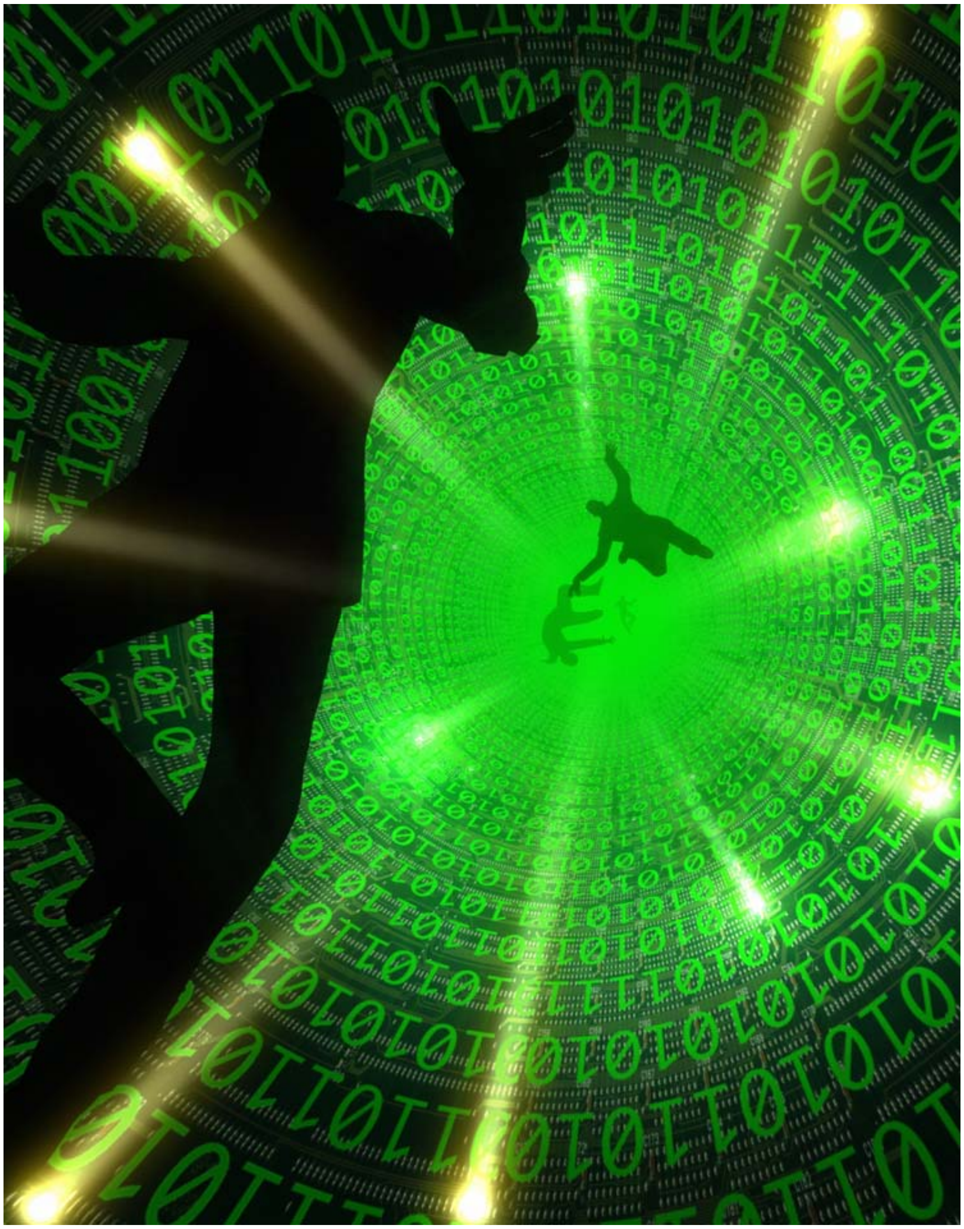
Free Ride: Deficiencies of the MCI 'Layers' Policy Model and the Need For Principles that Encourage Competition in the New IP World



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Author Biographies

Wayne T. Brough is currently chief economist at Citizens for a Sound Economy. He received a Ph.D. in economics from George Mason University, with fields in industrial organization and public choice. Dr. Brough previously worked at the U.S. Office of Management and Budget, focusing on transportation regulations; the United States Agency for International Development, focusing on market reforms in Africa; and in the research branch of an investment bank, where he covered U.S. domestic policies. Dr. Brough has published in books, academic journals, and newspapers on a wide variety of economic and regulatory issues.

Braden Cox is technology counsel with the Competitive Enterprise Institute's Project on Technology and Innovation in Washington, D.C. His work lies at the intersection of law and technology relating to e-commerce, intellectual property, telecommunications, and cybersecurity. He concentrates on the ways that government approaches to regulating technology and the Internet hurt consumers and stifle innovation. He is a frequent guest on radio programs and his articles have recently appeared in such publications as the Chicago Sun-Times and National Review Online. Mr. Cox is the former counsel at Veriprise Wireless, a technology venture based in Atlanta. Mr. Cox obtained both his undergraduate finance degree and law degree from the University of Georgia. He is a member of the District of Columbia, Georgia, and Virginia state bars.

James L. Gattuso is a research fellow in regulatory policy in the Roe Institute for Economic Policy Studies, where he handles regulatory and telecommunications issues for The Heritage Foundation. Prior to joining Heritage, he was vice president for policy at the Competitive Enterprise Institute. In that position, he oversaw CEI's policy work, and supervised the overall management of the organization. Before joining CEI, Mr. Gattuso was vice president for policy development with Citizens for a Sound Economy (CSE) from 1993 to 1997, where he directed the research activities of that organization. From 1990 to 1993, he was deputy chief of the Office of Plans and Policy at the Federal Communications Commission. Mr. Gattuso graduated Magna Cum Laude from the University of Southern California in 1979. He received his J.D. degree from the University of California at Los Angeles in 1983, where he was a member of the UCLA Law Review. He is a member of the California and District of Columbia bars and is the author of a number of articles written for newspapers, magazines and journals.

David P. McClure is president and chief executive officer of the U.S. Internet Industry Association, the primary U.S. trade association for Internet commerce, content, and connectivity. A technologist by education and experience, Mr. McClure has held positions in the Internet, computing, aerospace, and environmental services industries. He has served on the staff of the Aviation and Space Writers Association (AWA) and the Software Publishers Association (SPA). He has served at the helm of the USIIA since it was founded in 1994. He is also a member of the American Society of Association Executives and its Technology Section Council. Mr. McClure has written and lectured extensively on management and technology issues, and is considered an authority on technology applications for business.

Andrew Odlyzko is director of the Digital Technology Center, holds an ADC Professorship, and is an Assistant Vice President for Research at the University of Minnesota. Prior to assuming that position in 2001, he devoted 26 years to research and research management at Bell Telephone Laboratories, AT&T Bell Labs, and AT&T Labs. He has written over 150 technical papers in computational complexity, cryptography, number theory, combinatorics, coding theory, analysis, probability theory, and related fields, and holds three patents. He has an honorary doctorate from Univ. Marne la Vallee and serves on the editorial boards of over 20 technical journals, as well as on several advisory and supervisory bodies. He is best known for an early debunking of the myth of Internet traffic doubling every three or four months. Mr. Odlyzko received a B.S. and M.S. in Mathematics from the California Institute of Technology and a Ph.D. in Mathematics from the Massachusetts Institute of Technology.

Stephen B. Pociask is president of TeleNomic Research, LLC and has worked in and consulted for telecommunications and high-tech industries for over twenty years. Mr. Pociask conducts a wide variety of applied economic studies, including those dealing with public policy, regulatory economics, and antitrust issues. He has provided consulting primarily for high tech firms, including those providing high-speed Internet services, local and long distance services. He has appeared numerous times in the media, including *Bloomberg News, CNBC, Telecommunications Reports, Telephony, Congressional Quarterly, Americas Network, Network Magazine*, and *CNET Radio*. From 1998 to 2000, Mr. Pociask was chief economist and executive vice president for Joel Popkin and Co., an economic consulting firm in Washington, D.C. Before that, he worked eighteen years in the telecommunications industry. He has completed his Ph.D. coursework in economics and has an M.A. in economics from George Mason University.

Adam Thierer is director of telecommunications studies for the Cato Institute where he conducts research on how government regulations hamper the evolution of communications networks, including telephony, broadcasting, cable, satellite and the Internet. He also examines the broader economic and constitutional aspects of telecommunications policy. His writing has been published in the *Washington Post*, *Newsweek*, *Wall Street Journal*, *Investors Business Daily*, *Journal of Commerce*, *Forbes*, and *The Economist*. Mr. Thierer has made media appearances on National Public Radio, PBS, Fox News Channel, CNN, MSNBC, BBC, Radio Free Europe and Voice of America. Prior to joining Cato, he spent nine years at The Heritage Foundation, where he served as the Alex C. Walker Fellow in Economic Policy, covering telecommunications and Internet policy, antitrust, electricity and energy policy, the airline industry, and federalism. Mr. Thierer earned his bachelor's degree in political science and journalism at Indiana University and received his master's degree in international business management and trade theory at the University of Maryland.

Glenn A. Woroch is an adjunct professor of economics at the University of California at Berkeley, and executive director of the Center for Research on Telecommunications Policy located in the Haas School of Business. He conducts theoretical and empirical investigations of competition and regulation of network industries, with particular application to the telecommunications and computer sectors. His research also examines antitrust policy toward intellectual property protection and various business practices. Professor Woroch has been an economic advisor to government agencies including the U.S. Departments of Commerce, Energy, and Justice. He regularly consults to private-sector clients and testifies on matters involving monopolization claims, mergers, intellectual property infringement, and economic damages. Professor Woroch received a B.A. from the University of Wisconsin-Madison, and an M.A. (Statistics) and Ph.D. (Economics) from the University of California-Berkeley.

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MCI's Layered Approach: A Horizontal Leap Nowhere

Braden Cox
Technology Counsel
Competitive Enterprise Institute

A new policy framework by MCI recommends a paradigm shift in telecommunications toward regulation based on how the Internet operates.[1] MCI has even gone as far as drafting proposed legislation to codify its approach.[2] Dubbed the "Network Layers Model," MCI's proposal builds upon an academic movement that has been gaining increasing visibility due to the obvious need for telecommunication regulatory reform. Rather than regulate by service categories, the network layers approach utilizes the structure of the Internet as the model for deciding what and how to regulate.

On its face, the layers model is a seductive analytical tool that improves upon the current lack of cohesiveness in telecom regulation. It breaks down policy goals by network layers – physical, logical, application, and content – and advocates for regulation that is specific to each, regardless of the technology used or service provided. However, what is a superior analytical tool for network engineers is not necessarily good for network regulators. The layers model does not translate to effective public policy because it is burdened with the same regulatory traps of current law – it retains too much faith in the capability of government regulators to beneficently intervene in the market. In particular, it places an inordinate amount of emphasis in antitrust law to improve consumer welfare and it ignores the reality of how markets respond to consumer demand and preferences. Under MCI's proposal, the physical network is at the same time overburdened and underappreciated by regulation.

The Network Layer as FCC, DOJ, and FTC Playground

The layers model assumes that the physical network is a natural monopoly that requires extensive regulation. In this way, the layers model is, as MCI's policy paper asserts, "not a radical departure from the basic regulatory structure and precedent of the last four decades."[3] Indeed, this is a problem, though the paper presents this as a positive. The difficulty is one of defining "market power" and how to test for its existence.[4] Antitrust law has not been very good at solving this problem, as much as its proponents would like to proclaim that it has. Defining the "relevant market" for antitrust purposes is as much of an arbitrary process as the current silo service definitions are for telecom law.

The fundamental goal of the layering principle is to "focus on where the concern lies…and then determine how best to achieve the goal without disrupting other layer-affecting objectives."[5] The overriding concern of MCI, as expressed in both its policy paper and draft legislation, is in the network layer. Indeed, the bulk of the MCI's draft text consists of a section on broadband access platforms competition, which is none other than the broadband equivalent of the Unbundled Network Element (UNE) system currently in place for "traditional" telecom. And it seems to guarantee that changes in technology will affect changes in law without the concomitant assurance that government regulations will change quickly, if at all.[6]

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[1] Richard S Whitt, *A Horizontal Leap Forward: Formulating a New Public Policy Framework Based on the Network Layers Model*, (March 2004).
[2] Richard S Whitt, *Codifying the Network Layers Model: MCI's Proposal for New Federal Legislation Reforming U.S. Communications Law*, (March 2004).
[3] *A Horizontal Leap Forward* at 22.
[4] Id. At 21. The policy paper admits that one of the "lingering questions" include "devising empirically-based tests for market power and monopoly abuses".
[5] *A Horizontal Leap Forward* at 63.
[6] Id. at 28, 29 (stating the view of Professor Lawrence Solum of Loyola Marymount University that legal regulation "can only be as effective as is permitted by the architecture of the Internet" and that "the layers principle is only as valid as the network engineering concepts that inform it").

Layer Regulation Will Not Necessarily Increase Consumer Welfare

The layers model cannot translate to effective public policy because it mandates a business model. Cable or telephone companies may in the future wish to establish "closed" networks, and doing so may indeed be within the interests of consumers. Peter Huber presciently asserted in 1987 that "as networks expand horizontally the companies that manage them grow vertically" in response to consumer demand for a single provider of integrated service packages.[7] A portion of this vertical development may be in response to the needs of a provider to effectively price differentiate in an industry affected by declining marginal costs.[8]

The layers model invites overly ambitious regulatory scrutiny when a technology provider attempts to operate within more than one layer. Often, tying applications to network infrastructure may be the only way to pay for the network. A critical question is whether the network is financially viable based on connectivity revenues alone. Price discrimination is often an effective (albeit misunderstood) way to increase consumer welfare. It may be necessary to meter consumer usage by measuring intensity of use at one layer through controlling another layer. Market segmentation may require multiple layer control, depending on what consumers value and are willing to pay.

Advances in technology often result in the increasing commoditization of products, resulting in increased consumer welfare. Regulators should focus on ways that will allow providers of commoditized products to thrive, instead of saddling them with "open access" and "common carrier" burdens. A new telecom act must protect the ability of telecom providers to quickly respond to and operate within a dynamic environment. However, the layers model may be just as rigid as current law in allowing the market flexibility in pricing and service, especially at the network level. The MCI paper quotes Lawrence Lessig and Timothy Wu at an FCC hearing:

> If this 'Darwinian evolution' is the best path of innovation, it follows that the most promising path of development will be difficult to predict in advance. Hence, despite the 'waste' generated by a competitive process, the results will be superior to planned innovation directed by a single prospect holder, however well-intentioned.[9]

The largest "prospect holder" under the layers approach is the FCC. This is not a horizontal leap forward for the telecommunications market or consumer welfare.[10]

The MCI Draft Legislation – A Regulatory Wolf in Layered Sheep's Clothing

MCI has outlined its version of what a reformed Communications Act should look like. MCI calls it "The Internet Innovation and Broadband Competition Act of 2004" yet it is very similar to the 1996 Telecommunications Act. The Basic/Enhanced distinction is now Layer 1 (Physical) versus Layer 3 and 4 (Application/Content). The proposed legislation is semantic re-regulation. For instance, is Active X control content or code? It doesn't make much of a difference under MCI's current construct, but one can envision the technical definitional matters that a court of law might have to decide and the problems that this would create. Engineers would replace economists in the battle of expert witnesses.

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[7] *The Geodesic Network*, 1987 Report on Competition in the Telephone Industry, United States Department of Justice, (1987).
[8] The controversy surrounding industries affected by high fixed and relatively low operating costs continues. *See* Ronald Coase, *The Marginal Cost Controversy*, 13 (New Series) Economica 169, 169 (1946) *and* Jim DeLong, *Marginalized*, Tech Central Station, (July 29, 2003) available at http://www.techcentralstation.com/072903D.html
[9] *A Horizontal Leap Forward* at 32.
[10] Artificially low wholesale prices for telecommunications services required under current federal unbundled network element (UNE) and platform (UNE-P) rules end up costing Americans substantially more than what would be the case in the absence of such regulations. *See* Stephen B. Pociask, *The Effects of Bargain Wholesale Prices on Local Telephone Competition: Does Helping Competitors Help Consumers?*, (June 2003) *available at* http://cei.org/pdf/3529.pdf

An analysis of MCI's draft legislation reveals that (italicized emphasis added):

- Broadband networks will be subject to continuous and pervasive FCC regulation according to ambiguous standards such as:

    - "the FCC *shall* adopt rules and regulations necessary to further foster the development of intramodal and intermodal competition, *to the benefit of all Americans*.

    - Waiver of open access requirements upon "no further evidence of *market power* or other *relevant* standard and/or at least three other *commercially-viable competing* broadband access platforms serve a *substantial* majority" or if the platform provider can demonstrate that end users are able to *fully exercise their Internet access rights;*

- Antitrust principles are given prophetic status: antitrust law will play an unprecedented role in telecommunications, using the imprecise Herfindal-Hirschman Index (HHI) and other forms of "anticompetitive practices demonstrating the existence of market power";

- Property rights get no respect: unbundling and price regulation remain by way of extensive wholesale carriage requirements for ISP access, CLEC unbundled access to broadband local loops at TELRIC prices; and

- A new subsidy program for broadband and wiretapping access of all Internet communications will invade consumers' wallets and privacy.

Conclusion

Layered model advocates believe that regulators should reformulate communications policy with the Internet at the center. Instead, what we should be discussing is how to change communications policy so that market forces, instead of government regulators, affect consumer welfare. The *free market* should be at the center. Ultimately, we want to reduce the role of the FCC in micromanaging the market for communications products and services. The layered model will not lead us toward this deregulatory path. Simply put, *layering is an object-to-think-with but not a model-to-regulate-with.* The layers principle may excel at respecting the integrity of TCP/IP, but it fails at respecting the integrity of market forces.