating ICT skill levels).

Methodology for calculating ICT skill levels

At its 11th meeting in September 2023, the ITU Expert Group on ICT Household Indicators (EGH) recommended changes in how data on ICT skill levels are reported – most importantly, that skill levels of individuals should be assessed for different areas.

Individuals should be assessed on the number of activities within a skill area they report having done in the last three months using the following progression:

None	Basic	Above basic
0 activities	1 activity	More than 1 activity

- Skill levels should not be assessed in skill areas where fewer than two indicators are collected.
- Indicators should be weighted equally within each skill area.
- Skill areas with different numbers of components should be treated equally.

While this recommendation does not require any additional data collection, it does require that countries perform additional analysis on existing survey microdata. ITU requested data on ICT skills for the first time in its April 2024 data collection, and received data from 40 countries, including 6 countries in Asia and the Pacific. However, other countries were unable to provide data, even though in many cases data on the underlying activities had been collected. It is expected that data availability will improve as familiarity with these new recommendations increases.

ICT skills data goes beyond simple access and use of ICTs to provide a view of the capabilities of ICT users. Data from the Asia and the Pacific region on the prevalence of ICT skills are shown below as a percentage of those already using the Internet. These data demonstrate the substantial variation between countries, and bring to light areas where attention is needed to increase ICT skills.

Percentage of Internet users with ICT skills in Asia and the Pacific, by skill level, 2023 or latest year available

Brunei Darussalam (2022)

Information and data literacy	N/A
Communication and collaboration	76 / 23
Digital content creation	88 / 10
Safety	61 / 33
Problem solving	91 / 9

■ Above basic skills ■ Basic skills

Hong Kong, China

Information and data literacy	N/A
Communication and collaboration	N/A
Digital content creation	50 / 17
Safety	22 / 6
Problem solving	48 / 9

■ Above basic skills ■ Basic skills

Japan (2022)

Information and data literacy	N/A
Communication and collaboration	N/A
Digital content creation	67 / 23
Safety	N/A
Problem solving	61 / 15

■ Above basic skills ■ Basic skills

Korea (Rep. of)

Information and data literacy	92 / 7
Communication and collaboration	84 / 14
Digital content creation	81 / 17
Safety	26 / 34
Problem solving	84 / 8

■ Above basic skills ■ Basic skills

Malaysia

Information and data literacy	N/A
Communication and collaboration	95 · 5
Digital content creation	68 · 16
Safety	N/A
Problem solving	82 · 8

0 25 50 75 100

■ Above basic skills ■ Basic skills

Viet Nam

Information and data literacy	N/A
Communication and collaboration	26 · 61
Digital content creation	N/A
Safety	N/A
Problem solving	N/A

0 25 50 75 100

■ Above basic skills ■ Basic skills

Note: Data for Japan and Viet Nam refer to individuals aged 6 and older. Data for Hong Kong, China refer to individuals aged 10 and older. Data for Brunei Darussalam and Malaysia refer to individuals aged 15 and older. Data for the Republic of Korea refer to individuals aged 16-74.
Source: ITU

In general, communication and collaboration skill levels are very high in the four countries with data available. However, in Viet Nam there are relatively fewer individuals with above basic skills in this area.

Digital content creation and problem-solving skill levels are also quite high in the countries with data available, though not as high as for communication and collaboration. Hong Kong, China reported somewhat lower levels than for the others.

For the three economies with data available (Brunei Darussalam, Hong Kong, China, and the Republic of Korea), the level of skills in safety are notably lower than those in other areas.

Comparing countries, Brunei Darussalam, Malaysia, and the Republic of Korea have similar profiles, with high levels of at least basic skills in all areas for which data are available, albeit with lower levels of safety skills. In Hong Kong, China, and in Japan skill levels are somewhat lower, indicating room for improvement in areas such as digital content creation, problem solving, and especially safety in Hong Kong, China.

A different way to analyse these data is by comparing the distribution of country values for the activities that comprise each of the five skill areas. This provides a view of the prevalence of each activity among Internet users relative to others in the same area. It also shows the wide range of variation in ICT skills among countries in the region even when focusing only on those using the Internet.

Percentage of Internet users with information and data literacy skills, latest year available
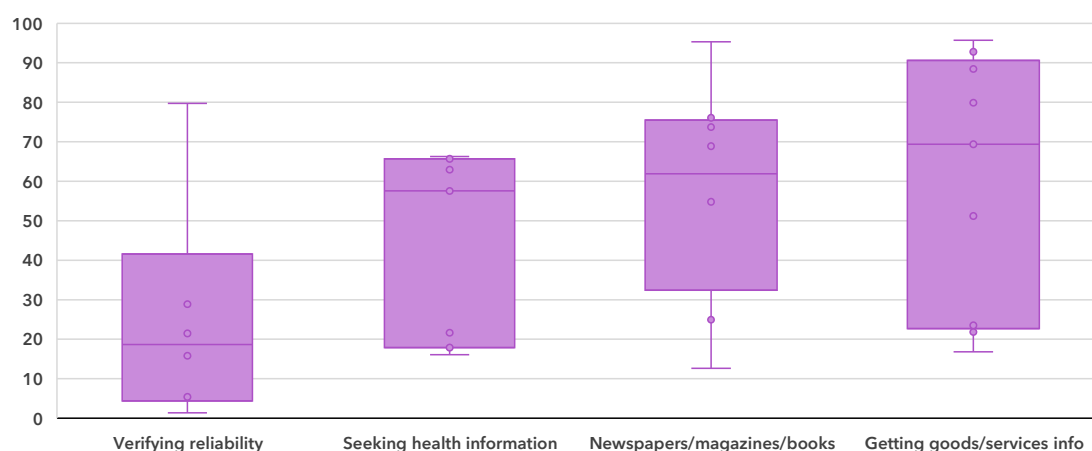
Note: Bars indicate the 25th, median and 75th percentile of all country values. The whiskers (bottom and top lines) indicate individual minimum and maximum values. In-scope age varies between countries. Country data are for 2023 where available b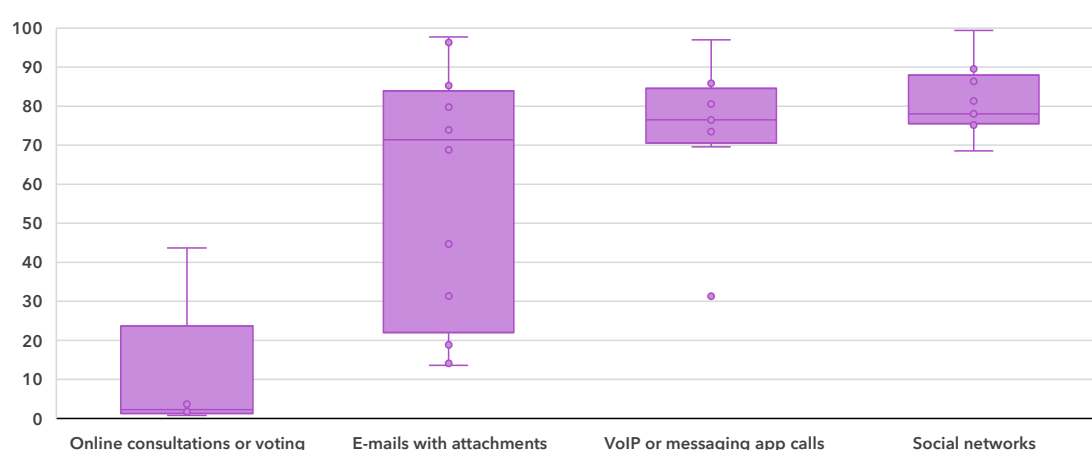ut no earlier than 2020. Data availability varies between indicators, ranging from six countries for *Verifying the reliability of information found online to* nine countries for *Getting information about goods or services.* Detailed information – including complete indicator names – is available here.
Source: ITU

Within the area of information and data literacy, made up of four activities, the activity that had the highest median (69 per cent) was getting information about goods or services, closely followed by the activities that involve using the Internet to read or download newspapers, magazines or books, and seeking health information. Verifying the reliability of information found online was less frequently reported (median of 19 per cent) across the region.

Percentage of Internet users with communication and collaboration skills, latest year available

Note: Bars indicate the 25th, median and 75th percentile of all country values. The whiskers (bottom and top lines) indicate individual minimum and maximum values. In-scope age varies between countries. Country data are for 2023 where available but no earlier than 2020. Data availability varies between indicators, ranging from five countries for *Taking part in online consultation or voting to define civic or political issues* to 12 countries for *Sending messages with attached files.* Detailed information – including complete indicator names – is available here.
Source: ITU

The medians throughout the communication and collaboration skills area were generally much higher than for the information and data literacy area, ranging between 71 and 78 per cent.

The one exception was the activity defined as taking part in online consultations or voting to define civic or political issues, which had a median of only 2 per cent.

Percentage of Internet users with digital content creation skills, latest year available

Note: Bars indicate the 25th, median and 75th percentile of all country values. The whiskers (bottom and top lines) indicate individual minimum and maximum values. In-scope age varies between countries. Country data are for 2023 where available but no earlier than 2020. Data availability varies among indicators, ranging from five countries for *Using software run over the Internet for editing text documents, spreadsheets or presentations* to eight countries for *Uploading self/user-created content to a website to be shared* to 12 countries for all other indicators. Detailed information – including complete indicator names – is available here.
Source: ITU

The digital content creation skill area generally shows relatively low medians for five of the six activities, ranging from 7 to 41 per cent. The exception is using copy and paste tools within a document, which had a median of 63 per cent, albeit with substantial variation between countries.

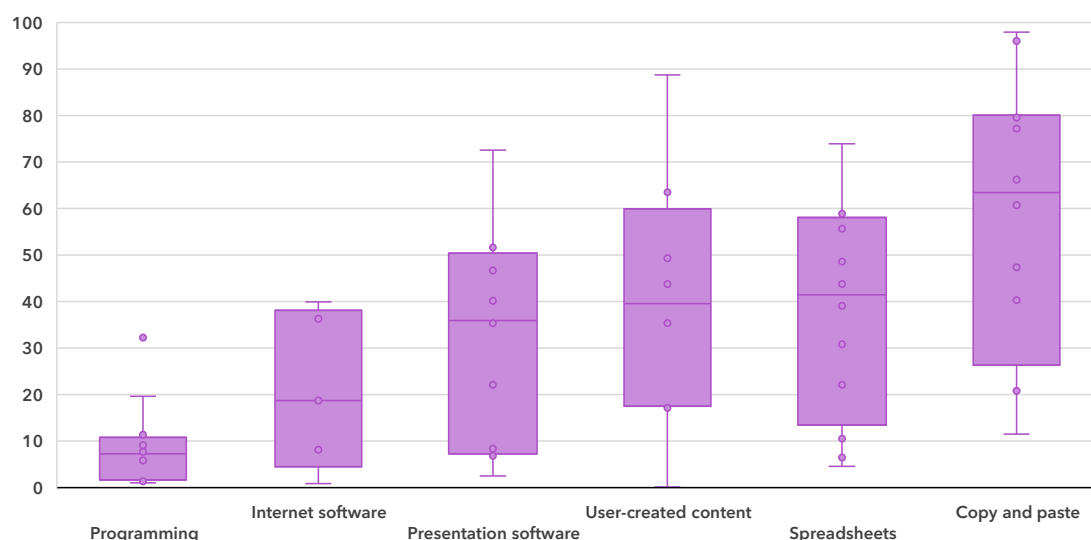**Percentage of Internet users with safety skills, latest year available**

Note: Bars indicate the 25th, median and 75th percentile of all country values. The whiskers (bottom and top lines) indicate individual minimum and maximum values. In-scope age varies between countries. Country data are for 2023 where available but no earlier than 2020. Eight countries provided data for each indicator. Detailed information – including complete indicator names – is available here.
Source: ITU

The two activities in the safety category showed similar prevalence for countries in the region. The median shares were 31 and 33 per cent respectively for changing privacy settings on one's device, account or app and for setting up effective security measures to protect devices and accounts. However, the share of individuals doing these activities varied widely between countries in the region.

Percentage of Internet users with problem-solving skills, latest year available
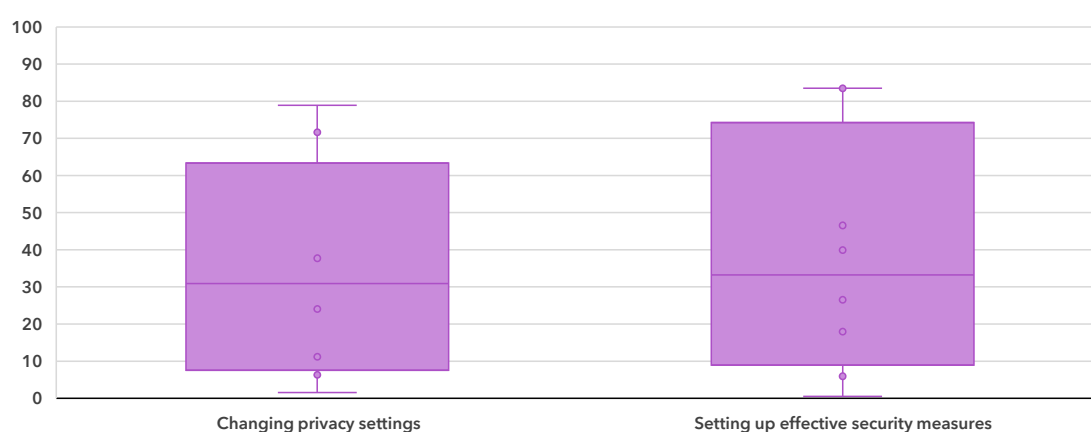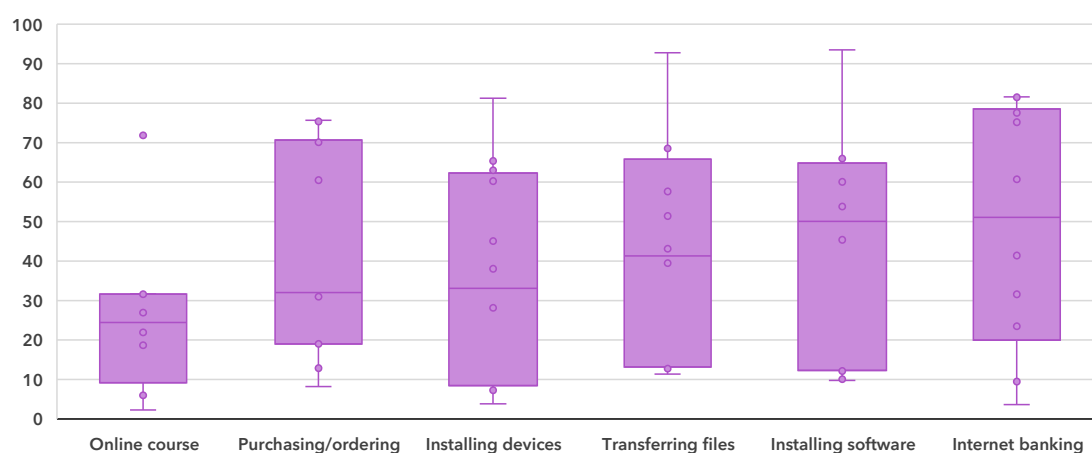

Note: Bars indicate the 25th, median and 75th percentile of all country values. The whiskers (bottom and top lines) indicate individual minimum and maximum values. In-scope age varies between countries. Country data are for 2023 where available but no earlier than 2020. Data availability varies between 8 and 12 countries for each indicator. Detailed information – including complete indicator names – is available here.
Source: ITU

Finally, the medians for the different activities that make up the problem-solving skills area vary widely, from 24 per cent for doing an online course to 51 per cent for Internet banking.

Revenue and investment

The telecommunication sector is a key economic driver in Asia and the Pacific

The telecommunication sector is an important enabler of economic development, with both direct and indirect impacts. While the indirect impact is harder to capture, the direct impact is clearly significant, as re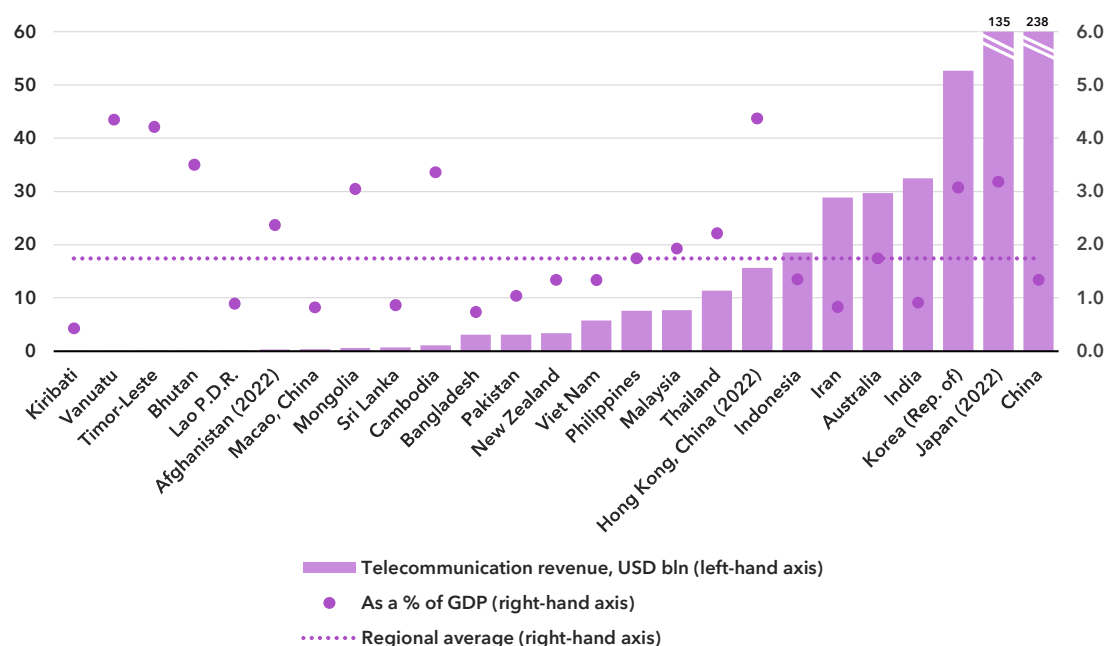vealed in recent data on revenue and investment. At the same time, those data also reveal considerable gaps between countries.

Revenue from all telecommunication services, in USD billion and as a % of GDP, 2023 or latest available year

Note: Annual average exchange rates applied, last available year values at constant 2023 prices.
Sources: ITU, World Bank World Development Indicators

The ICT services sector includes activities providing telecommunications and related service activities, i.e. transmitting voice, data, text, sound and video over wired, wireless, satellite or other networks.[6] The total retail revenues for the sector in the Asia and the Pacific region, for the 25 countries that provided data in the last available year since 2021, is estimated at around USD 597 billion. However, the size of the telecommunication market varies significantly across countries, with nine countries reporting revenue of up to USD 750 million, while China, the largest market, achieved USD 238 billion, followed by Japan at USD 135 billion.

This sector contributed an average of 1.7 per cent to the region's GDP. At the country level the contribution ranges from less than 1 per cent in seven countries to over 3 per cent in eight countries.

---

[6]   For a complete definition, see the International Standard Industrial Classification of All Economic Activities (ISIC), Rev. 4, division 61.

Annual investment in telecommunication services, in USD billion and as % of GDP
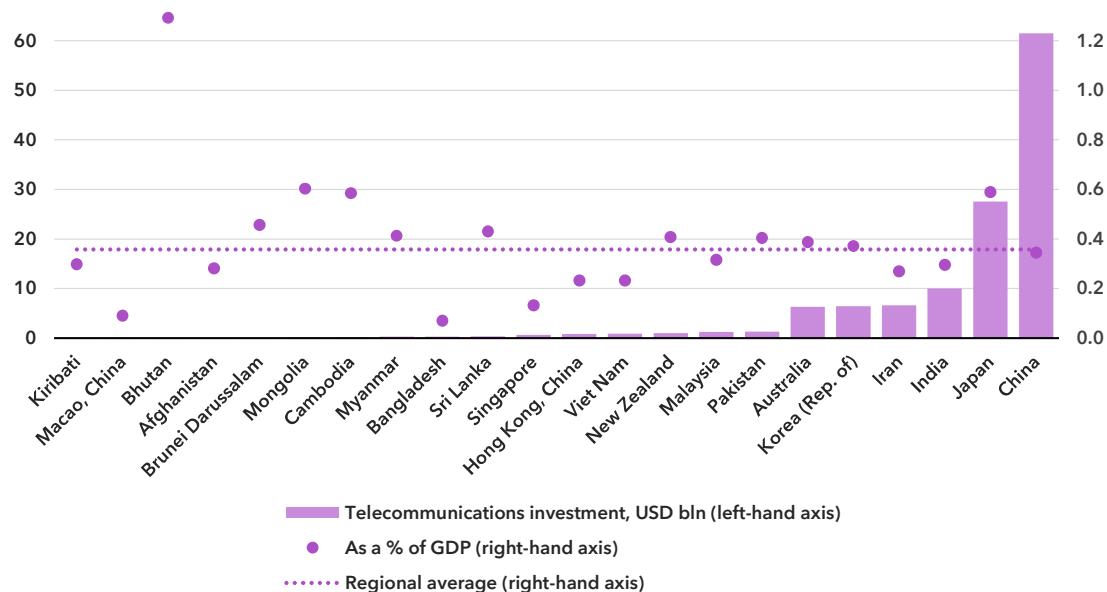
Note: Data are a three-year (2021-2023) average of available data points to correct for annual fluctuations and gaps. Investment figures are in constant 2023 US dollars.
Sources: ITU, World Bank World Development Indicators

The deployment of new network technologies and the upgrading of existing ones are highly capital-intensive activities. Investment projects often span multiple years and spending fluctuates, which is why statistics are presented as the period average for 2021-2023. Those countries in the region for which data was available made annual investments ranging from less than USD 1 billion in nine countries, to USD 28 billion in Japan and USD 62 billion in China. This corresponded to a median value of 0.4 per cent of GDP over the 2021-2023 period.[7]

Investment is unevenly distributed across countries in the region, and both the levels and the per GDP rates of capital expenditure vary significantly. A low level of investment in countries with mobile network coverage gaps and low mobile and fixed broadband penetration is a particular concern, as it perpetuates digital development divides.

[7]   Investment statistics collected by ITU refer to acquiring or upgrading property (including tangible assets such as plant and non-tangible assets such as computer software) and networks. The statistics exclude expenditure on research and development, annual fees for operating licences and the use of radio spectrum, and investment in telecommunication software or equipment for internal use.

Cybersecurity

The Asia and the Pacific region shows progress, but many countries continue to lag.

Meaningful connectivity requires trustworthy and secure communications. With over 5.5 billion people now online, cybersecurity is no longer an afterthought in the digital economy. Addressing cybersecurity requires a holistic approach that encompasses multiple domains: legal, technical, organizational, capacity development, and cooperation. Since 2015, the Global Cybersecurity Index (GCI) has tracked countries' measures in these areas, each represented by a pillar of the GCI. Overall GCI scores are measured on a 0-100 scale, with each pillar scored out of 20. The 2024 edition revealed a notable improvement in countries' commitment to cybersecurity: the global average GCI score reached 66 out of 100, up 14 points from the 2021 edition. The countries in Asia and the Pacific have continued to expand their commitments, reaching an average score of 61, a gain of 13 points from the previous edition.

Global Cybersecurity Index scores, 2017-2024
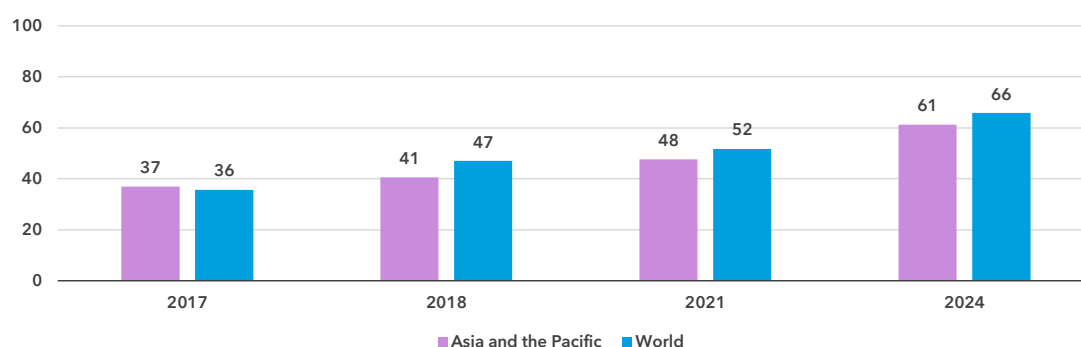
Note: Questions and weightings have been updated between editions, in collaboration with the GCI Expert Group, to better measure cybersecurity commitments by countries.
Source: ITU

The performance in the GCI of Asia and the Pacific region countries is mixed, with a 94-point between the region's best performers, which achieved the maximum score of 100, and the region's worst performer, the Democratic People's Republic of Korea, with a score of 6.2.[8] The next lowest scoring country is Micronesia, scoring 8.8, followed by other SIDS.

---

[8]   Data for DPR Korea is based on desk research, as the country did not provide any inputs.

Global Cybersecurity Index scores, by pillar and overall, 2024
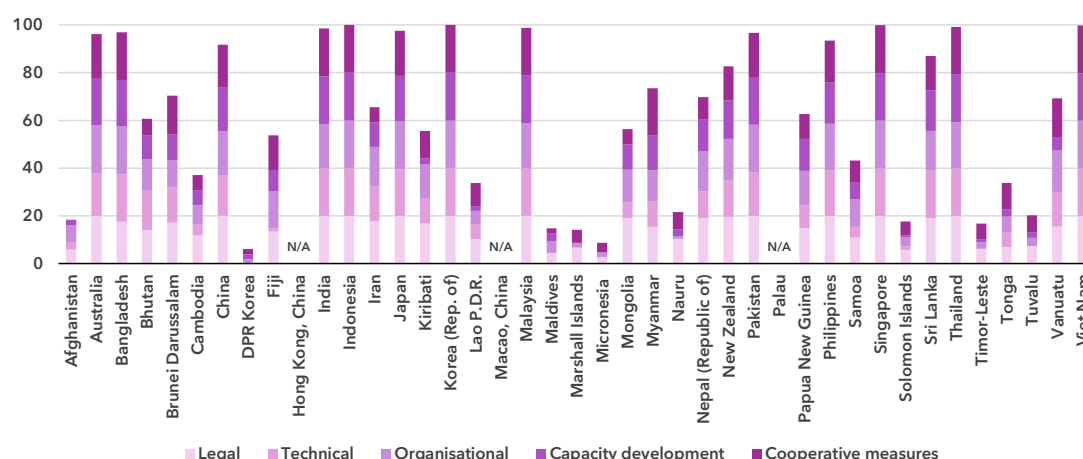
Note: The overall CGI score shown is the sum of the score of the five pillars
Source: ITU

While SIDS are among the lowest performers in the region, some of them have shown significant improvement in the past years, including Kiribati, Papua New Guinea, and Vanuatu. Elsewhere in the region, two LLDCs, Bhutan and Mongolia, have also made significant improvements.

The technical pillar of the GCI assesses the effectiveness of national mechanisms and institutional structures in detecting, preventing, responding to, and mitigating cyber threats and incidents. computer incident response teams (CIRTs) are responsible for protection against, detection of, and response to cybersecurity incidents, and can enhance a country's ability to manage them. Twenty-nine countries (76 per cent) in the region have established their national CIRTs, and many are participating in regional cyber-exercises. Still, there is a need for further development of these CIRTS, and the protection of critical information infrastructure strengthened.

Child online protection (COP) encompasses strategies and initiatives to protect children from harm or exploitation online. This includes ensuring children are using age-appropriate software and filtering tools and educating parents and children about staying safe online. COP is tracked through questions under the legal, organizational, and capacity development pillars. A total of 164 countries reported having legal measures on COP in the GCI 2024, compared to 130 countries in the previous edition. These measures were sometimes part of other rules, regulations, and substantive law, such as on online crime or sexual exploitation. Seventeen countries in the Asia and the Pacific region (17 per cent) have some form of a COP strategy with associated actions. However, the key factor is to link this to educational efforts for educators, parents, and policy-makers.

Finally, to meet the demand for cybersecurity professionals, countries are increasingly developing cybersecurity skills within their populations. While 25 countries in the region (66 per cent) have cybersecurity-focused university degrees, multiple pathways towards building cybersecurity competency are needed in order to meet ongoing cyber needs.

E-waste management

Lack of formalized collection and recycling targets impedes progress towards a circular economy for electronics

As countries strive to harness the benefits of technology to drive economic growth and achieve their national development priorities, the challenge of managing electronic waste has become increasingly urgent. Strengthened e-waste policy and regulatory e-waste management are pivotal for ensuring environmental sustainability, supporting circular economy practices, and advancing progress towards the sustainable development goals (SDGs).

E-waste generated, in billions of kilograms, 2022
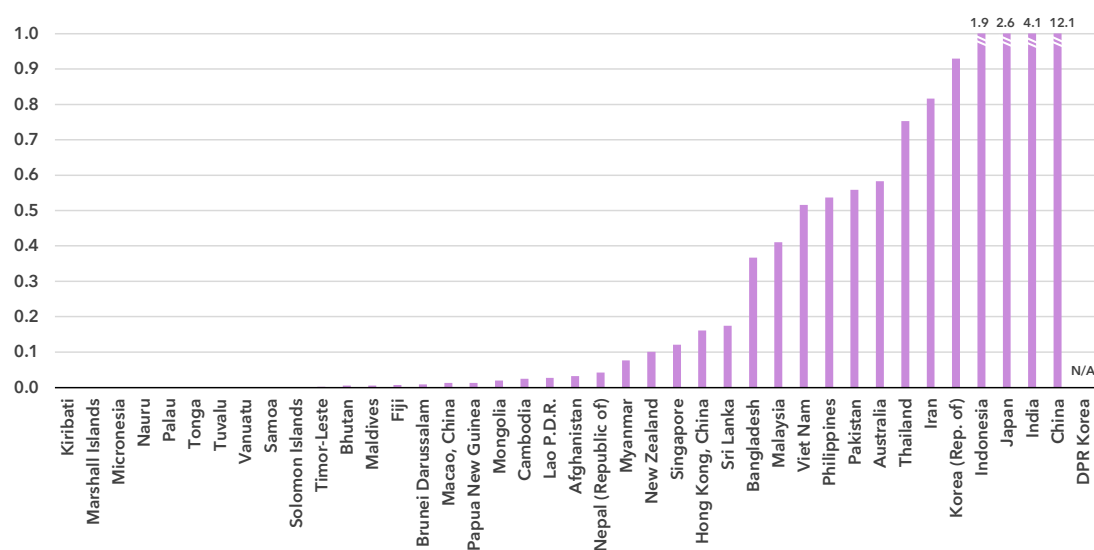
Source: ITU and UNITAR, Global E-waste Monitor, 2024

The Global E-waste Monitor 2024 finds that in 2022, Asia and the Pacific generated approximately 27 billion kg of e-waste, representing almost 44 per cent of global e-waste generation (62 billion kg). Significant disparities exist across the region. China is the largest contributor, producing 12 billion kg, followed by India (4.1 billion kg) and Japan (2.6 billion kg). Together these three countries generated over 60 per cent of the region's total e-waste. In contrast, smaller countries such as small island States, including Kiribati, Nauru, and Tuvalu generated less than 5 million kg combined, reflecting differences in population size, economic development, and levels of technological adoption.

E-waste per capita generated, in kg, 2022
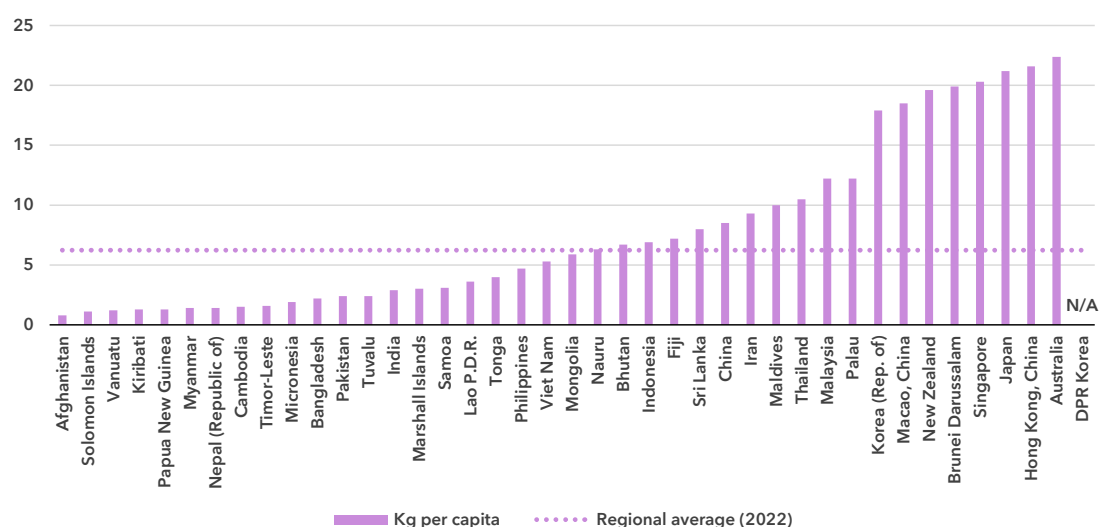
Source: ITU and UNITAR, Global E-waste Monitor, 2024

The analysis of e-waste trends in Asia and the Pacific can be further deepened by examining per capita e-waste generation. While the regional average of 6.2 kg of e-waste per capita per year approaches the global average of 7.8 kg, disparities between countries are stark. In the diverse landscape of the region, high-income countries significantly drive up the overall figure. For instance, Australia (22.4 kg per capita per year) generates nearly three times the global average, while Japan (21.2 kg) and New Zealand (19.6 kg) exceed the regional average by a factor of more than three. In contrast, low-income countries such as the Republic of Nepal (1.4 kg per capita per year), Papua New Guinea (1.3 kg), and Afghanistan (0.8 kg) generate e-waste at a per capita rate that is less than one-fifth of the global average. Mid-range contributors such as Malaysia (12.2 kg) and Thailand (10.5 kg) have e-waste generation levels above the regional average of 6.2 kg, though they remain significantly below the highest per capita generators in the region.

Despite these high e-waste generation rates, in 2022, only 12.8 per cent (3.5 billion kg) of the e-waste generated was documented as properly collected and recycled, well below the 22.3 per cent global average. A few countries, such as India and the Republic of Korea, report formal collection and recycling initiatives. Notably, China documented having recycled 2.0 billion kg of e-waste. In contrast, many countries in the region, including high e-waste generators like Indonesia and the Islamic Republic of Iran (which together producer over 2.7 billion kg), lack significant formal recycling activity.

E-waste policies and regulations in place, 2022

Country	National e-waste legislation/policy or regulation	Extended producer responsibility (EPR) framework for e-waste	Collection targets	Recycling targets
Afghanistan	No	No	No	No
Australia	Yes	Yes	Yes	Yes
Bangladesh	Yes	Yes	Yes	No
Bhutan	No	No	No	No
Brunei Darussalam	No	No	No	No
Cambodia	Yes	No	No	No
China	Yes	Yes	No	Yes
Dem. People's Rep. of Korea	N/A	N/A	N/A	N/A
Fiji	No	No	No	No
Hong Kong, China	No	No	No	No
India	Yes	Yes	Yes	No
Indonesia	No*	No	No	No
Iran (Islamic Republic of)	Yes	No	No	No
Japan	Yes	No	No	Yes
Kiribati	No	No	No	No
Korea (Rep. of)	Yes	Yes	No	No
Lao P.D.R.	No	No	No	No
Macao, China	No	No	No	No
Malaysia	Yes	No	No	No
Maldives	No	No	No	No
Marshall Islands	No	No	No	No
Micronesia	No	No	No	No
Mongolia	No	No	No	No
Myanmar	No	No	No	No
Nauru	No	No	No	No
Nepal (Republic of)	No	No	No	No
New Zealand	No	No	No	No
Pakistan	No	No	No	No

E-waste policies and regulations in place, 2022 (continued)

Country	National e-waste legislation/policy or regulation	Extended producer responsibility (EPR) framework for e-waste	Collection targets	Recycling targets
Palau	No	No	No	No
Papua New Guinea	No	No	No	No
Philippines	No	No	No	No
Samoa	No	No	No	No
Singapore	Yes	No**	Yes	No
Solomon Islands	No	No	No	No
Sri Lanka	No	No	No	No
Thailand	No	No	No	No
Timor-Leste	No	No	No	No
Tonga	No	No	No	No
Tuvalu	No	No	No	No
Vanuatu	No	No	No	No
Viet Nam	Yes	Yes	No	No

* The Indonesian e-waste regulatory framework was strengthened after publication of the Global E-waste Monitor.
** Singapore began the process of adopting an extended producer responsibility framework after publication of the Global E-waste Monitor.
Source: ITU and UNITAR, Global E-waste Monitor, 2024

The lack of comprehensive policies for e-waste management remains a significant challenge in the Asia and the Pacific region, where only a few countries have implemented national e-waste legislation and extended producer responsibility (EPR) frameworks. Globally, 42 per cent of countries (81 out of 193) have enacted national e-waste policies, legislation, or regulations. In contrast, only 12 countries[9] in Asia and the Pacific have done so, accounting for just 29 per cent of the 41 ITU Member States in the region.

Moreover, only 7 countries[10] in the region have introduced an EPR framework for e-waste, essential for holding producers accountable for the entire lifecycle of their products. This figure is well below the global average, where 67 of the 81 countries with national e-waste policies or legislation have adopted EPR systems. The absence of these frameworks across most of Asia and the Pacific exacerbates the region's e-waste challenges, contributing to continued reliance on unregulated waste management practices that are harmful to both the environment and public health.

---

[9] Including Indonesia, where the e-waste regulatory framework was strengthened after publication of the Global E-waste Monitor.
[10] Including Singapore, which begun the process of adopting an EPR framework after publication of the Global E-waste Monitor.

The lack of formal collection and recycling targets can significantly impede progress towards a circular economy for electronics. Globally, countries with collection targets achieve an average e-waste collection rate of 25 per cent, somewhat higher than the global average of 22.3 per cent. In the Asia and the Pacific region, just four countries have implemented collection targets, and three have recycling targets. Without such policies, the region risks missing key opportunities to advance towards a circular economy and reduce its environmental footprint.

Disparities within the region

Regional averages conceal disparities in connectivity among countries in Asia and the Pacific

The Asia and Pacific region is diverse in many respects: income level, with the wealthiest country's GNI per capita more than 60 times larger than the poorest; urbanization rate, which ranges from less than 20 per cent to 100 per cent; and population, which ranges from SIDS with less than 50 000 residents to the two most populous countries in the world with more than one billion residents.

Given these differences, it can be useful to group countries in Asia and the Pacific into clusters, according to their scores on indicators of Internet use, mobile phone ownership, mobile broadband and fixed broadband subscription rates, affordability of entry-level mobile and fixed broadband, and gender equality. This 'cluster analysis' yields three distinct groups,[11] whose respective members share similar ICT profiles.

The first group, consisting of nearly one-half of the countries in the region, is characterized by rates of ICT usage and ownership that are well above the world average – notably one country classified as an LDC (Bhutan) is included in this group. Both fixed broadband and data-only mobile broadband are affordable relative to the world average, with prices (median entry-level prices as a share of monthly GNI per capita) meeting the Broadband Commission target of 2 per cent or lower. There is also a relatively high level of gender parity in terms of Internet use in this group.

The second group, consisting of Bangladesh, Cambodia, India, Indonesia, Kiribati, Lao P.D.R., the Marshall Islands, Micronesia, Myanmar, Nepal, Palau, Samoa, Sri Lanka, Tonga, Tuvalu and Vanuatu is closer to world averages for most indicators. Their average level of Internet use and mobile phone ownership are below the world average. Gender parity for Internet use is also below the world average and prices for both fixed and mobile broadband services are above the 2 per cent target. This group includes more LDCs: Bangladesh, Cambodia, Kiribati, Lao P.D.R., Nepal and Tuvalu.

The final group, consisting of Afghanistan, Pakistan, Solomon Islands and Timor-Leste, has the lowest rates of ICT use, low subscription rates and much worse affordability. On all indicators this group lags far behind the global averages, including a score for gender parity on Internet use that is well below the worldwide average. The low results for these indicators reflect the development challenges faced by these countries, all but one of which (Pakistan is the exception) are classified as LDCs.

Finally, Papua New Guinea – another LDC – does not fall into any of the three groups, due to its low levels of ICT use and ownership, poor gender parity and differing patterns of affordability of broadband services.

The diversity of these groups of countries makes evident the need to design tailored approaches to achieve universal and meaningful connectivity.

---

[11] Papua New Guinea is not included in the three groups due to substantial differences in connectivity with others in the region. The Democratic People's Republic of Korea is excluded because of insufficient data.

Average of key ICT indicators by groups of similar countries in Asia and the Pacific, 2023

Indicator (units)	Group			World average
	1 (19 countries)	2 (16 countries)	3 (4 countries)	
Share of individuals using the Internet (%)	88.9	56.8	30.4	**65.4**
Gender equality - Internet use (gender parity score)	0.96	0.88	0.74	**0.93**
Share of individuals owning mobile phones (%)	91.6	73.7	57.6	**78.6**
Mobile broadband subscriptions (per 100 inhabitants)	130.8	92.9	47.1	**89.9**
Fixed broadband subscriptions (per 100 inhabitants)	24.1	4.5	0.7	**18.6**
Data-only mobile broadband prices (as a % of GNI per capita)	0.5	2.4	6.4	**2.8**
Fixed broadband prices (as a % of GNI per capita)	1.1	6.2	24.6	**1.3**

Note: Group medians shown for data-only mobile broadband and fixed broadband prices as a % of GNI per capita.
Source: ITU

Overview of data availability in Asia and the Pacific

Data plays a key role in achieving universal and meaningful connectivity. Reliable and timely data equips policymakers to identify needs, set priorities, design effective interventions, track progress, and measure impact. Investing in data yields substantial returns by enabling better decision-making and more efficient interventions.

The importance of data for the delivery of the Kigali Action Plan was acknowledged by the ITU Telecommunication Development Advisory Group, which adopted five key performance indicators (KPIs) tracking the extent to which Member States submit timely ICT data to ITU, including KPIs related to the submission of ICT skills data and data on Internet use disaggregated by location and gender.

The availability and quality of ICT statistics vary significantly across the Asia and the Pacific region. This is true both of administrative indicators and of those derived from household surveys.

On average the countries in the region have two-thirds of a core set of 14 administrative ICT indicators available, typically collected by national regulatory authorities or ministries (see indicator list in the note of the figure below). Availability reaches 100 per cent (i.e. recent data is available for all 14 indicators) in 10 countries, while 8 countries are missing only one indicator. At the other end of the scale, 13 countries collect less than one-half of the core set of administrative indicators, and 9 of them report data for 3 indicators or less.

Data availability is generally good for the fixed and mobile broadband subscription indicators as well as for 3G and 4G mobile network coverage indicators. Countries should focus their data collection and reporting on indicators for fixed broadband (broken down by speed), fixed and mobile broadband traffic, and investment and revenue, which are currently available for barely one-half of the countries in the region.

Percentage availability of selected administrative ICT indicators, 2022-2023
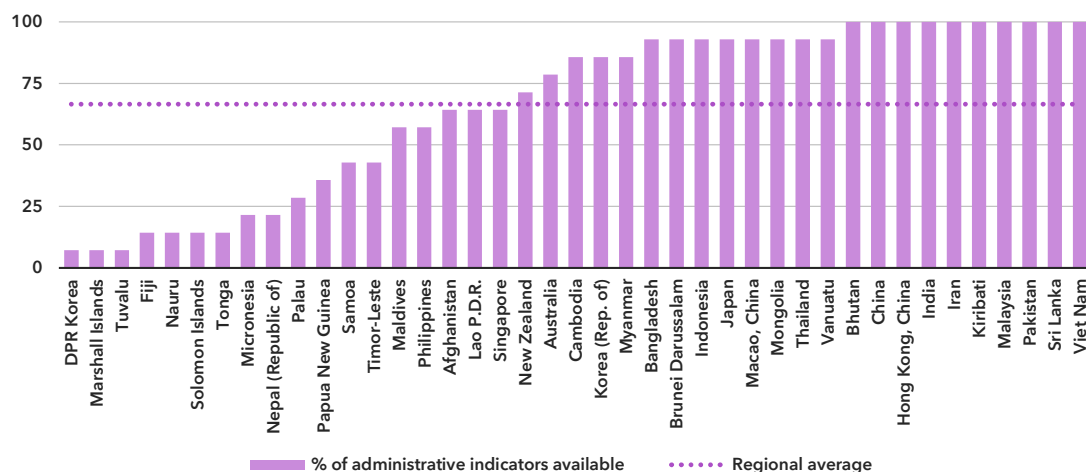
Note: An indicator is considered available if at least one value is available for the period in question. Assessment is based on the following set: active mobile broadband subscriptions, fixed broadband subscriptions (total, as well as by speed-tiers: 256 kbit/s to 2 Mbit/s, 2 Mbit/s to 10 Mbit/s, and above 10 Mbit/s), mobile network coverage indicators by technology (at least 2G, 3G, LTE/WiMAX, 5G), total fixed broadband Internet traffic, mobile broadband Internet traffic within the country, international bandwidth usage, total telecommunication revenues and investment in telecommunication services.
Source: ITU

Data on ICT access and usage by households and individuals, usually derived from household surveys, remains limited. Only 14 countries in Asia and the Pacific have provided at least partial data for ICT household indicators for the period 2022-2023. Fourteen countries have not provided any data in the last 10 years.

The issue is even more acute for data disaggregated by socio-economic attributes, which is often not available. Only six of the countries in the region have submitted recent data (2022 or more recent) for all six attributes of interest (see table on next page). Eight other countries have submitted recent data for at least one attribute.

Even when data is available, it may suffer from poor sample design, inadequate collection methods, or low response rates. Such shortcomings are likely to yield misleading results and may result in misguided policies. (For example, overestimation of ICT skills could lead policymakers to shift focus away from supporting populations that need training in this area.) Addressing these challenges requires a dual approach targeting both the producers and users of data. Through continuous efforts in capacity building, technical assistance, and advocacy, ITU aims to enhance the availability and quality of ICT data globally.

Latest year of submission of ICT household survey data, by socio-economic attribute

Country	Overall	Gender	Urban Rural	Household composition	Age	Level of education	Labour force status
Afghanistan	2016						
Australia	2017	2017	2017	2017	2017	2017	2017
Bangladesh	2023	2023	2023	2023	2023	2023	2023
Bhutan	2021	2021	2021	2021			
Brunei Darussalam	2022	2022			2018	2018	2018
Cambodia	2019	2019	2017	2016	2017	2017	2017
China	2023	2023	2021				
Dem. People's Rep. of Korea							
Fiji							
Hong Kong, China	2023	2023	2023		2023	2023	2023
India	2019	2019					
Indonesia	2023	2023	2023	2023	2023	2023	2023
Iran (Islamic Republic of)	2021	2021	2021	2021	2021	2021	2017
Japan	2022	2022	2022	2022	2022		
Kiribati	2005						
Korea (Rep. of)	2023	2023	2023	2023	2023	2023	2023
Lao P.D.R.	2021						
Macao, China	2021	2021	2021		2021	2021	2021
Malaysia	2023	2023	2023		2023		
Maldives	2022	2022	2022	2022	2022	2022	2022
Marshall Islands							
Micronesia							
Mongolia	2022	2022	2020	2020			
Myanmar	2017	2017	2017	2017			
Nauru	2011						
Nepal (Republic of)	2011		2008				2008
New Zealand	2013	2012	2009	2009	2009	2009	2009
Pakistan	2020	2020	2020	2016	2020	2020	2020
Palau	2005						
Papua New Guinea							
Philippines	2022	2022	2022	2022	2022	2022	2022
Samoa	2021		2021				
Singapore	2023	2023	2017	2023	2023	2021	2021
Solomon Islands							
Sri Lanka	2021	2021					
Thailand	2023	2023	2023	2023	2023	2023	2023
Timor-Leste							
Tonga	2021	2021	2021		2021		
Tuvalu							
Vanuatu	2009		2009				
Viet Nam	2023	2023	2023		2023		

Source: ITU

Part 2. BDT4Impact: Selected case studies from Asia and the Pacific

The second part of this report presents a selection of projects and initiatives supported by BDT in the Asia-Pacific region. More impact stories are available on ITU-D website.

Farmers in Papua New Guinea acquire digital skills to boost their businesses

Deep in a Papua New Guinea rainforest, farmers are using newfound digital skills to increase the sales of their products – from pure vanilla to fish and turmeric – and bring greater prosperity to their communities.

Since 2020, more than 1 260 Papua New Guinea farmers have learned to conduct e-commerce, advertise online and find new markets, thanks to the EU-funded programme Support to Rural Entrepreneurship, Investment and Trade in Papua New Guinea, a joint programme with the Food and Agriculture Organization (FAO), the International Labour Organization (ILO), ITU, the United Nations Capital Development Fund (UNCDF), and the United Nations Development Programme (UNDP).

"Farmers are very excited to learn about basic computing," West Sepik farmer and teacher Joseph Wotom said. "I believe it will bring increased cash right into the village and boost the living standard."

East Sepik farmer Jenelyn Mamba created a website to find new buyers for her village's vanilla beans after participating in the programme's five-day course. She is among the first to export dried vanilla to Australia, New Zealand and the United States of America.

"As a girl in the community, I feel that the trainings have really equipped me with the skills to actively participate," Ms Mamba said.

The programme has set up seven hubs to promote connectivity and plans to establish five more.

Smart village Gokina reaps the rewards of digital transformation

Pakistan launched its [first smart village in 2023 in Gokina](#), and the success of the project has sparked enthusiasm for expanding the model to more villages in the country.

Gokina's example showed how digital transformation can help a village overcome challenges like poor access to job opportunities, health care, education, and more, said Ali Asghar, Senior Joint Secretary, Ministry of Information Technology and Telecommunications (MoITT).

"Through the platforms provided by the ministry and ITU, we provide the facilities and services for e-health, for e-education and for e-agriculture, and for entrepreneurship and digital training skills," Mr Asghar said. "The rural community, especially the women and girls in rural areas, will be the major beneficiaries of this project because of the digital services provided at their doorstep."

The ITU Smart Villages initiative in Pakistan is being implemented with MoITT/USF Pakistan and is supported by ITU and Huawei projects. Implementing partners include TeleTaleem, Sehat Kehani, and Baidarie.

Workshop in Mongolia delves into regional digital infrastructure challenges

The challenges of developing countries – especially those which are landlocked – in building resilient digital infrastructure was the subject of a [workshop in Ulaanbaatar, Mongolia](#), conducted in October 2024 by BDT and the International Think Tank for Landlocked Developing Countries.

The integration of upcoming non-terrestrial networks, direct-to-device services, and other new satellite technologies into digital infrastructure development is essential for building a resilient and inclusive digital ecosystem. The workshop examined ways that satellite and space services can support affordable, resilient and universal connectivity, emphasizing the need to overcome connectivity challenges and advance sustainable development in the Asia and the Pacific region.

Participants looked at case studies from 10 countries, including Azerbaijan, Bangladesh, Bhutan, Cambodia, Indonesia, Lao P.D.R., Malaysia, Nepal, Pakistan, and Sri Lanka. The event was supported by the Department of Infrastructure, Transport, Regional Development, Communications and the Arts of Australia and by the Ministry of Digital Development, Innovation and communication (MDDIC) of Mongolia and its Communications and Regulatory Commission (CRC).

The event featured sessions related to national satellite regulations and space policies, as well as a segment on Partner2Connect, where new pledges were presented from Mongolia for the first time.

ASEAN Digital Ministers focus on interoperable digital government infrastructure

The ADGMIN (ASEAN Digital Ministers) Meeting held in Bangkok in January 2025 endorsed the ASEAN Digital Government Technical Framework developed under the aegis of the ASEAN-ITU Priority Cooperation Areas (2024-2026) to strengthen cooperation between ASEAN and ITU. A physical workshop was hosted in Brunei in October 2024, where the technical framework was developed in consultation with the ASEAN Member States.

The interoperability framework was envisaged to provide a strategic blueprint for ASEAN Member States to establish and enhance interoperability within their digital government services. The framework elaborated technical and technological aspects of interoperability, addressing infrastructure, data exchange protocols, privacy, security, and semantic consistency.

The ADGMIN meeting encouraged ASEAN Member States to take advantage of the opportunity offered by ITU resources and technical assistance to accelerate digital transformation in the region. The meeting also extended its deep appreciation on the occasion of the 160th anniversary of the founding of ITU in 2025, reflecting its remarkable journey since 1865.

Leaders focus on digital inclusion as a component of healthy aging

The ITU Regional Office for Asia and the Pacific organized an information session in Thailand that stressed the importance of information and communications technology for healthy aging.

Representatives from government and UN agencies, academia and non-governmental organizations gathered for the hybrid event, which featured presentations and discussions about providing the country's growing population of older people with the digital skills and tools they need to be engaged, empowered citizens.

Participants also examined Thailand's demographic trends and sought to better understand the challenges older people face in the country. The session noted that many older people have found themselves left behind in the wake of the post-pandemic digital transformation.

Thailand is one of the world's fastest-aging countries. Organizers said that the digital realm offers many opportunities for aging gracefully and becoming more active, less vulnerable members of the community.

The event was organized by ITU and Thailand's Ministry of Digital Economy and Society, with partners Juntendo University of Japan and the World Health Organization.

Innovation Centre in New Delhi unites stakeholders, enables digital advancement across sectors

The new ITU Area Office and Innovation Centre in India's capital is serving as a hub for promoting advanced technologies in the region and beyond.

Inaugurated in 2023, the Centre has been bringing together government, industry, academia and others in an entrepreneurial environment so that digital technology advances can reach communities that need them most in sectors such as agriculture, health and education.

The Centre also serves as a platform for the exchange of ideas, success stories, innovative solutions and global endeavours. It pursues four objectives: strategic foresight, open technology innovation, the growth of small and medium enterprises and entrepreneurship, and policy experimentation.

Officials in India noted that the Innovation Centre is the first of its kind under the auspices of ITU and that it will play an important role in the development of new telecommunication technologies.

The facility is in the Centre for Development of Telematics, and the office is funded by the Government of India.

Annex: Data resources

To ensure up-to-date information, and enhance readability, all data presented in this report are available for download as Excel files:

- Country-level data organized by tabs corresponding to the sections of this report (URL: https://www.itu.int/en/ITU-D/Statistics/Documents/facts/rpm_asp_pub_2025_data.xlsx). Country level data were extracted from the ITU DataHub, reflecting the February 2025 data release.
- Regional and global estimates, as compiled for Facts and Figures 2024 (URL: https://www.itu.int/en/ITU-D/Statistics/Documents/facts/ITU_regional_global_Key_ICT_indicator_aggregates_Nov_2024.xlsx).

Office of the Director
International Telecommunication Union (ITU)
Telecommunication Development Bureau (BDT)
Place des Nations
CH-1211 Geneva 20
Switzerland

Email: bdtdirector@itu.int
Tel.:   +41 22 730 5035/5435
Fax: +41 22 730 5484

Office of Deputy Director and Regional Presence
Field Operations Coordination Department (DDR)
Place des Nations
CH-1211 Geneva 20
Switzerland

Email: bdtdeputydir@itu.int
Tel.:   +41 22 730 5131
Fax: +41 22 730 5484

Digital Networks and Society (DNS)

Email: bdt-dns@itu.int
Tel.:   +41 22 730 5421
Fax: +41 22 730 5484

Digital Knowledge Hub Department (DKH)

Email: bdt-dkh@itu.int
Tel.:   +41 22 730 5900
Fax: +41 22 730 5484

Partnerships for Digital Development Department (PDD)

Email: bdt-pdd@itu.int
Tel.:   +41 22 730 5447
Fax: +41 22 730 5484

Africa

Ethiopia
International Telecommunication Union (ITU) Regional Office
Gambia Road
Leghar Ethio Telecom Bldg. 3rd floor
P.O. Box 60 005
Addis Ababa
Ethiopia

Email: itu-ro-africa@itu.int
Tel.:   +251 11 551 4977
Tel.:   +251 11 551 4855
Tel.:   +251 11 551 8328
Fax: +251 11 551 7299

Cameroon
Union internationale des télécommunications (UIT)
Bureau de zone
Immeuble CAMPOST, 3e étage
Boulevard du 20 mai
Boîte postale 11017
Yaoundé
Cameroon

Email: itu-yaounde@itu.int
Tel.:   + 237 22 22 9292
Tel.:   + 237 22 22 9291
Fax: + 237 22 22 9297

Senegal
Union internationale des télécommunications (UIT)
Bureau de zone
8, Route du Méridien Président
Immeuble Rokhaya, 3e étage
Boîte postale 29471
Dakar - Yoff
Senegal

Email: itu-dakar@itu.int
Tel.:   +221 33 859 7010
Tel.:   +221 33 859 7021
Fax: +221 33 868 6386

Zimbabwe
International Telecommunication Union (ITU) Area Office
USAF POTRAZ Building
877 Endeavour Crescent
Mount Pleasant Business Park
Harare
Zimbabwe

Email: itu-harare@itu.int
Tel.:   +263 242 369015
Tel.:   +263 242 369016

Americas

Brazil
União Internacional de Telecomunicações (UIT)
Escritório Regional
SAUS Quadra 6 Ed. Luis Eduardo Magalhães,
Bloco "E", 10º andar, Ala Sul
(Anatel)
CEP 70070-940 Brasilia - DF
Brazil

Email: itubrasilia@itu.int
Tel.:   +55 61 2312 2730-1
Tel.:   +55 61 2312 2733-5
Fax: +55 61 2312 2738

Barbados
International Telecommunication Union (ITU) Area Office
United Nations House
Marine Gardens
Hastings, Christ Church
P.O. Box 1047
Bridgetown
Barbados

Email: itubridgetown@itu.int
Tel.:   +1 246 431 0343
Fax: +1 246 437 7403

Chile
Unión Internacional de Telecomunicaciones (UIT)
Oficina de Representación de Área
Merced 753, Piso 4
Santiago de Chile
Chile

Email: itusantiago@itu.int
Tel.:   +56 2 632 6134/6147
Fax: +56 2 632 6154

Honduras
Unión Internacional de Telecomunicaciones (UIT)
Oficina de Representación de Área
Colonia Altos de Miramontes
Calle principal, Edificio No. 1583
Frente a Santos y Cía
Apartado Postal 976
Tegucigalpa
Honduras

Email: itutegucigalpa@itu.int
Tel.:   +504 2235 5470
Fax: +504 2235 5471

Arab States

Egypt
International Telecommunication Union (ITU) Regional Office
Smart Village, Building B 147,
3rd floor
Km 28 Cairo
Alexandria Desert Road
Giza Governorate
Cairo
Egypt

Email: itu-ro-arabstates@itu.int
Tel.:   +202 3537 1777
Fax: +202 3537 1888

Asia-Pacific

Thailand
International Telecommunication Union (ITU) Regional Office
4th floor NBTC Region 1 Building
101 Chaengwattana Road
Laksi,
Bangkok 10210,
Thailand

Email: itu-ro-asiapacific@itu.int
Tel.:   +66 2 574 9326 – 8
    +66 2 575 0055

Indonesia
International Telecommunication Union (ITU) Area Office
Gedung Sapta Pesona
13th floor
Jl. Merdeka Barat No. 17
Jakarta 10110
Indonesia

Email: bdt-ao-jakarta@itu.int
Tel.:   +62 21 380 2322

India
International Telecommunication Union (ITU) Area Office and Innovation Centre
C-DOT Campus
Mandi Road
Chhatarpur, Mehrauli
New Delhi 110030
India

Email:
Area Office: itu-ao-southasia@itu.int
Innovation Centre: itu-ic-southasia@itu.int
Website: ITU Innovation Centre in New Delhi, India

CIS

Russian Federation
International Telecommunication Union (ITU) Regional Office
4, Building 1
Sergiy Radonezhsky Str.
Moscow 105120
Russian Federation
Email: itu-ro-cis@itu.int
Tel.:   +7 495 926 6070

Europe

Switzerland
International Telecommunication Union (ITU) Office for Europe
Place des Nations
CH-1211 Geneva 20
Switzerland

Email: eurregion@itu.int
Tel.:   +41 22 730 5467
Fax: +41 22 730 5484