

# Telecommunications / Information & Communication Technology PPPs

## Full Description

Innovations in Information and Communication Technology (“ICT”) and telecommunications have been a key driver of modern-day economic growth, enabling near-instant communication, transforming the economy (e.g. through the rise of the digital economy and e-commerce) and creating new opportunities in all industries and sectors. Consequently, the ICT and telecommunications sector has become an area of priority for many governments, from developing a regulatory environment that supports a thriving digital economy and ensures the availability of the infrastructure that underpin the delivery of telecommunication services, to tackling the emerging and increasingly critical issues of data protection and privacy. For more information on digital technologies and the development of a digital economy, visit the [World Bank’s Digital Development page](#). Also of relevance to this area are data protection regulations emerging around the world. See for example, the [online database](#) hosted by the European Commission.

## **Telecommunications infrastructure public-private partnerships (PPPs)**

Telecommunications infrastructure consists of a broad range of technologies, from broadband and fixed-line networks to mobile connectivity and satellites. Historically, such infrastructure has been state-owned and operated, given its strategic importance. However, a rise in market demand and the pace of innovation in underlying telecommunications technologies have had implications for government ownership, including a trend towards deregulation, privatization and liberalization of telecommunications infrastructure and markets. In many jurisdictions, these factors have resulted in a competitive and dynamic market where multiple private sector participants operate alongside the former state monopoly (which may have been partially or fully privatized).

At the same time, while private sector construction, ownership and operation of telecommunications assets has become increasingly common around the world, telecommunications projects still require significant upfront and ongoing capital investment, with the risk that the network quickly becomes outdated or is overtaken by new technologies. State investment in telecommunications infrastructure addresses the challenges of the economic viability of private sector investment in the entire cost of constructing and operating new telecommunications infrastructure and provides governments with a degree of control over infrastructure deployment (including technology mix, geography, and timeframes). In some cases, state investment also provides government with ultimate ownership over the asset. Telecommunications PPPs enable governments to financially contribute to the development of key telecommunications infrastructure while leveraging private sector capital, technology and expertise.

In markets where telecommunications infrastructures are ultimately owned and operated by private sector participants, ICT PPPs usually take the form of a government subsidy to the capital cost of construction. However, the nature and requirements of the PPP may differ depending on the maturity of the market and the history of private sector participation. In economies with limited historical private sector participation and higher levels of state-led development, PPP requirements can be expected to be more prescriptive, e.g. with the government specifying technology and delivery requirements, while in economies with a more mature and experienced private sector, PPP requirements can be expected to be more outcome-focused, relying on the private sector to plan, design and manage the rollout of telecommunications infrastructure.

This section explores some common regulatory features of the telecommunications sector and provides an overview of sample telecommunications PPPs across a range of different jurisdictions, highlighting the varying PPP structures used in markets at different stages of development. Navigate the following

subsections for more information, sample laws, licenses and agreements.

- [General Telecommunication frameworks \(by country\)](#)
- [Laws, Regulations, Frameworks and Licenses](#)
  - [Net Neutrality](#)
  - [Network / Service Separation / Network or Facilities Access](#)
  - [Satellite Regulation](#)
  - [Licensing \(by country\)](#)
- [Universal Access / Universal Service](#)
- [Telecommunications Interconnection and Price Regulation](#)
- [Telecommunications Competition Policy](#)
- [Case Studies on PPP Arrangements for Telecommunications](#)
- [Telecommunications Market Indicator: Investment in Telecoms with Private Participation](#)
- [Toolkits](#)
- [Further Reading](#)

## Further Reading

- [PPP Risk Allocation Tool \(2019\)](#) – provides a useful reference source which outlines common risks arising in different types of PPPs and different market approaches to the allocation of such risks.
- [BroadbandUSA: An introduction to effective public-private partnerships for broadband investments](#), BroadbandUSA, National Telecommunications and Information Administration (NTIA), United States Department of Commerce, January 2015.
- [Connectivity](#), Handshake, International Finance Corporation's (IFC's) quarterly journal on public-private partnerships (PPPs), Issue #15, October 2014.

- [A Framework to Approach Shared Use of Mining-Related Infrastructure](#) by Perrine Toledano, Sophie Thomashausen, Nicolas Maennling, and Alpa Shah, Vale Columbia Center on Sustainable International Investment, Columbia University, 2014. The publication presents an economically, legally and operationally rational framework to enable shared use of mining-related infrastructure, including rail, ports, power, water, and internet and telecommunications(ICT).
- [Developing successful Public-Private Partnerships to foster investment in universal broadband networks](#), International Telecommunication Union (ITU), the United Nations specialized agency for information and communication technologies, September 2012.
- [Broadband – Delivering Next Generation Access through PPP](#), European PPP Expertise Centre (EPEC) 2012.
- [A Model for Calculating Interconnection Costs in Telecoms, Public-Private Infrastructure Advisory Facility \(PPIAF\) 2004 \(pdf\)](#): This guidebook provides a sound methodology to help regulators and telecommunications operators adopt a tariff regime and deal with interconnection disputes on the basis of a rigorous cost model.
- [Public-Private Partnerships \(PPPs\) in e-Government: Knowledge Map Information for Development Program \(InfoDev\) June 2009](#): This publication is designed to provide policy makers, development agency staff, private sector partners, and other key practitioners with guidance on the policies, programs, services, and instruments that may facilitate the engagement of the private sector into areas traditionally seen as those solely of government.
- [Next Generation Connectivity - A review of broadband Internet transitions and policy from around the world February 2010 \(pdf\)](#): An independent expert review conducted by the Berkeman Center for Internet & Society at Harvard University for the benefit of the Federal Communications Commission (FCC).
- [Report on Next Generation Access - Economic Analysis and Regulatory Principles \(June 2009\)](#): Produced by the European Regulators Group (ERG), this report discussed current regulatory developments in the European Union addressed to the economic and technical challenges and various PPP practice at the local level to build out fiber infrastructure in collaboration with local communities.
- [The Economics of Next Generation Access—Final Report September 2008](#): In this study for the European Competitive Telecommunications Association (ECTA), public private partnerships are presented as an effective vehicle for achieving “open access” to multiple competitors.
- *Implementing Electronic Business Registry (e-BR) Services: Recommendations for policy makers based on the experience of EU Accession Countries*, by Lewin, Anat, Leora Klapper, Bruno Lanvin, David Satola, Sophie Sirtaine, Richard Symonds, and Cara Zappala, June 2008.
- [Sources of Performance Improvements in Privatized Firms: A Clinical Study of the Global Telecommunications Industry, April 2001 \(pdf\)](#). This paper examines the financial and operating performance of 31 national telecommunication companies in 25 countries that were fully or partially

privatized through public share offering between 1981 and 1998

- *The Impact of Privatization and Competition in the Telecommunications Sector around the World*, October 2002 (pdf) - this study shows that half of the output growth between 1990 and 1998 was attributable to privatization and competition after controlling for input growth. Competition appeared to have a larger impact on labor and total factor productivity than privatization.

#### Related Content

[Telecommunications / Information & Communication Technology PPPs](#)

[General Telecommunications Framework \(by Country\)](#)

[Telecommunications - Laws Regulations and Licenses](#)

[Telecommunications Licensing \(by Country\)](#)

[Telecommunications Universal Access / Universal Service](#)

[Telecommunications Interconnection and Price Regulation](#)

[Telecommunications Competition Policy](#)

[Case Studies on PPP arrangements for Telecommunications](#)

3RD Party Related Content

[Further Reading on Telecommunications/ICT](#)

Additional Resources

[Climate-Smart PPPs](#)

Related Content Child Sub Section

[General Telecommunications Framework \(by Country\)](#)

[Telecommunications - Laws Regulations and Licenses](#)

[Telecommunications Licensing \(by Country\)](#)

[Telecommunications Universal Access / Universal Service](#)

[Telecommunications Interconnection and Price Regulation](#)

[Telecommunications Competition Policy](#)

[Case Studies on PPP arrangements for Telecommunications](#)