#### TELECOMMUNICATIONS POLICY

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### **Summary**

Telecommunications is considered the "central nervous system" of the global information economy. Historically, conventional wisdom held that telecommunications networks functioned most efficiently as a natural monopoly. Political and economic changes following the end of the Cold War created conditions in which policy makers around the world began to reach a consensus about the failure of state-operated telecommunications monopolies, promoting instead, the "liberalization" of national telecommunications policy.

Today's ubiquitous rhetoric about the information or digital "revolution" often ignores the structural and cultural legacies that shape telecommunications policy decisions. Although the spread of new communications technology across the planet has been astonishing in the last 20 years, the expansion has been extremely uneven. Thus, despite the fact that we live in an age of information, 75 % of the world's population has yet to gain access to basic telephone services.

This article examines the changing role of telecommunications policy in an increasingly global information economy. After outlining the reasons for the recent historical shift towards competition, this article considers the three main schools of thought in the social science literature on telecommunications policy. The next section examines the role of telecommunications policy in "the South" (specifically Africa, Asia, and Latin America) from a historical as well as theoretical perspective. The final section highlights the new local information disparities in a decidedly global network society.

## 1. Introduction: the Role of Telecommunications Policy

Access to telecommunications services is increasingly considered a basic human need

linked to basic participation in modern economic activity. Telecommunications as an industry has been historically regulated by domestic and international institutions, because it is considered an infrastructure industry, upon which other forms of economic activity are based. Telecommunications policy thus involves balancing public and private interest through local, national, regional, and international regulation of a growing variety of communications technologies. These include (a) network facilities and equipment; (b) basic telephony; (c) value-added and information services including data, video, and voice transmission (i.e. the Internet); (d) mobile and radio services; and (e) integrated digital networks and integrated broadband networks. Regulation should be understood as a dynamic political process that distributes costs and benefits throughout these various sectors.

Telecommunications regulation has always had a domestic and international or multilateral component. Traditionally, this was composed of a national government body with the most power in setting the rules of operation, and the International Telecommunications Union (ITU), which served to establish common standards and protocols. Today, telecommunications and information policy is in a period of dramatic transition as a result of what some have called the rise of a global "network society" (see chapter *The Information Economy and the Internet*). This transition can be explained by both rapid changes in technology since the 1970s, particularly the transformation from analogue to digital switching, and transmission, which led to the convergence of new and old media, as well as dramatic political changes, most commonly understood as "globalization."

This notion of a network society is based on the interactive switched telecommunications network that was originally developed for basic telephony. In contrast to traditional top-down, one-way mass media, new electronic media function through a hub-and-spoke model. In terms of regulation, these networks are unique because they are based fundamentally on shared resources. In the case of a telephone service, it would make little economic sense, for each individual subscriber to connect separate cables to every other subscriber in order to make a telephone call, even though it is technologically feasible. Individual subscribers do not make enough telephone calls to warrant investment in hundreds of cables. Instead, phone calls made by individual subscribers are routed through a local exchange, where, using a common connection, the calls are connected to a bigger regional exchange, which uses high-capacity connections that link major exchanges in order to distribute calls. The value of this network grows as each additional user joins the network, precisely because it spreads the fixed costs around a larger number of users, and because it expands the numbers of people each already existing subscriber can contact. Economists argue that because the network can enhance social benefits beyond the members of the network, telecommunications should be seen as a "public good" because of "positive externalities." In other words, the greater the number of people connected to a network, the greater the worth of that network. Putting this into practice, public policy experts argue that the telecommunications network should be seen as a "club" based on members with mutual interests, as opposed to a market composed of members with competing interests. These "members" generally include different institutional actors including government bodies, domestic and transnational firms, labor unions, consumer organizations, and public interest groups. The problem in regulating both broadcasting and telecommunications networks is, therefore, what happens when this coalition of mutual interest falls apart in periods of political transition and technological change?

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## **Biographical Sketch**

**Paula Chakravartty** is an assistant professor in the Department of Communication at the University of California-San Diego. She is currently working on a book on the politics of national high-tech development in India. Chakravartty is also working on research on race and gender as it relates to work in the global information economy.

