The evolution of internet technology, with higher demand for data originating as a result of an expanding range of communication services, rapidly increasing number of connected applications and the rise of cloud technologies, raises the importance of broadband infrastructure as part of the discussion on structural transformation and productive capacity building.

Broadband is the underlying infrastructure that can connect small and medium-size enterprises with their customers; farmers to their markets; students to quality education; villagers to modern healthcare; and communities to each other to address a vast array of interests. Availability of broadband infrastructure and high-speed connectivity directly affects total factor productivity and can contribute to higher growth rates and poverty reduction.

Generally, the private sector plays a predominant role in deploying broadband network infrastructure around the world. In the case of Asia-Pacific LDCs, government can play an important role through regulations and policies that seek to promote the strategic development of broadband infrastructure. Thus, government leadership is an essential element in eliminating bottlenecks, facilitate entry of actors and reduce costs.

The lack of high-capacity backbone networks constitutes an important challenge from the point of view of broadband infrastructure in Asia-Pacific LDCs. Successful deployment of broadband in Asia-Pacific LDCs will require investment across the supply-chain, from international connectivity that links countries with the rest of the world; domestic and regional backbone networks that carry traffic from the landing point of international communications and within the country; switching and routing devices that direct traffic; last mile connectivity that provides linkages between the end user and the network; and services, which can take the form of retail or government provided utilities.

One area of investment could be through updating the backbone network to be able to deliver the volumes of traffic that are required to provide affordable broadband connectivity in LDCs. This is one of the areas in which a combination of public interventions and private initiatives – which could follow existing models that have proven to be successful such as competitively awarded subsidies, partnership with existing operations or financial incentives for underserved areas— can help expand access to broadband not only in urban areas, but also in underserved zones such as rural areas.

Questions

- How can the development of broadband infrastructure support national development objectives?
- What models could work in LDCs to develop the different components of the broadband infrastructure?
- What type of measures can help reducing the risk-perception of private investors?
- How can public authorities support the development of broadband connectivity to underserved areas?
- How can cross-border broadband infrastructure be incentivized?