

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Review of the Section 251 Unbundling	)	CC Docket No. 01-339
Obligations of Incumbent Local Exchange	)	
Carriers	)	

In the Matter of	)	
	)	
Review of Regulatory Requirements for	)	CC Docket No. 01-337
Incumbent LEC Broadband	)	
Telecommunications Services	)	

In the Matter of	)	
	)	
Appropriate Framework for Broadband	)	CC Docket No. 02-33
Access to the Internet Over Wireline	)	
Facilities	)	

**STATEMENT OF 43 ECONOMISTS ON THE PROPER REGULATORY  
TREATMENT OF BROADBAND INTERNET ACCESS SERVICES**

May 3, 2002

## **Introduction**

1. This statement is provided by 43 economists, listed below, who have studied telecommunications and competition policy. Many of us have consulted with or publicly represented local telephone companies or cable companies in regulatory proceedings.

2. We submit this statement to give our views, relevant to each of the above-captioned dockets, on the proper regulatory treatment of broadband Internet access, an issue of great importance for telecommunications policy and for the American economy generally.

3. In our view, the Commission should move promptly to eliminate existing regulations and to establish a non-regulated framework for unfettered and unbiased competition, in order to promote the fastest possible growth in the market for broadband Internet access. In particular, common carrier and unbundling obligations, such as are currently imposed, asymmetrically, on incumbent telephone companies, are likely to retard investment in this nascent, fast growing business and the growth of vigorous, facilities-based competition, at the expense of consumers.

4. While we have disagreed in varying ways with the way the Commission has interpreted the mandate of the Telecommunications Act of 1996 insofar as it seeks to encourage competition in the provision of traditional telephone services—specifically, its basis for selection of the network elements subject to mandatory sharing and its prescribed method of pricing them—we all agree that there is no reason to impose unbundling and similar requirements with respect to broadband Internet access—indeed, there is every reason not to do so.

## The Factual Background

5. Our recommendation is predicated on the following facts:
  - Broadband Internet access services can be and are currently being offered by a number of different transmission media using differing technologies that compete directly with one another. These include cable, digital subscriber line (DSL), terrestrial wireless (both fixed and mobile), and satellite.
  - Competition among these providers is centered on the deployment of new facilities and the development of competitive packages of transport and digital content. Companies are today making extremely risky multi-billion dollar investments in new plant and equipment, independently and by acquiring or forging alliances with content providers.
  - Currently, cable has a much larger share of the market than any other medium; but at this early stage in the development of broadband, and in the presence of differing regulatory obligations and burdens, it is not possible to tell which if any of the existing technologies—or some other, as yet undemonstrated—will emerge from unencumbered competition as dominant.

6. We do not understand any interested party to have challenged any of these predicates, and the Commission itself appears to have embraced each of them. It has, for example, identified “a continuing increase in consumer broadband choices within and among the various delivery technologies—xDSL, cable modems, satellite, fixed wireless, and mobile wireless.”<sup>1</sup> It has stressed that the market is still young and growing rapidly, and that broadband investments are in consequence both extremely valuable and highly risky.<sup>2</sup> And while the Commission has acknowledged cable’s current substantial lead in the number of subscribers,<sup>3</sup> it has also stressed that this market is likely “to accommodate

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<sup>1</sup> Third Report and Order and Memorandum Opinion and Order, *Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission’s Rules to Redesignate the 27.5-29.5 GHz Frequency Band*, 15 FCC Rcd 11857, 11865, ¶ 19 (2000) (“*Fixed Wireless Order*”).

<sup>2</sup> See, e.g., Third Report and Order and Fourth Further Notice of Proposed Rulemaking, *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, 15 FCC Rcd 3696, 3840, ¶ 317 (1999).

<sup>3</sup> See, e.g., Third Report, *In re Inquiry Concerning the Deployment of Advanced*

different technologies such as DSL, cable modems, utility fiber to the home, satellite and terrestrial radio,”<sup>4</sup> and that the “preconditions for monopoly appear absent.”

7. Indeed, the Commission has in at least two instances declined to exercise its regulatory authority over broadband wireless and cable platforms, precisely because it viewed the market as competitive.<sup>5</sup> Moreover, it tentatively concluded in a recent Notice of Proposed Rulemaking that forbearance from common carrier regulation of cable-modem providers is “justified” because “cable modem service is still in its early stages; supply and demand are still evolving; and several networks providing residential high-speed Internet access service are still developing.”<sup>6</sup> Manifestly, these conclusions, which relate to the competitive conditions prevailing in the broadband market overall, and not to the specific situation of cable operators, justify lifting common carrier regulation on all access providers, including incumbent local telephone companies.

### **The Perversity of Regulatory Requirements**

8. The Commission has imposed common carrier and unbundling requirements on DSL services provided by incumbent local telephone companies, but not on cable or

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*Telecommunications Capability to All Americans*, CC Docket No. 98-146, ¶¶ 44, 49 (2002) (reporting 5.2 million cable modem lines as of June 2001, compared to 2.7 million ADSL lines).

<sup>4</sup> Report, *Inquiry Concerning the Deployment of Advanced Telecommunications Capability*, 14 FCC Rcd 2398, 2423-24, ¶ 48 (1999).

<sup>5</sup> See *Fixed Wireless Order*, 15 FCC Rcd 11857 (removing ownership limitations on fixed wireless because of intermodal broadband competition); Memorandum Opinion and Order, *Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations from MediaOne Group, Inc. to AT&T Corp.*, 15 FCC Rcd 9816, 9866, ¶ 116 (2000) (“*AT&T/MediaOne Order*”) (rejecting public interest concerns stemming from merger of two broadband providers because of “actual and potential competition” in the broadband market).

<sup>6</sup> Declaratory Ruling and Notice of Proposed Rulemaking, *In re Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities*, GN Docket No. 00-185, ¶ 95 (2002).

on wireless and satellite providers. The labels and details may differ, but the common goal of all such restrictions and requirements is to allow non-facilities based providers to share the underlying facilities at regulated rates and on non-discriminatory terms.

9. In our view, such sharing requirements are misguided. The development of the broadband market is heavily reliant on the deployment of new and expensive networks. To install those networks, existing providers must make extremely risky investments, in an environment of technological and financial uncertainty. The imposition of sharing obligations confronts telephone companies with the prospect of being required to share the results of any successes with rivals at regulated rates, while alone bearing the full costs of ventures that prove unsuccessful. That prospect is almost certain to slow the deployment of those facilities—not just by those who are regulated today but also by potential competitors confronted with the choice between undertaking the requisite large, risky investments in their own facilities or free-riding on the successful investments of others at designedly minimal regulated rates.

10. The original purpose of mandated sharing obligations prescribed by the 1996 Act was to assist the transformation of traditional markets from mature monopoly to competition. But to impose such obligations on a nascent market simply impedes the development of full competition. In particular, for regulators to attempt to set wholesale prices at forward-looking levels in the early stages of a market's development, when innovation remains crucial to that development and it is not yet clear which technologies are likely to prevail, can only be injurious to the process of competitive innovation itself. And it will hurt consumers by slowing the deployment of new infrastructure and the introduction of new services.

11. Concern has been expressed about the danger that broadband Internet access providers may be unwilling to negotiate access arrangements with unaffiliated ISPs that might otherwise benefit consumers by offering them more varied choices of program content, features and functions. But the more competitive the market is, the more sufficient are the incentives of facilities-based providers to negotiate such arrangements without compulsion. In a competitive market, with multiple platforms available for providing service, if one supplier withholds its cooperation from independent ISPs in the hope of vertically extending its control from transport to content, the ISPs can work with its competitors who will in this way obtain a competitive advantage. Similarly, if transport facilities are most efficiently utilized through unbundling arrangements, providers will enter into such agreements voluntarily. The critical point is that where, as here, a market is competitive, market forces are sufficient to encourage participants to make arrangements that will maximize consumer welfare; and it is preferable by far that all such arrangements be negotiated on mutually beneficial terms rather than on terms set by regulators.

12. The Commission should strive to avoid asymmetrical treatment and consequent competitive handicapping of the several contestants in the broadband market. For it to impose heavier burdens on one set of facilities-based providers than others can only discourage—as well as distort—the process of competitive innovation that is the central goal of our national telecommunications policy. The Commission should opt for de-regulatory parity, in which all service providers have an opportunity to compete equally free from the heavy hand of government.

## Conclusion

13. In competitive markets, competition, not regulation, is the best mechanism for maximizing consumer welfare. The nascent broadband Internet access market shows great potential for vibrant competition. There is every reason, therefore, to believe that market forces, unimpeded by common carrier and unbundling requirements, and especially discriminatory ones, will ensure the development and deployment of efficient, consumer-welfare-enhancing technologies and business models. To displace those market forces with regulation can only discourage investment in new technologies and new services, in direct conflict with the interests of consumers and the national economy.

Respectfully submitted by:<sup>7</sup>

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Aniruddha Banerjee  
Paul S. Brandon  
Michael Carnall  
Robert W. Crandall  
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Henry Kahwaty  
Dale Lehman  
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Paul W. MacAvoy

Karl A. McDermott  
William Palmer  
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Steve G. Parsons  
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Leonard Waverman  
Dennis L. Weisman  
John T. Wenders  
G. Mitchell Wilk

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<sup>7</sup> Biographical information on the signatories is included in Appendix A.

## **Appendix A: Biographical Information on Signatories**

**Debra J. Aron** is Adjunct Associate Professor at Northwestern University, where she teaches courses in the economics of communications industries. Dr. Aron consults extensively in the telecommunications industry in the U.S. and abroad on telecommunications and broadband policy issues. Dr. Aron prevserved as an economist at the Civil Aeronautics Board, where she worked on issues pertaining to deregulation of the airline industry.

**Aniruddha Banerjee** is a Vice President at National Economic Research Associates (NERA) and a consultant on telecommunications matters. His research and consulting has spanned local and long distance competition, interconnection and inter-carrier compensation, universal service, regulatory reform, telephone service quality, and demand for mobile services.

**Paul S. Brandon**, a Vice President at NERA, has over 25 years of telecommunications policy experience. He has conducted research on telecommunications demand, new service development, and the entry by incumbent local exchange carriers into interLATA long-distance, among other subjects.

**Michael Carnall** has done substantial research and consulting on the economics of network industries, focusing primarily on telecommunications. His work in telecommunications has addressed issues related to appropriate cost estimation methodologies and service quality measurement and testing. He has testified on these issues in both state and FCC proceedings.

**Robert W. Crandall** is the Chairman of Criterion Economics and a Senior Fellow in Economic Studies at the Brookings Institution in Washington, D.C. His areas of economic research include antitrust, telecommunications, competitiveness, deregulation, mergers, and regulation. He has previously held positions at the Massachusetts Institute of Technology, George Washington University, and in the Federal Government.

**Carl Danner** is former Chief of Staff to the President of the California Public Utilities Commission, and a Director at LECG, L.L.C.

**Gregory M. Duncan** is a Senior Vice President at NERA and faculty member in Economics at the University of California, Berkeley. He has testified extensively on telecommunications and antitrust issues and has written published articles on telecommunications, other regulated industries, and theoretical and applied microeconometrics. His prior affiliations include GTE Laboratories, Northwestern University, Washington State University, and Boston University.

**Jeffrey A. Eisenach** is President and co-founder of The Progress & Freedom Foundation, and also serves on the faculty of the George Mason University Law School. He previously taught at Harvard University's Kennedy School of Government, and served in a variety of government posts, including Senior Economist at the U.S. Federal Trade Commission. He is the author of several books and articles concerning telecommunications issues.

**Richard Emmerson**, formerly President and CEO of INDETEC International, Inc. and Assistant Professor of Economics, University of California, San Diego has worked in telecommunications for 25 years. He has testified throughout the United States on economics matters in telecommunications and has performed research and consulting for government agencies, new entrants and incumbent communications companies in more than 20 countries.

**William Fitzsimmons**, Managing Director of LECG, L.L.C.'s Telecommunications Practice, is a telecommunications economist with over fourteen years experience building and interpreting financial and cost simulation models used in the analysis of telecommunications issues and investments. Prior to joining LECG in 1994, he worked in various capacities in the private sector. He has testified in numerous regulatory proceedings.

**Kenneth Gordon** is Special Consultant and previously a Senior Vice President with NERA. He also has been Chairman of the Maine and Massachusetts public utility commissions, President of the National Association of Regulatory Utility Commissioners (NARUC), and on the FCC staff. He has written and testified extensively on regulation of the telecommunications, electricity, and natural gas industries.

**Robert W. Hahn** is director of the AEI-Brookings Joint Center for Regulatory Studies, a resident scholar at the American Enterprise Institute, and a research associate at Harvard University. He testifies frequently before Congress on regulatory matters and has served as a consultant to government and industry on issues involving the costs and benefits of regulation.

**Robert G. Harris** is Professor Emeritus in the Haas School of Business, University of California, Berkeley, where he has taught courses in telecommunications and regulatory policy for 24 years. Dr. Harris has testified on telecom policy before the FCC and 27 state regulatory commissions. He served a Deputy Director at the Interstate Commerce Commission under President Carter.

**Jerry A. Hausman** is the John and Jennie S. MacDonald Professor of Economics at MIT and Director of the MIT Telecommunications Economics Research Program. He has done research in telecommunications since 1974. He has received the John Bates Clark Award from the American Economics Association and the Frisch Medal from the Econometric Society.

**Thomas W. Hazlett** is a Senior Fellow at the Manhattan Institute for Policy Research and a Fellow of the AEI-Brookings Joint Center for Regulatory Studies. He was formerly a professor at the University of California, Davis, where he served as Director of the Program on Telecommunications Policy, and has also served as Chief Economist of the Federal Communications Commission.

**Richard Higgins**, a Director at LECG, L.L.C., has studied industrial organization for more than thirty years. He has published articles on the competitive impact of the MFJ restrictions on vertical integration in cellular and wireline telecommunications. He is former Deputy Director for Antitrust in the FTC Bureau of Economics.

**Alfred E. Kahn** is the Robert Julius Thorne Professor of Political Economy, Emeritus, Cornell University and Special Consultant with NERA. He has served as Chairman of the New York State Public Service Commission and of the (U.S.) Civil Aeronautics Board and has written and testified extensively in the area of direct economic regulation and particularly of the public utilities.

**Henry Kahwaty** is an economist specializing in industrial organization and competition policy. He was formerly an economist with the Antitrust Division of the U.S. Department of Justice.

**Dale Lehman** is Director of the MBA Program in Telecommunications Management at Alaska Pacific University. He has taught at 10 universities, served as Member of Technical Staff at Bellcore and as Senior Economist at Southwestern Bell Telephone Company. He has an extensive research and consulting background in the telecommunications industry.

**Thomas M. Lenard** is Vice President for Research and Senior Fellow at The Progress & Freedom Foundation. He has previously served in senior government positions at the Office of Management and Budget, the Federal Trade Commission and the Council on Wage and Price Stability, and has been a visiting economist at the Brookings Institution.

**Stanford L. Levin** is Professor of Economics at Southern Illinois University Edwardsville. He served as a Commissioner on the Illinois Commerce Commission from 1984-1986, and he has been involved in research, teaching, and consulting in telecommunications policy for the past twenty years. Professor Levin has consulted in telecommunications for local exchange companies, long distance companies, and public agencies, and for cable companies.

**Paul W. MacAvoy** is the Williams Brothers Professor of Management Studies and former Dean at the Yale School of Management. His work has focused on regulation and strategic decision-making by firms in the energy, transportation, and telecommunications industries. He served as a member of the President's Council of Economic Advisers during the Ford Administration, and also held positions in the Johnson, Carter, and Reagan administrations.

**Karl A. McDermott**, a Vice President at NERA, has over 20 years experience in regulatory policymaking. He has served as a Commissioner of the Illinois Commerce Commission during the implementation of the Telecommunications Act of 1996 and has written and testified in the area of economic regulation and public utility policy.

**William Palmer** has testified in arbitration proceedings pursuant to the Telecommunications Act of 1996 in Wisconsin, Indiana, Michigan, and Illinois. Previously, Mr. Palmer worked at Ameritech where his responsibilities included the development of the methodological framework for the cost studies and models used by Ameritech and its subsidiaries.

**Francis X. Pampush** is an economist specializing in competitive analysis, regulation, antitrust and management consulting services in network industries. He has submitted testimony at the FCC, testified at FERC, and provided expert analysis for telecommunications service providers and manufacturers. Dr. Pampush is also a Chartered Financial Analyst.

**Steve G. Parsons**, President PAE and adjunct Professor Washington University St. Louis (Masters of Telecommunications Management Program), has over 18 years experience in Telecommunications. He has consulted, taught, published, and testified extensively on telecommunications economics and public policy issues including: unbundling, retail and wholesale pricing, universal service, interconnection, and competitive safeguards.

**Stephen Pociask** is president of TeleNomic Research, an economic consulting firm that specializes in telecommunications public policy and its affects on consumer welfare. With over twenty years of industry experience, he has conducted and presented numerous studies on broadband competition and regulation, and has testified before the Congress on Internet and broadband legislation.

**Paul Rappoport**, Associate Professor of Economics, Temple University and former founder and Chairman of PNR and Associates, is also a senior research fellow for Columbia University's Center for Tele-Information and a senior academic consultant for Econsult. He has over 20 years of telecommunications experience, which has most recently focused on Internet access choice and usage, and the demand for bandwidth.

**Agustin J. Ros** is a Senior Consultant at NERA with over 8 years of telecommunications policy experience. His recent research and consulting have addressed issues of price cap regulation and interconnection. Prior to NERA he has served as advisor to the Chairman of the Illinois Commerce Commission and worked at the Federal Communications Commission.

**Paul H. Rubin** is Professor of Economics and Law at Emory University and editor-in-chief of the journal *Managerial and Decision Economics*. He is an expert on antitrust, consumer protection, and advertising. Professor Rubin was formerly Chief Economist at the U.S. Consumer Product Safety Commission, and has also held positions in the Federal Trade Commission and the Council of Economic Advisers in the Executive Office of the President.

**Michael A. Salinger** is Professor of Economics and Chairman of the Department of Finance and Economics at the Boston University School of Management and Special Consultant with NERA. He has consulted and published about competition issues in telecommunications in general and about bundling and vertical integration in telecommunications in particular.

**Richard L. Schmalensee** is John C. Head III Dean of the MIT Sloan School of Management, Professor of Economics and Management at MIT, and Special Consultant with NERA. He has served as a Member of the President's Council of Economic Advisers and has written and testified on a wide range of issues in antitrust, regulatory, and environmental policy.

**Howard A. Shelanski**, Acting Professor of Law at the University of California at Berkeley, has served as Chief Economist of the Federal Communications Commission and a Senior Economist to the President's Counsel of Economic Advisors. He teaches and conducts research in the areas of telecommunications regulation, antitrust, and applied microeconomics, and is co-author of a recently published textbook titled *Telecommunications Law and Policy*.

**Richard Shin** is an economist specializing in industrial organization, competition policy, and telecommunications industry. He was formerly an economist with the Antitrust Division of the U.S. Department of Justice and the Federal Trade Commission.

**Timothy J. Tardiff**, a Vice President at NERA, has over 20 years of telecommunications policy experience. His recent research and consulting have addressed issues of interconnecting and unbundling competing networks, universal service, entry by incumbent local exchange carriers into interLATA long distance.

**Lester D. Taylor** is Professor of Economics and Agricultural & Resource Economics at the University of Arizona. He is the author of numerous publications on telecommunications economics, including two well-known books on telecommunications demand. His most recent research has focused on broadband demand.

**William E. Taylor** is a Senior Vice President at NERA and head of its Communications Practice. He has published and testified extensively on economic issues associated with the AT&T divestiture, implementation of the Telecommunications Act of 1996, incentive regulation and industry consolidation and mergers of communications firms.

**David J. Teece** is the Mitsubishi Bank Professor at the Haas School of Business at the University of California, Berkeley, where he also directs the Institute of Management, Innovation, and Organization and is the Chairman of the Consortium for Research on Telecommunications Policy. He has testified before Congress on regulatory policy and competition policy, is the author of over 100 books and articles, and is the editor of the professional journal *Industrial & Corporate Change*.

**Harold Ware**, a Vice President at National Economic Research Associates (NERA), has over 25 years of telecommunications policy experience. He has recently analyzed competition for local, interexchange, broadband, wireless, and directory assistance services; pricing, costs, entry, and universal service issues associated with increasing competition; mergers of wireless companies and between telephone and cable TV companies; and the deployment of new technology.

**Leonard Waverman** is Professor of Economics at London Business School and the Director of LBS's Centre for the Network Economy. He has over 25 years of experience in telecommunications with extensive publications, consulting and public service.

**Dennis L. Weisman** is a Professor of Economics at Kansas State University. He is the co-author of *THE TELECOMMUNICATIONS ACT OF 1996: THE "COSTS" OF MANAGED COMPETITION* and currently serves on the editorial boards of the *Journal of Regulatory Economics* and *Information Economics and Policy*.

**John T. Wenders**, Professor of Economics, Emeritus, at the University of Idaho, previously served on the faculties of Northwestern University, Middlebury College, and the University of Arizona. His broad practical and academic experience includes dozens of published articles on various aspects of regulatory economics as well as over 100 testimonies in virtually every state, on behalf of regulated utilities, state regulatory commissions, and public interest organizations.

**G. Mitchell Wilk** is former Commissioner and President of the California Public Utilities Commission, where he successfully led major initiatives reforming state regulation of the telecommunications industry. Many of these initiatives became nationally recognized benchmarks for incentive regulation.