

## Rob Frieden

### Contact Information

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### Education Background

B.A., University of Pennsylvania, 1977 (cum laude with distinction in the major)  
J.D. University of Virginia, 1980

### Professional Background

1992-Present: **PIONEERS CHAIR AND PROFESSOR OF TELECOMMUNICATIONS AND LAW**, Pennsylvania State University, University Park, Pennsylvania

Teach courses and research issues in the law, regulation, and business of telecommunications, information technologies, international trade, intellectual property, and electronic commerce. Actively engaged in seeking grants and consulting work, and in administrative duties which have included serving as Department Chair.

1991-1992: **DEPUTY DIRECTOR-INTERNATIONAL RELATIONS**, Motorola Satellite Communications, Inc. Washington, D.C. and Chandler, Arizona

Primary manager for spectrum allocation, business development, strategic planning, and regulatory liaison efforts of the IRIDIUM™ mobile satellite venture.

1989-1991: **CONSULTANT**

Sole practitioner providing legal, regulatory, and strategic counsel on telecommunications and information management issues.

1988-1989: **ASSISTANT GENERAL COUNSEL**, Private Trans-Atlantic Telecommunications System, Inc. McLean, Virginia

Primary in-house counsel for resolving corporate, legal, transactional and regulatory problems affecting construction and operation of the nation's first private international fiber optic cable; Principal negotiator for sale or lease of transmission capacity, and for contracts involving the terrestrial backhaul facility linking the cable with urban centers.

1986-1988: **PROGRAM MANAGER FOR INTERNATIONAL FACILITY AND SERVICE POLICY**, National Telecommunications and Information Administration, Washington, D.C.

Chief liaison with other federal government agencies for executing international telecommunications treaties and for multilateral coordination on satellite and spectrum policies. Managed Executive Branch filings at the Federal Communications Commission.

1982-1986: **ATTORNEY**

Associate in the communications departments of three prominent Washington, D.C. law firms. Performed transactional and regulatory services for satellite, fiber optic, cellular radio, and microwave carriers, foreign telephone companies, cable television systems and broadcasters. Drafted pleadings in FCC and judicial proceedings, and briefed clients and Congressional staff on communications policy issues.

1980-1982: **ATTORNEY ADVISOR**, Federal Communications Commission, Washington, D.C.

Drafted international telecommunications policies and regulations for public vote by FCC Commissioners. Presided over carrier facility interconnection negotiations.

## **Publications**

### **Books or Parts of Books**

Rob Frieden, *WINNING THE SILICON SWEEPSTAKES: CAN THE UNITED STATES COMPETE IN GLOBAL TELECOMMUNICATIONS?*, (New Haven: Yale University Press, 2010).

Rob Frieden, *The Way Forward for Wireless*, in ... *AND COMMUNICATIONS FOR ALL—A POLICY AGENDA FOR A NEW ADMINISTRATION*, Amit M. Schejter, ed., 153-166 (Lanham, MD: Lexington Books 2009).

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James Goodale & Rob Frieden, ALL ABOUT CABLE AND BROADBAND, (New York: Law Journal Press 2004-present)(bi-annual updates).

Rob Frieden, *Satellite Broadcasting*, in ENCYCLOPEDIA OF INTERNATIONAL MEDIA AND COMMUNICATIONS, Donald H. Johnston, ed., Vol. 4, pp. 115-126 (San Diego, CA: Academic Press 2003).

Rob Frieden, *Regulation of Internet-mediated communication and commerce*, in Gary Madden, ed., EMERGING TELECOMMUNICATIONS NETWORKS, Vol. II, pp. 107-128 (Cheltenham, U.K.: Edward Elgar 2003) (web promotion of this two volume work available at <http://www.e-elgar.co.uk/>).

Rob Frieden, MANAGING INTERNET-DRIVEN CHANGE IN INTERNATIONAL TELECOMMUNICATIONS, (Norwood, MA: Artech House, 2001).

Rob Frieden, *The Potential for Scrutiny of Internet Peering Policies in Multilateral Forums*, in Benjamin M. Compaine and Shane Greenstein, eds., COMMUNICATIONS POLICY IN TRANSITION: THE INTERNET AND BEYOND, (Cambridge, MA: MIT Press, 2001)

Robert M. Frieden, *Satellite Technology and Regulation*, in Kornel Terplan, ed., THE TELECOMMUNICATIONS HANDBOOK, (Boca Raton, Florida: CRC Press, 2000).

Harvey Zuckman, Robert Corn-Revere, Robert M. Frieden & Charles Kennedy, MODERN COMMUNICATIONS LAW, (St. Paul, Minn.: West Publishing Co. 1999).(chapters on international telecommunications, spectrum management and common and private carriage, plus pocket part updates 2000-2006).

Robert M. Frieden, *Winning and Losing the Telecommunications Sweepstakes of 1996*, in E. Bohlin and S. Levin, eds., TELECOMMUNICATIONS TRANSFORMATION: TECHNOLOGY, STRATEGY AND POLICY , (Washington, D.C.: IOS Press, 1998).

Patrick R. Parsons & Robert M. Frieden, THE CABLE AND SATELLITE TELEVISION INDUSTRIES, (Needham Heights, Ma.: Allyn & Bacon, 1998) (1999 Cable Book Award-National Cable Television Center and Museum, University of Denver).

Robert M. Frieden, *Satisfying the Radio Spectrum and Capital Requirements of Satellite Power Systems*, in P.E. Glaser, F.P. Davidson and K.I. Csigi, eds., SOLAR POWER SATELLITES, (New York: John Wiley & Sons, 1998).

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Robert M. Frieden, *Can and Should the FCC Regulate Internet Telephony?*, in D. Waterman and G. Reston, eds., SELECTED PAPERS OF TPRC 1996, (Mahwah, N.J.: L. Erlbaum, 1997).

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Robert M. Frieden, *Satellite Phones and Cross-Border Cellular Service: New Challenges For Incumbent Carriers*, in G. Staple, ed. TELEGEOGRAPHY 1993, (Washington, D.C.: International Inst. of Communications, 1993).

### Refereed and Law Review Articles

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Rob Frieden, *Assessing the Merits of Network Neutrality Obligations at Low, Medium and High Network Layers*, 115 PENN STATE LAW REVIEW, No. 1, 49-82 (Summer, 2010)

Rob Frieden, *Invoking and Avoiding the First Amendment: How Internet Service Providers Leverage Their Status as Both Content Creators and Neutral Conduits*, 12 UNIVERSITY OF PENNSYLVANIA JOURNAL OF CONSTITUTIONAL LAW, No. 5, 1279-1323 (June, 2010); draft available at: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1425138](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1425138).

Rob Frieden, *Case Studies in Abandoned Empiricism and the Lack of Peer Review at the Federal Communications Commission*, 8 JOURNAL ON TELECOMMUNICATIONS & HIGH TECHNOLOGY LAW 277-312 (2010); available at: [http://www.jthtl.org/content/articles/V8I2/JTHTLv8i2\\_Frieden.PDF](http://www.jthtl.org/content/articles/V8I2/JTHTLv8i2_Frieden.PDF);

Rob Frieden, *Lock Down on the Third Screen: How Wireless Carriers Evade Regulation of Their Video Services*, 24 BERKELEY TECHNOLOGY LAW JOURNAL, No. 2 819-849(Spring, 2009).

Rob Frieden, *Lies, Damn Lies and Statistics: Developing a Clearer Assessment of Market Penetration and Broadband Competition in the United States*, 14 VIRGINIA JOURNAL OF LAW AND TECHNOLOGY 100- 125(Summer, 2009); available at: [http://www.vjolt.net/vol14/issue2/v14i2\\_100%20-%20Frieden.pdf](http://www.vjolt.net/vol14/issue2/v14i2_100%20-%20Frieden.pdf).

Rob Frieden, *Hold the Phone: Assessing the Rights of Wireless Handset Owners and Carriers*, 69 PITTSBURGH LAW REVIEW, No. 4, 675-725 (2008); draft available at: [http://papers.ssrn.com/sol3/cf\\_dev/AbsByAuth.cfm?per\\_id=102928](http://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=102928).

Rob Frieden, *Neither Fish Nor Fowl: New Strategies for Selective Regulation of Information Services*, 6 JOURNAL ON TELECOMMUNICATIONS AND HIGH TECHNOLOGY LAW, No. 2 373-423 (2008); available at [http://www.jthtl.org/content/articles/V6I2/JTHTLv6i2\\_Frieden.PDF](http://www.jthtl.org/content/articles/V6I2/JTHTLv6i2_Frieden.PDF).

Rob Frieden, *Internet Packet Sniffing and Its Impact on the Network Neutrality Debate and the Balance of Power Between Intellectual Property Creators and Consumers*, 18 FORDHAM INTELLECTUAL PROPERTY, MEDIA & ENTERTAINMENT LAW JOURNAL, No. 3. 633-675 (2008); draft available at: [http://papers.ssrn.com/sol3/cf\\_dev/AbsByAuth.cfm?per\\_id=102928](http://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=102928).

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Rob Frieden, *Analog and Digital Must-Carry Obligations of Cable and Satellite Television Operators in the United States*, in European Audiovisual Observatory, IRIS SPECIAL, TO HAVE OR NOT TO HAVE—MUST CARRY RULES, 21-28 (2005); 15 MEDIA LAW & POLICY, No. 2, 230-246 (2005-06).

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Rob Frieden, *The FCC's Name Game: How Shifting Regulatory Classifications Affect Competition*, 19 BERKELEY TECHNOLOGY LAW JOURNAL, No. 4, 1275-1314 (Fall, 2004).

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Rob Frieden, *Fear and Loathing in Information and Telecommunications Industries: Reasons for and Solutions to the Current Financial Meltdown and Regulatory Quagmire*, 5 THE INTERNATIONAL JOURNAL ON MEDIA MANAGEMENT, No. 1, 25-38 (Spring, 2003).

Rob Frieden, *Adjusting the Horizontal and Vertical in Telecommunications Regulation: A Comparison of the Traditional and a New Layered Approach*, 55 FEDERAL COMMUNICATIONS LAW JOURNAL, No. 2, 207-250 (March, 2003).

Rob Frieden, *Revenge of the Bellheads: How the Netheads Lost Control of the Internet*, 26 TELECOMMUNICATIONS POLICY, No. 6, 125-144 (Sep./Oct. 2002).

Rob Frieden, *Wither Convergence: Legal, Regulatory, and Trade Opportunism in Telecommunications*, 18 SANTA CLARA COMPUTER AND HIGH TECHNOLOGY LAW JOURNAL, No. 2, 171-205 (May, 2002).

Rob Frieden, *Does a Hierarchical Internet Necessitate Multilateral Intervention?*, 26 NORTH CAROLINA JOURNAL OF INTERNATIONAL LAW AND COMMERCIAL REGULATION, No. 2, 361-405 (Spring, 2001).

Rob Frieden, *Regulatory Opportunism in Telecommunications: The Unlevel Competitive Playing Field*, 10 COMMLAW CONSPECTUS, No. 1, 81-102 (2001).

Robert M. Frieden, *Universal Service: When Technologies Converge and Regulatory Models Diverge*, 13 HARVARD JOURNAL OF LAW & TECHNOLOGY, No. 3, 395-433 (Summer, 2000).

Robert M. Frieden, M., *Last Days of the Free Ride? The Consequences of Settlement-Based Interconnection for the Internet*, 1 INFO, No. 3, 225-238 (June, 1999).

Robert M. Frieden, *Falling Through the Cracks: International Accounting Rate Reform at the ITU and WTO*, 22 TELECOMMUNICATIONS POLICY, No. 11, 963-975 (December 1998).

Robert M. Frieden, *Without Public Peer: The Potential Regulatory and Universal Service Consequences of Internet Balkanization*, 3 VIRGINIA JOURNAL OF LAW & TECHNOLOGY, 8 (Fall, 1998) available at <http://vjolt.student.virginia.edu/graphics/vol3/homeart8.html>.

Robert M. Frieden, *That Pesky Last Mile: Call Termination Strategies for Mobile Satellite Systems*, 22 TELECOMMUNICATIONS POLICY, No. 2, 133-143. (1998).

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Robert M. Frieden, *The Impact of Call-Back and Arbitrage on the Accounting Rate Regime*, 21 TELECOMMUNICATIONS POLICY, No. 9/10, 819-827 (1997).

Robert M. Frieden, *Widespread Deployment of Wireless Telephony: Business, Legal, Regulatory and Spectrum Challenges*, 21 TELECOMMUNICATIONS POLICY, No. 5, 451-459 (June, 1997).

Robert M. Frieden, *Dialing for Dollars: Will the FCC Regulate Internet Telephony?*, 23 RUTGERS COMPUTER AND TECHNOLOGY LAW JOURNAL, 47-79 (1997).

Robert M. Frieden, *Schizophrenia Among Carriers: How Common Carriers and Private Carriers Trade Places*, 3 MICHIGAN TELECOMMUNICATIONS AND TECHNOLOGY LAW REVIEW, (1997), available at <http://www.mttl.org/volthree/frieden.html>.

Robert M. Frieden, *Privatization of Satellite Cooperatives: Smothering a Golden Goose?*, 36 VIRGINIA JOURNAL OF INTERNATIONAL LAW, No. 4 1001-1019 (Summer, 1996).

Robert M. Frieden, *Contamination of the Common Carrier Concept in Telecommunications*, 19 TELECOMMUNICATIONS POLICY, No. 9, 685-697 (December, 1995).

Robert M. Frieden, *Universal Personal Communications in the New Telecommunications World Order--Access to Wireline Networks*, 19 TELECOMMUNICATIONS POLICY, No. 1, 43-49 (January, 1995).

Robert M. Frieden, *Should Intelsat and Inmarsat Privatize?*, 18 TELECOMMUNICATIONS POLICY, No. 9, 679-686 (December, 1994).

Robert M. Frieden, *International Toll Revenue Division--Tackling the Inequities and Inefficiencies*, 17 TELECOMMUNICATIONS POLICY, No. 3, 221-233 (April, 1993).

Robert M. Frieden, *Strategies for Market Entry by Private International Satellite Systems*, 16 TELECOMMUNICATIONS POLICY, No. 4, 354-363 (May/June 1992).

Robert M. Frieden, *Open Network Policies for the United States and Europe: Visions and Realities*, 31 JURIMETRICS JOURNAL, 319-328 (Spring 1991).

Robert M. Frieden, *Accounting Rates: The Business of International Telecommunications and the Incentive to Cheat*, 43 FEDERAL COMMUNICATIONS LAW JOURNAL, No. 2, 111-139 (1991).

Robert M. Frieden, *The Third Computer Inquiry: A Deregulatory Dilemma*, 38 FEDERAL COMMUNICATIONS LAW JOURNAL, No. 3, 383-410 (1987).

Robert M. Frieden, *Getting Closer to the Source: New Policies for International Satellite Access*, 37 FEDERAL COMMUNICATIONS LAW JOURNAL, No. 2, pp. 293-323 (1985).

Robert M. Frieden, *The International Application of the Second Computer Inquiry*, 5 MICHIGAN YEARBOOK OF INTERNATIONAL LEGAL STUDIES, 189-218 (1984).

Robert M. Frieden, *International Telecommunications and the Federal Communications Commission*, 21 COLUMBIA JOURNAL OF TRANSNATIONAL LAW, No. 3, 423-485 (1983).

Robert M. Frieden, *The Computer Inquiries: Mapping the Communications/Information Processing Terrain*, 33 FEDERAL COMMUNICATIONS LAW JOURNAL, No. 1, 55-115 (1981).

**Refereed Proceedings and Referred Letters**

Robert M. Frieden, *Lessons From Broadband Development in Canada, Japan and Korea*, in PROCEEDINGS OF THE PACIFIC TELECOMMUNICATIONS COUNCIL TWENTY-SEVENTH ANNUAL CONFERENCE, (Honolulu: Pacific Telecommunications Council, 2005); available at: <http://www.ptc.org/PTC05/program/pdfs/8.pdf>.

Robert M. Frieden, *Assessing the Regulatory Consequences When Content and Conduit Converge*, in PROCEEDINGS OF THE PACIFIC TELECOMMUNICATIONS COUNCIL TWENTY-FIFTH ANNUAL CONFERENCE, (Honolulu: Pacific Telecommunications Council, 2003).

Robert M. Frieden, *Bellheads Rule: How the Netheads Lost Control of the Internet*, in PROCEEDINGS OF THE PACIFIC TELECOMMUNICATIONS COUNCIL TWENTY-FOURTH ANNUAL CONFERENCE, (Honolulu: Pacific Telecommunications Council, 2002) available at [http://www.ptc.org/PTC2002/index\\_proceedings.html](http://www.ptc.org/PTC2002/index_proceedings.html)

Robert M. Frieden, *The Potential Regulatory and Universal Service Consequences of Internet-Mediated Accounting Rate Arbitrage*, in Wedemeyer and R. Nickelson, eds. PROCEEDINGS OF THE PACIFIC TELECOMMUNICATIONS COUNCIL TWENTY-FIRST ANNUAL CONFERENCE, (Honolulu: Pacific Telecommunications Council, 2000).

Robert M. Frieden, *Variations on a Theme: The Three Phases of Competition Policy*, in PROCEEDINGS AND WHO IS WHO TELECOM 99/INTER@CTIVE99, (Geneva: International Telecommunication Union, 1999).

Robert M. Frieden, *The Potential Regulatory and Universal Service Consequences of Internet Balkanization*, in Wedemeyer and R. Nickelson, eds. PROCEEDINGS OF THE PACIFIC TELECOMMUNICATIONS COUNCIL TWENTY-FIRST ANNUAL CONFERENCE, (Honolulu: Pacific Telecommunications Council, 1999).

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Robert M. Frieden, *New Opportunities and Challenges When Regulators Change Course*, in D. Wedemeyer and R. Nickelson, eds., PROCEEDINGS OF THE PACIFIC TELECOMMUNICATIONS COUNCIL NINETEENTH ANNUAL CONFERENCE, (Honolulu: Pacific Telecommunications Council, 1997).

Robert M. Frieden, *The Impact of Boomerang Boxes and Callback Services on the Accounting Rate Regime*, in D. Wedemeyer and R. Nickelson, eds., PROCEEDINGS OF THE PACIFIC TELECOMMUNICATIONS COUNCIL EIGHTEENTH ANNUAL CONFERENCE, (Honolulu: Pacific Telecommunications Council, 1996).

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Robert M. Frieden, *Legal and Regulatory Challenges to Universal Personal Communication Services Provided by Low Earth Orbiting Satellites*, in PROCEEDINGS OF THE ANNUAL CONFERENCE OF THE AMERICAN INSTITUTE OF AERONAUTICS AND ASTRONAUTICS, (Washington, D.C.:1994).

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Robert M. Frieden, *There's An ISDN in Your Telecommunications Future*, PROCEEDINGS OF THE PACIFIC TELECOMMUNICATIONS COUNCIL EIGHTH ANNUAL CONFERENCE, (Honolulu: Pacific Telecommunications Council, 1985).

### Other Publications

Revised materials on telecommunications topics for the *World Book* encyclopedia (2008).

*Locking Down the Third Screen: How Wireless Firms Thwart Users' Access to Content*, 36 *intermedia*, No. 2, 18-21 (Spring, 2008).

*Wireless Carterfone--A Long Overdue Policy Promoting Consumer Choice and Competition*, New America Foundation, Wireless Future Program, Working Paper No. 20 (Jan. 2008); available at: [http://www.newamerica.net/events/2008/free\\_my\\_phone](http://www.newamerica.net/events/2008/free_my_phone).

*Internet 3.0: Assessing the Scope of a Non-Neutral and Tiered Web*, presented at the 29<sup>th</sup> Annual Conference of the Pacific Telecommunications Council (Honolulu, HI 2007); available at: [http://www.ptc07.org/program/papers/M11\\_RobertFrieden.pdf](http://www.ptc07.org/program/papers/M11_RobertFrieden.pdf)

*Best and Worst Practices in Promoting Universal Access to Telecommunications and Information Services*, presented at the 28<sup>th</sup> Annual Conference of the Pacific Telecommunications Council (Honolulu, HI 2006); available at: [http://www.ptc.org/events/ptc06/program/public/proceedings/Rob%20Frieden\\_paper\\_m152%20\(formatted\).pdf](http://www.ptc.org/events/ptc06/program/public/proceedings/Rob%20Frieden_paper_m152%20(formatted).pdf)

Rapporteur, The Museum of Television and Radio, Media Center Dialogue, *Digital Rights Management*, Briefing Summary, Issue 1/2004 (2004).

Rapporteur, *Innovations In Customer Loyalty, Retention, And Advocacy: Powered By Technology*, Philadelphia, Pennsylvania (May 14-15, 2003), White Paper available at: [http://www.smeal.psu.edu/ebrc/publications/w\\_papers.html](http://www.smeal.psu.edu/ebrc/publications/w_papers.html)

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Revised materials on several telecommunications topics for the Microsoft ENCARTA compact disk encyclopedia (2000-present).

Robert M. Frieden, Conference Report, *Real Convergence and Real Uncertainty*, 1 INFO, No. 6 (December 1999).

Rapporteur for Corporation for Public Broadcasting, *The Role of Public Service Media in the Digital Telecommunications Age*, Bethesda, Maryland (June, 1999). Report available at: <http://nc.psu.edu/progress.html>.

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Robert M. Frieden, Book Review of William Melody, ed., *Telecom Reform Policies, Policies and Regulatory Practices*, 21 TELECOMMUNICATIONS POLICY, No. 8 (Oct. 1997).

Senior Consultant on World Bank InfoDev and International Telecommunication Union ICT Regulation Toolkit project; see <http://www.ictregulationtoolkit.org/> (extensive coverage of Voice over the Internet Protocol telephony and Internet network interconnection).

### Research Projects, Grants, and Contracts

Developed a template identifying best practices in broadband development and generated studies on national efforts for six nations, prepared for The World Bank (2009). See *Building broadband: Strategies and policies for the developing world*; available at: <http://www.infodev.org/en/Document.756.pdf>.

Contributor on wireless telecommunications regulatory reform for a book entitled . . . AND COMMUNICATIONS FOR ALL: A POLICY AGENDA FOR THE NEW ADMINISTRATION (2008); supported by the Social Science Research Council.

Strategies for Repairing the Universal Service Fund (2007), funded by the Benton Foundation; available at: <http://www.benton.org/node/6060>.

Senior Consultant on Ford Foundation grant to the East-West Center for research on technology parks and technology incubation in China and Singapore; available at <http://www2.eastwestcenter.org/research/itparks/> (2003).

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Denton, Timothy, Rob Frieden, ert and Savage, James, *International Charging Arrangements for Internet Services*, Issues Paper prepared for the Asia Pacific Economic Cooperation organization. (March, 1999); Phase Two Data Collection and Analysis (January, 2000) available at <http://www.apii.or.kr/telwg/ICAIS/ICAIS-frame.html>.

**Participation in Conferences, Seminars and Workshops (2005-Present)**

*Do National Governments Need to Stimulate Next Generation Network Investment?*, 33rd Annual Conference of the Pacific Telecommunications Council, Honolulu, Hawaii (January 16-19, 2011).

*Assessing the Need for More Incentives to Stimulate Next Generation Network Investment*, A Presentation at the 38th Annual Telecommunications Policy Research Conference Arlington, VA (October 2, 2010).

*Legislative and Regulatory Strategies for Providing Consumer Safeguards in a Convergent Marketplace*, A Presentation at The Broadband Act of 2011: Designing a Communications Act for the 21st Century, Washington, D.C. (September 30, 2010).

*An Unregulated Third Screen?: Assessing the Scope of Regulation for Wireless Networks Operating in a Convergent Environment*, A Presentation at the 18th Annual Conference of the International Telecommunications Society Tokyo, JAPAN (June 28, 2010).

*Assessing the Need for More Incentives to Stimulate Next Generation Network Investment*, A Presentation at the 60th Annual Conference of the International Communications Association, SINGAPORE (June 25, 2010).

*Decoding the Network Neutrality Debate in the United States*, A Presentation at Diverging Electronic Communications Regulatory Trends in E.U. and U.S., Florence School of Regulation, European University Institute, Florence, ITALY (June 21, 2010).

*Deep Packet Inspection Technology and Censorship*, A Presentation at A Digital Rights Roundtable, The Ryerson Law Research Centre, Toronto, Ontario CANADA (June 18, 2010).

*Implications of Deep Packet Inspection Technology*, A Presentation at Online Censorship— Implications of Content Filtering at Home and Abroad Media Access Project Mapping Change Forum Washington D.C. (June 11, 2010).

*Best Practices in Broadband Development Without Unnecessary Incentives*, 32nd Annual Conference of the Pacific Telecommunications Council, Honolulu, Hawaii (January 17-20, 2010).

*Invoking and Avoiding the First Amendment: How Internet Service Providers Leverage Their Status as Both Content Creators and Neutral Conduits*, 37th Research Conference on Communication, Information, and Internet Policy, George Mason University School of Law, Arlington, VA (September 26, 2009).

*Beyond Broadband Access: Data-Based Information Policy for a New Administration, Case Studies in Abandoned Empiricism and the Lack of Peer Review at the Federal Communications Commission*, New America Foundation. Washington, D.C. (September 24, 2009).

*Lies, Damn Lies and Statistics: Developing a Clearer Assessment of Market Penetration and Broadband Competition in the United States*, 36th Research Conference on Communication, Information and Internet Policy, George Mason University School of Law, Arlington, VA (September 26-28, 2008); revised version presented at the 2009 AEJMC Conference Boston, MA (August 5, 2009).

*Locking Down the Third Screen: How Wireless Firms Thwart Users' Access to Content*, International Telecommunications Society 17th Biennial Conference, Montreal, Canada, (June 24-27, 2008); revised version presented at the 59th Annual Conference of the International Communications Association, Chicago, IL (May 22, 2009).

Cyberspeech, University of North Carolina, School of Law, First Amendment Law Review, Seventh Annual Symposium, *First Amendment Issues Triggered by a Non-Neutral and Tiered Web* (Feb. 20, 2009).

The National Conference for Media Reform, Pre-Conference Academic Symposium for Scholars, Future of American Communications Working Group presentation on wireless policy, Minneapolis, Minnesota (June 5, 2008).

*Internet Access as Essential Infrastructure: Public Utility, Private Utility or Neither?* University of San Francisco School of Law (January 26, 2008).

*Wireless Carterfone: A Long Overdue Policy Promoting Consumer Choice and Competition*, Free My Phone-- Is Regulation Needed to Ensure Consumer Choice?, Organized by the New America Foundation, Washington, D.C. (January 22, 2008).

*Wireless Network Neutrality Overview*, WIK Consult International Conference Network Neutrality – Implications for Europe, Bonn, Germany (December 4, 2007).

*Neither Fish Nor Fowl: New Strategies for Selective Regulation of Information Services*, 35th Annual Telecommunications Policy Research Conference, George Mason University School of Law, Arlington, Virginia (September 29, 2007).

*Network Neutrality or Bias?—A Determination of Lawful and Unlawful Internet Discrimination*, presented at the 57th Annual Conference of the International Communication Association, San Francisco, CA, (May 25, 2007) (Ranked in the Top 3 Three Papers in the Law and Policy Division).

*Best and Worst Practices in Universal Service Funding--A United States Case Study*, International Telecommunications Union, Telecom World 2006, Hong Kong, China (Dec. 8, 2006).

*Network Neutrality or Bias?--Handicapping the Odds for a Tiered and Branded Internet*, presented at the 35th Annual Telecommunications Policy Research Conference, George Mason University School of Law, Arlington, Virginia (Sept. 30, 2006); available at: <http://web.si.umich.edu/tprc/papers/2006/599/NetNeutrality.pdf>.

*What Do Pizza Delivery and Information Services Have in Common? Lessons From Recent Judicial and Regulatory Struggles with Convergence*, presented at The Wharton Colloquium on Media and Communications Law, Philadelphia, PA (Oct. 29, 2005); available at:

<http://lgst.wharton.upenn.edu/cmcl/>

*Killing With Kindness: Fatal Flaws in the \$5.7 Billion Universal Service Funding Mission and What Should be Done to Narrow the Digital Divide*, presented at the 34th Annual Telecommunications Policy Research Conference, George Mason University School of Law, Arlington, Virginia (Sept. 24, 2005); available at:

<http://web.si.umich.edu/tprc/papers/2005/417/Killing%20With%20Kindness.pdf>

*Analog and Digital Must-Carry Obligations of Cable and Satellite Television Operators in the United States*; presented at a Workshop on Must Carry Obligations hosted by the Institute for Information Law at the University of Amsterdam and the European Audiovisual Observatory, Amsterdam, The Netherlands (April 9, 2005).

### **Speaking Engagements or Other Activities in Which There Was Significant Use of Expertise**

Testified before the United States Senate, Commerce Committee on wireless telecommunications issues, June 17, 2009; see

[http://commerce.senate.gov/public/index.cfm?FuseAction=Hearings.Hearing&Hearing\\_ID=03b81ffd-ba9f-42e6-8331-7c28f6d112b0](http://commerce.senate.gov/public/index.cfm?FuseAction=Hearings.Hearing&Hearing_ID=03b81ffd-ba9f-42e6-8331-7c28f6d112b0).

Interviewed on Public Broadcasting System's *News Hour With Jim Lehrer* piece on the Global Crossing bankruptcy (February 13, 2002), available at

[http://www.pbs.org/newshour/bb/business/jan-june02/global\\_crossing\\_2-13.html](http://www.pbs.org/newshour/bb/business/jan-june02/global_crossing_2-13.html).

Interviewed on National Public Radio's *Morning Edition* piece on trouble in the telecommunications marketplace (February 8, 2002), available at

<http://search.npr.org/cf/cmn/cmnpd01fm.cfm?PrgDate=02/08/2002&PrgID=3>.

Testified before the Pennsylvania House of Representatives, Judiciary Committee on House Bill 10, The Child Internet Protection Act (June 7, 2001).

Frequent source for dozens of newspaper and magazine articles on telecommunications, including the Associated Press, Atlanta Constitution, Bloomberg News, Businessweek, CBS Market Watch, CNBC, Chicago Tribune, Christian Science Monitor, Dow Jones News Retrieval Service, Fort Lauderdale Sun-Sentinel, KYW Radio, Minnesota Public Radio, National Public Radio, Philadelphia Inquirer, USA Today, Wired, and the Wall Street Journal.

**New Courses or Cooperative Extension Programs Developed**

Maintain an active blog site Telefrieden, available at: <http://telefrieden.blogspot.com/>; This blog seeks to offer a provocative, unsponsored assessment of current legal, regulatory, marketplace and cultural issues affecting the information, communications and entertainment ("ICE") industries.

Developed and taught at the Dickinson School of Law courses on Internet law and policy and telecommunications law and regulation.

Developed new graduate and undergraduate courses in media and democracy, telecommunication policy analysis, telecommunications and information processing technologies, and international telecommunications and trade policy.

**Honors or Awards for Scholarship of Professional Activity**

Top Three Faculty Paper, Association for Education in Journalism and Mass Communications, Law and Policy Division (2009).

Fulbright Specialist Program Registrant (2008-2009)(see <http://www.cies.org/specialists/ProgramDescription.htm>).

Pacific Telecommunications Council, Meheroo Jussawalla Research Paper Prize (2008).

Top Three Faculty Paper, International Communications Association, Communications Law and Policy Division (2007).

Penn State, College of Communications, Dean's Excellence Award for Research (2004, 2000).

Courtesy Appointment, School of Information Science and Technology, Pennsylvania State University (2000-present).

Winner, 1999 Cable Book Award, National Cable Television Center.

Penn State, College of Communications, Alumni Society Excellence in Teaching Award (1995).

Who's Who in American Education (1995 and various subsequent years).

Who's Who in American Law (1986 and various subsequent years).

Who's Who in Communications and the Mass Media (1997 and various subsequent years).

Who's Who in the World (2003 and various subsequent years).

Who's Who in America (2006).

**Membership and Active Participation in Professional and Learned Societies**

Pacific Telecommunications Council, elected to the Advisory Council (2005-2009); Program Committee numerous years.

Telecommunications Policy Research Conference, Program Committee for the 29<sup>th</sup>, 30<sup>th</sup>, 34<sup>th</sup>, 35<sup>th</sup> and 36<sup>th</sup> Annual Conferences.

Editorial Board, *Telecommunications Policy* (1997-present).

Editorial Board, *Info: the journal of policy regulation and strategy for telecommunications information and media* (1998-present).

Associate, Program on Information Resources Policy, Harvard University (1992-present).

Fellow, Center for Strategic and International Studies, International Communications Studies Program (1999-2001).

American Bar Association; Vice Chair, Communications Committee of the International Law Section (1992-1994).

Federal Communications Bar Association (1983-present).

Member Virginia, Pennsylvania and Supreme Court Bars.