
Pricing

Once a firm has been allowed to enter the market, it must set some price for its communication service. Should the state get involved in setting that price? To answer this question intelligently, we must apply some of the economic theory introduced in CHAPTER 1: POWER. In a market economy, prices are generally set by the marketplace and, under ideal circumstances, the market price will be “efficient.” However, in the real world, a firm may exercise sufficient economic power—even total monopoly power—such that we cannot rely on the market to price a service. This is the principal justification for government ratemaking. Assuming that the justification for regulating prices has been made, numerous legal and policy issues arise about how the government should set prices correctly. Ratemaking also creates questions about how firms might challenge prices if they disagree on the pricing formula. In some cases, the government may even need to subsidize prices to ensure that everyone has access to essential communications tools.

A. Telephony

We start by studying the pricing of wireline telephony services. This section is extremely technical—both as a matter of technology and regulation. You may wonder whether the payoff is worth the effort, especially as wireline telephony has become less important. But the

fundamentals you learn here will apply to pricing in other industries. This will also help you understand the legal treatment of common carriers, which has become increasingly relevant since the internet's recent reclassification as a common carrier.

1. Setting Prices

a. Mapping the Players

As introduced in CHAPTER 2: ENTRY, the three basic elements of the public switched telephone network (PSTN) are phone, line, and switch. The simplest phone call takes place when the caller and receiver connect to the same local switch. The basic connectivity to the local switch provided to customers like you and me is called *exchange service*, and the twisted-pair copper wire connecting the end-user to the switch is called the “local loop.”

47 U.S.C. § 153(47). Telephone exchange service

The term ‘telephone exchange service’ means (A) service within a telephone exchange, or within a connected system of telephone exchanges within the same exchange area operated to furnish to subscribers intercommunicating service of the character ordinarily furnished by a single exchange, and which is covered by the exchange service charge, or (B) comparable service provided through a system of switches, transmission equipment, or other facilities (or combination thereof) by which a subscriber can originate and terminate a telecommunications service.

If the caller and receiver are far apart and not served by the same local switch, the call must be transported from the switch servicing the caller to the switch servicing the receiver. The hauling of communications from one switch to another is called *transport service*, and the line connecting the two switches is called a “trunk.” (See Figure 3.1, which depicts exchange services in vertical boxes, and transport service in a horizontal box.)

Until the 1980s, a single monopoly firm, AT&T, essentially provided all of telephony—including exchange service (customer to local switch, except in some rural areas) and transport service (switch to switch)—in an integrated package. But competition was slowly permitted to grow in the transport sector. As competitors (e.g., “MCI”) branched out to try to provide a complete alternative long distance service, they ran into a thorny problem: they needed cooperation from their archrival, AT&T. Although MCI could provide transport service between switches, the caller and receiver were themselves still connected to the PSTN through AT&T’s exchange service. MCI thus needed access to the local exchange (*exchange access*) from AT&T in order to originate and terminate the long distance calls transported by MCI.

47 U.S.C. § 153(16). Exchange access

The term “exchange access” means the offering of access to telephone exchange services or facilities for the purpose of the origination or termination of telephone toll services.

From the Department of Justice’s perspective, AT&T refused to play nice with its competitors, in violation of federal antitrust laws. So the federal government sued and reached a settlement that broke up AT&T and severed exchange service from transport service.* Henceforth, a *local exchange carrier* (LEC) would provide the former, but an *interexchange carrier* (IXC) would provide the latter.

47 U.S.C. § 153(26). Local exchange carrier.

The term ‘local exchange carrier’ means any person that is engaged in the provision of telephone exchange service or exchange access. Such term does not include a person insofar as such person is engaged in the provision of a commercial mobile service under section 332(c) of this title, except to the extent

* We study the breakup of AT&T carefully in CHAPTER 4: ACCESS.

that the Commission finds that such service should be included in the definition of such term.

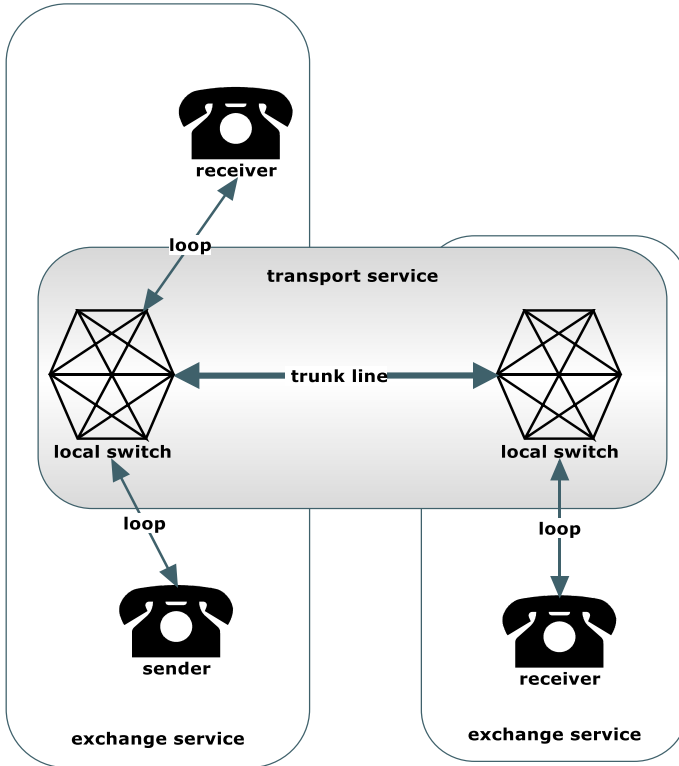


Figure 3.1: Exchange and Transport Services

It was, however, impractical to prevent a LEC from performing any and all transport—if “transport” is defined strictly as connecting any switch to another switch. After all, at the time, there were approximately 19,000 local switches in use, and many were geographically close to