BROADBAND COMMISSION FOR SUSTAINABLE DEVELOPMENT

The State of Broadband 2021: People-Centred Approaches for Universal Broadband

ITU/UNESCO Broadband Commission for Sustainable Development

Key Messages

Progress against our 2025 and 2030 targets has been made, but a concerted effort is needed to push ahead in closing the divide – a massive opportunity

- The opportunity is there… The global community can leverage broadband and high-speed digital infrastructure to progress. We now need to direct funding to connect the unconnected – through business model innovation, technologies, policy and regulation, financing and partnerships.
- New technologies and their benefits must be shared. As new technology comes on stream – such as 5G, IoT connectivity and LEO satellite broadband – these must benefit low- and middle-income countries (LMICs) as well as developed countries.
- Countering market failure. Policy and regulation should address inequitable access sparked by market failures (such as monopolies, rent-seeking, regulatory capture, barriers to entry, deadweight losses, leakage and public resource waste).
- Build public confidence in the digital economy. Prevent cybercrime and cybersecurity incidents.
- Increase funding. Sort fragmentation (of funding, legislative and regulatory frameworks, investment and distribution). Coordinate across regions, across government, between public and private sector.
- Support innovative partnerships that leverage participants' strengths in digital infrastructure – and translate plans into action.
- Unleash connectivity to address the climate emergency. Build resilience to climate stress. Commit to reaching net zero carbon emissions.
- Put people at the centre. Focus on individuals and inclusivity.

Our approach must be 'people-centred' – strong on affordability, service levels, content

- It's about more than technology… The digital divide is more than purely a technological issue – a view powerfully expounded by The Global Education Coalition and UNESCO.
- This is what 'people centred' means… The people-centred approach is strong on affordability, service levels and quality content. It is sensitive to:
  - The differences across and within individuals and communities
  - Gender, age, race and ability
  - The needs of those who have been marginalized
  - The need to build digital skills and digital literacy necessary for participating in the digital economy
  - The importance of trust and civility in online engagement
  - Technologies and financing that are aligned with user needs
- It has to be about people, about the 'human element of connectivity'. Regulation, investment and policy must reflect a people-centred approach to encourage and expand Internet adoption – and need to address education, age, gender, income status, skills, and residence. This extends to digital skills readiness, solutions, tools, educational resources and content.
- Concerted support for this approach. Over 30 international organizations and private sector corporations active in Internet connectivity support a people-centred approach.

Governments have leveraged connectivity to help withstand massive pandemic shock

Governments have done a great deal in the past year to support society in the face of the pandemic – and Internet connectivity has moved to centre-stage in making such measures effective. Examples include:

- Remote working – still the norm where practical, but not all can benefit (for example those working in agriculture and manufacturing, those in in-person services and activities in the informal sector)
- Distance learning – remains in place in many countries – while noting at least 31 per cent of school children worldwide (463 million) cannot access distance education content
- Telehealth services – continue to gain regulatory approval and general adoption
- Quality content – access to relevant, timely information, and content that is reliable and factual

COVID-19 has thrown a sharp and urgent focus on disparities of access, adoption and affordability

- Renewed interest. Governments at national and sub-national levels have shown renewed, urgent interest in addressing these issues.
- Heavy investment. Network operators and service providers are investing heavily to expand networks, to increase capacity and to respond to the acceleration in broadband demand. Over the past five years, investments of close to USD 900 billion have helped reduce the number of individuals living outside of mobile broadband coverage by close to 1 billion. In next five years, additional investments of USD 1.1 trillion are forecast (USD 250 billion in Asia Pacific, USD 50 billion in Sub-Saharan Africa).
- Digital – important across all sectors. Regulators in telecommunications and in other sectors, increasingly recognize *the importance of digital technology in all facets of economic activity*.

Some progress made but pernicious digital divide persists – even as the role of Internet connectivity grows in importance

- Progress has been made but needs to accelerate – progress continues to build on solid expansion of Internet connectivity over the past three decades, fostered by regulatory frameworks that encourage commercial developments and by the private sector.
- Slowing global growth in Internet users. Against the backdrop of a COVID-19-triggered rise in the use of Internet connectivity, the growth in Internet users globally has slowed, and the digital divide persists.
- Most vulnerable countries are least able to leverage Internet. The most vulnerable countries with limited resources are also those with the lowest Internet adoption – hampering their COVID-19 response and ability to cope with economic and social shock.
- In LDCs, fewer than one in five is online. In 2019 (before the crisis), 87 per cent of individuals in developed countries were online. This compares with only 19 per cent in the least developed countries (LDCs).
- Network coverage is there but affordability and capacity are lacking. Network coverage is present for almost all on the planet. Of the 4 billion who remain unconnected, 85 per cent are covered by a mobile broadband network. Effort is needed to increase capacity and improve affordability.

Digital and broadband – an important role to play in combating the effects of climate change

- Building resilience. Digital and broadband can demonstrate leadership in targeting the reduced carbon emission – and can actively help build resilience to climate stress.
- Digital and mobile technology can address climate change in seven ways (GSMA, 2021): enabling clean energy and energy efficiency; improving mobility and logistics; improving natural resource management and forestry; improving agriculture; managing water solutions; improved waste management and circular economy solutions; increased disaster preparedness and effective response.

Where are we on the 2025 Advocacy Targets?

This section summarizes at high level the report content as it applies to each of the seven targets. See Chapter 3 of the report for details.

1. Universal broadband policy. 165 countries worldwide now have a national broadband plan of some sort, with several countries currently in the process of adopting one, up from 102 countries in 2010 and 151 in 2016. However, work must be done to monitor and evaluate implementation of these national plans.
2. Make broadband affordable. *(Entry-level broadband services available in developing countries at less than 2 per cent of monthly gross national income per capita).* Some way to go. In 2020, 56 developing economies (including 4 LDCs) achieved the target for mobile broadband while this remained unaffordable in 84 countries (45 per cent). 23 developing economies only achieved the target for fixed broadband while 111 countries (56 per cent) did not.
3. Getting people online. (*(i) 75 per cent penetration worldwide ii) 65 per cent in developing countries iii) 35 per cent in least developed countries*). Latest data shows i) 51 per cent penetration worldwide ii) 44 per cent in developing countries iii) 19.5 per cent, well below target. There remains a significant gap between uptake and target – which underlines an urgent need for policies that prioritize demand-side challenges and address barriers to Internet adoption.
4. Digital skills and literacy. *(60 per cent of youth and adults should have achieved minimum proficiency in sustainable digital skills*). The shift to remote work and learning underline the importance of Digital skills. One UN estimate forecasts 230 million 'digital jobs' in Sub-Saharan Africa by 2030, requiring training to enable the transition. In LMICs, lack of literacy and digital skills remains the barrier to mobile Internet use. This is also the case for rural population in general.
5. Digital financial services (*40 per cent of the world's population should be using digital financial services*). Digital financial services have seen heavy use during the COVID-19 pandemic for transactions and remittances. E-commerce has substituted for in-person shopping. E-logistics, entertainment, remote healthcare and other forms of FinTech have surged in use. In Sub-Saharan Africa there are over 469 million registered mobile money accounts, as against 298 million traditional bank accounts. Governments have increased direct payments to citizens – those receiving government-to-person payments increased four-fold from September 2019 to June 2020. We have also seen the rise of digital currencies enabling low-income and vulnerable groups to send small value remittances and avoiding high transaction fees.
6. Getting businesses online. *(By 2025, improve connectedness of micro-, small- and medium-sized enterprises by 50 per cent, by sector).* The pandemic hit micro-, small- and medium-sized enterprises (MSMEs) hard. Almost two thirds of smaller businesses were strongly affected. One in four micro firms expected to shut down permanently within three months. The uptake of digital technologies by MSMEs will determine the extent of overall Internet economy growth, particularly in developing countries. Accenture estimates that by 2025, the Internet economy

could contribute 5.2 per cent of Africa's GDP, depending on the intensity of digital technologies usage by businesses.

7. Achieving gender equality in access to broadband. *(Gender equality should be achieved across all targets).* In 2019, global estimates put use of the Internet at 55 per cent of male population and at 48 per cent of the female population. Growth rates of Internet adoption may be faster for men than women as the gender gap in Internet use appears larger in developing and least developed countries. In mobile Internet use, particularly in LMICs, gaps have been declining in the past three years. However, women in LMICs are still 20 per cent less likely than men to use mobile Internet, meaning around 300 million fewer adult women than men use mobile Internet

What does the Broadband Commission do?

The Broadband Commission for Sustainable Development, led by ITU and UNESCO, offers a voice of global leadership and advocacy for universal connectivity – and is a powerful, worldwide convener of strategic efforts to make universal connectivity a reality.

- Global leader and advocate for universal connectivity. The Broadband Commission is the world's leading advocate of universal broadband connectivity. It works to leverage this technology in delivering progress towards achieving the SDGs.
- A decade of ITU and UNESCO together, collaborative UN engine for SDG progress. The Broadband Commission was established by the International Telecommunication Union (ITU) and the United Nations Educational, Scientific and Cultural Organization (UNESCO) in 2010 to accelerate progress to meeting the Millennium Development Goals (MDGs) and now to the Sustainable Development Goals (SDGs).
- Global engine for high-level advocacy and policy recommendation. The Broadband Commission's major activities include:
  - High-level advocacy
  - Making policy recommendations – no fewer than 26 recommendations for the decade of action
  - Running no fewer than 29 working groups – looking at topics such as science, youth, health, environmental sustainability, public-private partnerships, education and multilingualism
  - Building effective partnerships
- High-powered, high visibility team steering the ship. The Broadband Commission is steered by a high-powered community, including top CEO and industry leaders, senior policymakers and government representatives, international agencies, academia and organizations steeped in development.