

Policy recommendations

Affordable and ubiquitous access

The opportunity

The internet offers many social, economic, and educational benefits for those with access. Currently, there are about 3.4 billion people with an internet connection—slightly less than half the world’s population.

Today governments everywhere recognize that for all citizens to take full advantage of the benefits and opportunities promised by a new generation of innovative cloud services, affordable broadband internet access is essential. There is additional urgency for many countries because affordable internet access is a prerequisite for achieving the Sustainable Development Goals (SDGs) adopted by the United Nations in 2015.

The challenge

As cloud-based services become increasingly central to our day-to-day lives, the need for robust, ubiquitous, and affordable broadband connectivity becomes all the more critical. And while internet access is the norm for more than 3 billion people around the world, significant gaps still exist across and even within countries.

For example, internet penetration is close to 100 percent in Korea, Qatar, and Saudi Arabia, but below 2 percent in a number of sub-Saharan African nations. Without specific steps to increase access, just 16 percent of people in the world’s poorest countries and only 53 percent of the total global population will be connected to the internet in 2020. At this rate, universal internet access in low-income nations won’t be achieved until 2042, a dozen years after the target date called for in the SDGs.

Policy recommendations

Programs that expand internet access are vitally needed. Initiatives such as the Alliance for Affordable Internet, the UN Broadband Commission for Sustainable Development, and the U.S. State Department's Global Connect project are helping policymakers understand why some countries have succeeded in making internet access more affordable and what they can do to create open and competitive broadband markets in their own countries. Policies removing obstacles that limit opportunities to provide access are also important. Steps that governments can take to make access more affordable include:

Spectrum management. Most of the world's wireless data traffic flows over unlicensed airwaves that are dramatically lower in cost than licensed spectrum. This is because there are no auction or licensing fees that must be accounted for in an operator's business model. While exclusively licensed spectrum is important, policymakers should work to open up new frequency bands for unlicensed and licensed use. Policymakers should also ensure that any spectrum licensed on an exclusive basis is actually deployed via "use it or lose it" policies. Spectrum regulators should also adopt policies to facilitate the sharing of underutilized spectrum, such as TV white spaces, an approach that is currently being successfully used in many developing countries.

Financing. Many governments have restrictions on foreign direct investments in telecommunications, mobile, and broadband infrastructure, as well as other investment policies that effectively put barriers in the way of entrepreneurs willing to enter the market. Policies that encourage public-private partnerships and recognize the structuring needs of funding institutions are needed to facilitate access to capital.

Taxation. In many countries, broadband access is taxed as a luxury good. This is counterproductive because it simultaneously reduces investment in infrastructure and increases the cost of access. This contributes to the widening of economic and social divides. Policymakers should adopt tax policies that stimulate rapid investment in and adoption of connectivity solutions and that optimize taxation regimes to achieve connectivity goals.

Overall telecommunications regulation. Policymakers should adopt telecommunications policies that minimize unnecessary regulation of services and stimulate competition, while supporting the underlying goals of access and adoption. For example, reforming universal service funds to incorporate funding for broadband; ensuring net neutrality, which stimulates innovation in services; and reducing the regulatory burden on operators are all generally helpful. At the same time, the independence of regulators and freedom from regulatory capture is critical to stimulating investment.

Ancillary policies. There are a variety of approaches that can stimulate accelerated investment and deployment, such as “dig once” policies ensuring that new highway and rail infrastructure projects include conduits for fiber. In addition, infrastructure-sharing such as shared transmission towers can avoid wasteful duplication. Demand-side stimulation through deployment of online government services and the development of locally relevant content and services can also help.

Evidence and further reading:

World Economic Forum: [“Internet for All: A Framework for Accelerating Internet Access and Adoption”](#)

[Chile Digital Agenda 2020](#)

[Costa Rica Telecommunications: Universal Service Fund](#)

[Mauritius broadband project](#)

For links to these and other resources, please visit:

<http://www.microsoft.com/cloudforgood>