

Infrastructure Sharing

- A common strategy (supply side) for broadband network expansion
- Idea: sharing of real property fixed assets among different sectors
- Partnership is mutually beneficial
 - *New player*: utilize existing network corridors and physical infrastructure to reduce initial cost of setup and expand reach rapidly
 - *Incumbent*: additional source of income
 - *Both*: lower maintenance cost for infrastructure

Infrastructure Sharing

- Intra-sector infra sharing: a bottleneck that leads to market dominance
- Cross-sector infra sharing: Transport and telecom; Electricity and telecom
- Expected outcomes of infra sharing:
 - Lower setup cost for operators
 - Higher competition
 - Lower prices for consumers

Infrastructure Sharing

- Passive vs active infrastructure
 - Active infrastructure –parts of infra that are used for main activities such as key electronic components like antennas, backhaul, transmission systems, radio access networks, feeder cable, nodes
 - Passive infrastructure –non-electronic parts like masts, ducts, buildings, towers, poles

Infrastructure Sharing

- Relevance of infrastructure sharing:
 - Passive infrastructure constitute 70-80% of the overall cost of investment in fixed access telecom networks (Broadband Commission Report 2014)*
 - ❖ **Wired technology** can help deliver more reliable and better-quality connection. However, for telcos, the cost of deployment is too high (civil works (75% of cost), ROW issues, numerous permits and clearances)
 - ❖ Same with wireless/**mobile technology**, cellular tower expansion can consume up to 50% capital, and up to 60% operating cost of mobile carriers (Mirandilla-Santos, 2016)

In DICT's National Broadband Plan...

- “Facilitating infostructure sharing” is one of the outlined strategies to mobilize and engage public and private sectors
- The government pledged to provide guidelines on: (1) systems interconnection and integration models and standards; (2) interconnection fee structure; (3) dispute resolution; (4) repository of available infostructure and (5) infostructure sharing regime.
- In addition, the government planned on opening its existing facilities to market players: (a) DICT's towers, through PPP, MOA/lease agreement; (b) NGCP's fiber cores for use in constructing government backbone; (c) existing infra such as roads, electricity poles, etc. to reduce costs related to civil works.

Actual steps taken

- DICT released Department Circular No. 008 in 2020 which contains the guidelines on the co-location and sharing of passive telecommunications tower infrastructure for macro cell sites (Common Tower Policy)
- Joint Memorandum Circular No. 001 in 2021 (DICT, ARTA, other key government agencies) –harmonized the provisions of RA 11494 Bayanihan to Recover as One Act to streamline the processes related to securing permits, licenses, and authorizations of passive telecom tower infra (PTTIs) to accelerate the roll-out of projects

Existing provisions leveraged for broadband expansion

- RA 9136 “Electric Power Industry Reform Act of 2001”, section 5c, rule 7 of its IRR –allows distribution utilities (DUs) to engage, directly or indirectly, in any business undertaking that would maximize the use of their assets
- Energy Regulatory Commission Resolution No. 18 in 2010 -sets the rules governing the submission, evaluation and approval of lease of properties by DUs
- National Electrification Administration Memo No. 2018-055 (Standard Joint Pole Agreement and Pole Rental Rate) -setting the pole rental rate at P420 per cable position per pole per annum

Some implementation issues (pole attachment)

- Conflict between Federation of International Cable TV and Telecommunications Association of the Philippines (FICTAP) and the National Electrification Administration (NEA) regarding rental charge
- Electric Cooperatives pursuing Joint Pole Agreements with unlicensed telecommunication companies (based on the formal complaint filed by FICTAP)

US experience on pole attachment

- Similar with the Philippines, communication companies in the US argue that pole attachment rates hinder their broadband deployment in rural areas
- The National Rural Electric Cooperative Association in the US argues that Electric Cooperatives and Communication companies have different priorities. ECs need to serve their territory with reliable and safe electric service regardless of area remoteness. Communications companies are profit-driven; hence, broadband investments are directed in areas with highest return on investment.
 - Payment for pole attachment is a small percentage of the cost of deploying broadband in rural areas
 - The major impediments for communication companies: low population density, high capital costs and high operating expenses
 - Lowering pole attachment rental rate (below cost) could adversely impact future electricity rates as it will raise the maintenance cost of the pole

Recommended Regulatory Approach

- Set of principles to guide policymakers in fostering cross sector infrastructure sharing based on international best practices*

Important Principles
Inclusive regulatory framework
Non-selective infrastructure sharing
Right to request to share infrastructure based on government mandate
Obliging sector participants to negotiate sharing their infrastructure within reasonable timeframes
Define guidelines on how pricing should be set
Develop an efficient process to encourage infrastructure sharing
Dispute resolution
Consistency with the national broadband plan and future technologies