

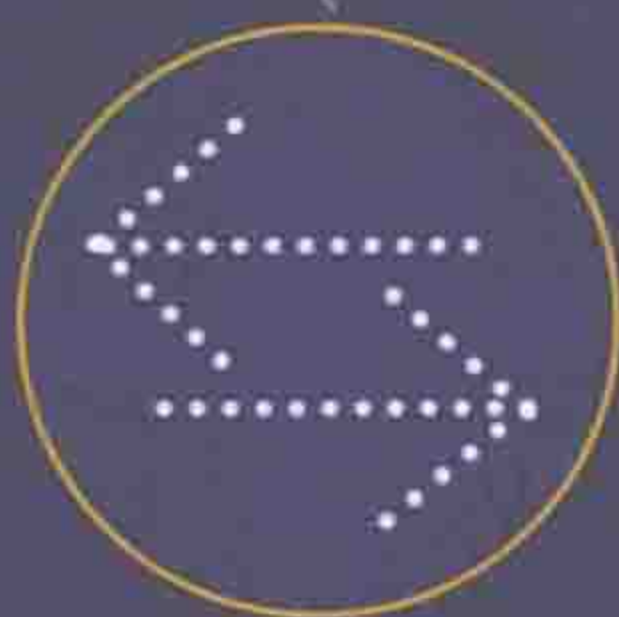
TELECOMMUNICATION

POLICY

FOR THE

INFORMATION AGE

FROM MONOPOLY TO COMPETITION



GERALD W. BROCK

Telecommunication Policy for the Information Age

From Monopoly to Competition

Gerald W. Brock

HARVARD UNIVERSITY PRESS

Cambridge, Massachusetts
London, England

*To my wife, Ruth, and our children,
Jane, Sara, David, and Jimmy*

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Printed in the United States of America
Second printing, 1996

This book is printed on acid-free paper, and its binding materials have been chosen for strength and durability.

Library of Congress Cataloging-in-Publication Data
Brock, Gerald W.

Telecommunication policy for the information age : from monopoly
to competition / Gerald W. Brock.

p. cm.

Includes index.

ISBN 0-674-87277-0

1. Telecommunication—Government policy—United States.

I. Title.

HE7781.B75 1994

388'.068—dc20

94-3911
CIP

Acknowledgments

This book developed out of my attempts to integrate what I understood about the regulatory process from the academic literature with what I observed in six years at the Federal Communications Commission. I am indebted to Tom Spavins and Peter Pitsch, who arranged for me to join the staff of the FCC's Office of Plans and Policy in 1983 to work under their direction, to then Chairman Mark Fowler and Common Carrier Bureau chief Albert Halprin, who provided me with a number of assignments that allowed me to see various components of the FCC's operation, and to Dennis Patrick, who provided me with the privilege of serving as Common Carrier Bureau chief after he assumed the chairmanship. FCC staff members Michael Wack, John Cimko, Evan Kwerel, Colleen Boothby, Mary Beth Hess, Mark Uretsky, Mary Brown, Ken Moran, Peyton Wynns, Carl Lawson, Gerald Vaughan, and Jane Jackson, along with many others, were influential in helping me understand the complex interrelated components of the regulatory process.

Christopher Sterling, my colleague, friend, and supervisor at the George Washington University Graduate Telecommunication Program, has been a constant source of encouragement, ideas, and sources for this book. His extraordinary personal library of works on telecommunication was a great benefit in my research, and his careful reading of the draft manuscript and advice at all stages of the work were extremely valuable. John Kwoka, Richard Caves, Tom Spavins, Carl Lawson, Tim Brennan, and Evan Kwerel provided very useful comments on the draft manuscript.

Many students in the Graduate Telecommunication Program at

George Washington University have read portions of the manuscript in various stages and provided responses that were helpful in the revisions.

Early stages of my work on portions of this book were sponsored by Unitel Communications Inc. I have benefited from discussions with Unitel staff members David McKeown, Michael Harburn, Gary Pizante, David Watt, Richard Stursberg, Janet Yale, Steve Guiton, Michael Ryan, and Mark Zohar.

The writing of this book was facilitated by a grant to George Washington University from the John and Mary R. Markle Foundation. I appreciate the assistance of Lloyd Morrisett, president, Dolores Miller, grants manager, and Jocelyn Hidi of the program staff at the Markle Foundation in making this book possible.

I am grateful to Michael Aronson at Harvard University Press for his support for the project over a long period of time, and to Mary Ellen Geer for her careful and insightful editing of the manuscript. Jennifer Sterling transformed rough drawings into finished figures.

None of the individuals or organizations named above is responsible for the views expressed in this book, or for any remaining errors in it. Some of the individuals have specifically expressed disagreement with certain of the interpretations developed in this book.

First-person accounts of selected regulatory issues by Bernard Strassburg are quoted from Fred W. Henck and Bernard Strassburg, *A Slippery Slope: The Long Road to the Breakup of AT&T*, copyright 1988 by Fred W. Henck and Bernard Strassburg, published by Greenwood Press, an imprint of Greenwood Publishing Group, Inc., Westport, Connecticut; reprinted with permission.

I am especially thankful for the love, encouragement, support, and patience of my wife, Ruth, and our four children, Jane, Sara, David, and Jimmy, throughout a long research and writing process.

Abbreviations

APA	Administrative Procedure Act
BOC	Bell Operating Company (after divestiture)
BSA	Basic Serving Arrangement (ONA structure)
BSE	Basic Service Element (ONA structure)
CAP	Competitive Access Provider
CCB	Common Carrier Bureau (of the FCC)
CCL	Carrier Common Line
CCLC	Carrier Common Line Charge (access charges)
CCSA	Common Control Switching Arrangement
CEI	Comparably Efficient Interconnection (ONA structure)
CPE	Customer Premises Equipment (terminal equipment)
CPNI	Customer Proprietary Network Information
DOD	Department of Defense
DOJ	Department of Justice
EIA	Electronic Industries Association
ENFIA	Exchange Network Facilities for Interstate Access
ESP	Enhanced Service Provider
FCC	Federal Communications Commission
FNPRM	Further Notice of Proposed Rulemaking
FTS	Federal Telecommunications System
FX	Foreign Exchange (type of long distance service)
ICC	Interstate Commerce Commission
IXC	Interchange Carrier (after divestiture)

LATA	Local Access and Transport Area
LEC	Local Exchange Carrier (after divestiture)
MFJ	Modified Final Judgment (divestiture decree)
MPL	Multi-Schedule Private Line (pricing plan)
MTS	Message Telecommunication Service (ordinary switched long distance service)
NARUC	National Association of Regulatory Utility Commissioners (state regulation)
NPRM	Notice of Proposed Rulemaking
NTIA	National Telecommunications and Information Administration (in the Department of Commerce)
NTS	Non-Traffic-Sensitive (the largest category of telephone plant and associated expense)
OCC	Other Common Carrier (small competitors of AT&T, especially prior to the divestiture)
ONA	Open Network Architecture
ONAL	Off Network Access Line
OPP	Office of Plans and Policy (of the FCC)
PBX	Private Branch Exchange
PCA	Protective Connecting Arrangement
POP	Point of Presence (post-divestiture connection point between LECs and IXC's)
SCC	Specialized Common Carrier
SLC	Subscriber Line Charge
SPF	Subscriber Plant Factor (a component of separations cost allocation formulas)
WATS	Wide Area Telecommunication Service

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Part I / Analytical Framework

Policy making in the United States is more like a bar-room brawl: Anybody can join in, the combatants fight all comers and sometimes change sides, no referee is in charge, and the fight lasts not for a fixed number of rounds but indefinitely or until everybody drops from exhaustion.

James Q. Wilson, *Bureaucracy*

1 / Introduction

The process for making telecommunication policy in the United States often appears chaotic and disorganized, with overlapping responsibility and frequent conflicts among federal regulators, state regulators, executive branch leadership, congressional committees, and judges. Parties disappointed by the policy choices in one forum frequently seek redress in an alternative forum. Some decisions can only be made by the concurrence of multiple independent agencies. For example, the routine preparation of the U.S. position on issues before Intelsat is done jointly by the Federal Communications Commission (FCC), the State Department, and the Commerce Department. Other decisions are issued independently by multiple agencies even though the implications may be contradictory. For example, AT&T and the Bell Operating Companies are subject to the orders of the FCC, the state regulatory commissions, and Judge Greene (the administrator of the AT&T antitrust consent decree), with none of the three required to coordinate their actions.

Observers of the telecommunication policy process have frequently criticized this state of affairs and have called for greater centralization of power and long-term planning of regulatory policy. Henry Geller has provided a survey of past criticisms of the telecommunication policy process that includes the following:

[The FCC] has been found to have failed both to define its primary objective intelligently and to make many policy determinations required for effective and expeditious administration. (1949, Hoover Commission)

The whole Government telecommunications structure is an uncoordinated one and will be even less adequate in the future than it has been in the past to meet the ever-growing complexities of telecommunications. A new agency is needed to give coherence to the structure. (1951, Communications Policy Board established by President Truman)

[The FCC] has drifted, vacillated and stalled in almost every major area. It seems incapable of policy planning, of disposing within a reasonable period of time the business before it. (1960, Landis Report for President-elect Kennedy)

[Telecommunication policy] has evolved as a patchwork of limited, largely *ad hoc* responses to specific issues, rather than a cohesive framework for planning. . . . The patchwork nature of the present structure is not conducive to optimum performance of the telecommunications activities and requirements of the Federal Government. (1968, Rostow Commission)

Inherent deficiencies in the commission form of organization prevent the commission from responding effectively to changes in industry structure, technology, economic trends, and public needs. (1971, Ash Council)

Geller then added his own voice to the many past calls for reform and centralization of authority:

The authority bestowed upon diverse executive departments and agencies is fragmented and has led to jurisdictional battles, delays, and confusion. The lack of focused responsibility becomes particularly acute in light of the independence of the Federal Communications Commission. This flawed policy process is especially egregious in view of the great importance of telecommunications in the information age and the difficult policy issues now confronting the United States, particularly in the international trade arena.¹

A major Department of Commerce study of telecommunications issues in 1988 repeated many of the old concerns with decentralized decision making:

So long as ultimate responsibility for most communications and information policy is fragmented among a multitude of agencies, and between domestic and international policymaking, then short-term, makeshift solutions will too often emerge as a hastily-coordinated, lowest common denominator. . . .

In the final analysis the problem is that for most issues there is, at times, no one in charge, and the buck does not stop anywhere.²

As Wilson's analogy between the U.S. policy process and a barroom brawl suggests, the chaotic process of developing telecommunication policy is not unique to that industry. Much of the routine development of U.S. policy in many different areas is done through agencies with vague mandates and overlapping responsibilities. Statutes frequently contain general language that must be clarified through regulations and administrative practice. Those who are dissatisfied with the response of one agency to their concerns generally have alternative places to seek redress, through either a formal appeal process or another agency with potential jurisdiction over the issue.

Positive Results of the Decentralized Process

While the decentralized telecommunication policy process in the United States has often been criticized, the results of that process have been better than the results of the centralized process in many other countries. Until recently, the most common telecommunication structure outside of the United States has been a single government ministry which was responsible for telecommunication policy and the operation of the government-owned telephone network. Yet those centralized structures have tended to show even less ability to adapt to rapidly changing technological opportunities in telecommunication than the U.S. process. Many countries have carefully examined U.S. telecommunication policy over the past twenty years and introduced elements of it into their own policies in order to reform rigid and dysfunctional hierarchical structures.

U.S. telecommunication policy has evolved gradually over a long period of time, resulting in a cumulative major transformation. Although many policy makers have been dissatisfied with the state of telecommunication policy at any one time, there has never been a consensus on what changes were needed. The telecommunication policy process can be clearly distinguished from the airline policy process, in which a single drastic change was made in the late 1970s (from traditional regulation to deregulation) through a new law supported by the Carter administration, the Civil Aeronautics Board, and congressional leaders.³ In contrast, telecommunication policy is still tied to the

Communications Act of 1934 despite repeated congressional efforts to create a new statutory framework. Even though Congress has been unable to update the basic law, the Federal Communications Commission, state regulatory agencies, the Department of Justice, and federal judges have all taken actions that have gradually moved policy from traditional public utility regulation of a monopoly to substantial reliance on market forces and encouragement of new competition. The policy that has resulted from the independent actions of several different power centers does not conform to the prescriptions of any single theoretical perspective, but it does incorporate elements from a wide range of political views and include adjustments for changing technological opportunities.

Potential Benefits of a Decentralized Policy Process

A centralized telecommunication policy agency would exert a great deal of power, including the power to confer or withhold vast amounts of money to individuals and organizations that seek licenses, permissions, or protections. American political culture is unwilling to trust such a degree of power to particular individuals without many opportunities for review and reconsideration of their decisions. James Q. Wilson notes that Americans are generally willing to accept reduced efficiency in government in exchange for protection against abuse of power:

Inefficiency is not the only bureaucratic problem nor is it even the most important. A perfectly efficient agency could be a monstrous one, swiftly denying us our liberties, economically inflicting injustices, and competently expropriating our wealth. People complain about bureaucracy as often because it is unfair or unreasonable as because it is slow or cumbersome. . . .

The checks and balances of the American constitutional system reflect our desire to reduce the arbitrariness of official rule. That desire is based squarely on the premise that inefficiency is a small price to pay for freedom and responsiveness. Congressional oversight, judicial review, interest-group participation, media investigations, and formalized procedures all are intended to check administrative discretion.⁴

During the economic crisis of the 1930s, there was widespread belief that drastic government intervention in the economy was necessary,

and consequently an effort was made to create agencies that combined executive, legislative, and judicial functions within a single organization. As confidence in market processes revived, the traditional concerns with limiting abuse of power caused the development of many restrictions on the activities of regulatory agencies. However, potential abuse of power is not the only problem with concentrating the power to make policy. A properly functioning policy process must be able to cope with four different problems:

1. Controlling power to be certain it is used only in the public interest, given the limited number of saints available for government service (opportunism).
2. Defining the public interest on issues for which any decision helps some people and hurts others and for which there are differing political views among those who are not personally affected by the issue (differing political values).
3. Providing adequate information to make rational decisions when critically important information is either missing altogether or controlled by individuals or firms that have an incentive to misrepresent it (unavailable information or asymmetric information).
4. Guarding against errors caused by the policy maker's lack of expertise or inability to fully utilize the available information to devise policies that accomplish given policy goals (bounded rationality).

Formal models have been developed to illuminate methods of coping with various subsets of the four problems. For example, the large literature on information economics is concerned with methods of coping with opportunism and asymmetric information (problems 1 and 3) while assuming a single principal and unbounded rationality (assuming away problems 2 and 4). There are no formal models of optimal processes that cope with all four problems simultaneously.

The perspective of this book is that existing government institutions have evolved over time to cope with observed conditions, including all four of the problems listed above. It is a similar perspective to that taken by Alfred Chandler in his famous study of the development of American business structures. Chandler explained the development of new corporate structures as efforts to manage the increasing complexity of large corporations as they expanded into diversified integrated companies.⁵ He made no attempt to prove that the observed structures were optimal, but showed the relationship between the problems faced by the business leaders and the organizational solutions they developed