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TPRC 2003 Program

Friday, September 19, 2003

1:00pm

REGISTRATION

Atrium

PANELS

Room 120

2:00pm

Renegotiating the Federal-State Government Relationship for Regulating Telecommunications in the U.S.

Panelists:

Pat Wood (invited), FERC Chairman
Jonathan Adelstein (invited), FCC Commissioner
Robert Nelson, Michigan PSC Commissioner (also
Chairman, Telecommunications Committee of NARUC; member of NARUC
Triennial Review Implementation Process (TRIP) Task Force)
Additional State PSC Commissioner from NARUC TRIP Task Force

Deregulatory policies in the U.S. are disrupting the traditional structure of shared federal-state governmental regulation of telecommunications and electricity industries. These policy shifts are altering federal-state regulatory relationships and posing new challenges for federal-state regulatory coordination. Recent events have also demonstrated the vulnerability, importance and interdependence of the telecommunications and electricity infrastructures in the U.S. This panel of federal and state regulators will discuss the difficulties they face in implementing recent policy changes, particularly the Telecommunications Act of 1996, and changes that may be required for economically viable and reliable telecommunications networks in the U.S.

Room 225

Wireless ISP's - Third Pipe to the Home?

Moderator:

Gene Crick, Executive Director, *TeleCommunity Resource Center* Panelists:

Marlon Schaffer, Owner, Odessa Office Equipment
Michael Anderson, President, PDQLink
Andrew Kreig, President, Wireless Consumers Alliance
Kenneth Carter, FCC Office of Strategic Planning and Policy Analysis

Great attention is being poured on "third pipe to the home" solutions for Internet over broadband. The FCC is aggressively revisiting spectrum policy searching for means of pushing more useable airwaves into the hands of service providers. Wireless ISPs, for their part, are an exploding industry

provisioning broadband in rural communities beyond where incumbents fear to tread, and also in markets where incumbents tread and WISPs offer affordable and flexible bypass solutions. Antennas are sprouting up about the country on grain silos and town pumping stations. This panel will be comprised of leaders in the WISP industry offering perspective on Wireless Internet deployment and the future of the industry. This panel is a follow up on the FCC's Sept 18 Rural Wireless Internet Showcase.

4:00pm

PANELS

Room 120

Consolidation and Competition: Economic Policymakers from the Administration

Moderator:

Greg Rosston, Stanford University

Panelists:

Patrick DeGraba, Senior Economist, FTC former Deputy Chief Economist David Sibley, Deputy Assistant Attorney General, DOJ Simon Wilkie, Chief Economist, FCC

This panel will feature the chief economists of the FCC and DOJ Antitrust Division discussing the economic views of the impact and approaches to analyzing consolidation and competition in the communications arena. The recent FCC decision on media concentration (and congressional action), rumored mergers among different telecommunications firms and questions about the interaction of regulation and competition policy should provide plenty of ammunition for the administration's policymakers.

Room 225

Academics to Academics: Higher Education CIOs Discuss Network Initiatives

Panelists:

Gary Bachula, Vice President for External Relations, Internet2
Christopher Peabody, Director, Network and Computing Services,
Georgetown University
Carl Whitman, Executive Director, E-Operations, American University

University chief information officers and campus network administrators will discuss the latest IT and networking initiatives and how your research can help educate policymakers on their value to society and the need for federal investment. The policy challenges involved with the building and daily running of stable, robust higher education information networks will also be discussed.

5:00pm

Atrium

RECEPTION

6:30pm Atrium

DINNER

Welcome:

Brad Brown, Chairman, the Tech Center, George Mason School of Law Robert Cannon, TPRC Program Committee Chair Benjamin Compaine, TPRC Board Chair

7:30pm Atrium

KEYNOTE:

Introduction:

Professor Lee McKnight, Syracuse University

Speaker:

Courtney Jackson, Deputy Director General Jamaican Office of Utility Regulation

Saturday, September 20, 2003

8:00am

Atrium

CONTINENTAL BREAKFAST and REGISTRATION

8:30am-10:10am

Room 225

BROADBAND POLICY

Moderator: Robert Cannon, FCC

Broadband Uptake in OECD Countries: Policy Lessons from Comparative Statistical Analysis

Junghyun Kim, Michigan State University Johannes M. Bauer, Michigan State University Steven S. Wildman, Michigan State University

Local Government Broadband Initiatives

Sharon Gillett, Massachusetts Institute of Technology Carlos Osorio, Massachusetts Institute of Technology William Lehr, Massachusetts Institute of Technology

Broadband Adoption in the United States: An Empirical **Analysis**

David E. Burnstein, LECG, LLC Debra J. Aron, LECG, LLC

Broadband Access Platforms to the Mass Market: An Assessment

Dr. Stagg Newman, McKinsey and Company

8:30am-10:10am Room 221

INTERNET INTERCONNECTION and TELECOM ACCESS

Moderator: Scott Marcus, FCC OSP

Access to Networks: Economic and Constitutional Connections

Christopher Yoo, Vanderbilt University Law School Daniel F. Spulber, Kellogg School of Management

Bargaining for Access Rates in International Long Distance

V. Brian Viard, Stanford Graduate School of Business Michael Dettorre, Charles Schwab & Co.

Internet Regulation: Monopolistic Bottlenecks in Internet Service Markets?

Margit Vanberg, ZEW (Centre for European Economic Research)

Explaining Internet Connectivity: Voluntary Interconnection Among Commercial Internet Service Providers

Daniel C. H. Mah, Steptoe & Johnson LLP

8:30am-10:10am Room 332

COMMUNITY NETWORKS and the DIGITAL DIVIDE

Moderator: Lammot du Pont, Technology Opportunities Program

Beyond Community Networking and CTCs: Access, Development and Public Policy

Sharon Strover, *University of Texas*Gary Chapman, *University of Texas*Jody Waters, *University of Texas*

Race, Place, and Information Technology

Karen Mossberger, Kent State University
Caroline Tolbert, Kent State University

Revisiting Cost and Affordability Assumptions for High Speed Data Services in Low Population Density Locations

Ben Compaine, MIT Program on Internet & Telecoms Convergence

Low-Income Demand for Local Telephone Service: The Effects of Lifeline and Linkup

Michael H. Riordan, *Columbia University* Gregory L. Rosston, *Stanford Institute for Economic Policy Research Bradley S. Wimmer, University of Nevada, Las Vegas*

8:30am-10:10am Room 224

INFORMATION POLICY

Moderator: Elliot Maxwell, Johns Hopkins University

China's Information Policy

Luyan Li, Northwestern University

Prospects and Limits of Comparative Research in Communications Policy-Making

Johannes Bauer, Michigan State University

Information Process Patents in the U.S. and Europe: Policy Avoidance and Policy Divergence

Brian Kahin, University of Michigan

Security and Autonomy for End Users

Jean Champ

10:10am-10:40am Atrium

COFFEE BREAK

10:40am-12:20pm Room 225

SPECTRUM POLICY

Moderator: Robert Pepper, FCC OSP

Efficiency, Predictability and the Need for an Improved Interference Standard at the FCC

R. Paul Margie, FCC

Real-Time Secondary Markets for Spectrum

Jon M. Peha, *Carnegie Mellon University*S. Panichpapiboon, *Carnegie Mellon University*

Transition Paths in a Spectrum Commons Regime

Siddhartha Raja, *University of Illinois at Urbana-Champaign* Francois Bar, *University of Southern California*

The U.S. Experience with Non-traditional Approaches to Spectrum Management: Tragedies of the Commons and Other Myths Reconsidered

Carol Ting, Quello Center for Telecommunication Management & Law, Michigan State University

Johannes M. Bauer, Quello Center for Telecommunication Management & Law, Michigan State University

Seven S. Wildman, Quello Center for Telecommunication Management & Law, Michigan State University

10:40am-12:20pm Room 221

TELECOMMUNICATIONS ACT REVISITED

Moderator: Daniel Craig, National Cable & Telecommunications Association

Thinking About Openness in the Telecommunications Policy Context

Ashish Shah, *Carnegie Mellon University* Dale Hatfield, *University of Colorado* Douglas Sicker, *University of Colorado*

The Telecommunications Meltdown in the United States: Reasons and Solutions

Rob Frieden, Pennsylvania State University

Addressing Political Feasibility As Well As Economic Viability Constraints to Achieve Sustainable Telecommunications Policies in the U.S.

Barbara Cherry, FCC

Excessive(?) Entry of National Telecom Networks, 1990-2001

Christiaan Hogendorn, Wesleyan University

10:40am-12:20pm Room 332

BROADBAND in DEVELOPING REGIONS

<u>Moderator</u>: Ben Compaine, *MIT Program on Internet & Telecoms Convergence*

Current International Issues in Communications Policy and Regulation

Irene Wu, FCC Roxanne McElvane, FCC Anita Dey, FCC

Universal Service: Beyond Established Practice to Possibility Space

Krishna Jayakar, *Pennsylvania State University* Harmeet Sawhney, *Indiana University*

Expanding Rural Access to Telecommunications in Developing Nations

J. Riley Allen, *USAID*Ed Malloy, *USAID*Dale Hatfield, *University of Colorado*

Bridging the Broadband Divide: Strategies for Rural and Developing Regions

Heather Hudson, University of San Francisco

10:40am-12:20pm Room 224

ISSUES of IDENTITY, AUTHENTICATION, and AUTHORIZATION in PRIVACY

Moderator: Mark Rotenberg, EPIC

Privacy Principles for Authentication Systems

Paula Bruening, Center for Democracy and Technology Alan Davidson, Center for Democracy and Technology Ari Schwartz, Center for Democracy and Technology

Contextualizing Online Identity: Paradigms and Practices

David J. Phillips, University of Texas at Austin

Role Based Authorization as a Tool for Privacy and Anonymity

Douglas Sicker, University of Colorado

Credential Wallets: A Classification of Credential Repositories Highlighting MyProxy

Jim Basney, *University of Illinois* William Yurcik, *University of Illinois*

12:20pm-2:00pm Atrium

LUNCH and PLENARY SESSION

Andrew Schwartzman and Randolph May

The FCC's Media Ownership Ruling Reconsidered

This panel brings together two vocal players in the ongoing debate about the FCC's controversial media ownership rules. Join Andrew Schwartzman of the Media Access Project and Randolph May of the Progress & Freedom Foundation for a lively discussion on the merits and consequences of the FCC's June vote.

STUDENT PAPER AWARDS

2:00pm-3:40pm Room 225

SPECTRUM POLICY: UNLICENSED

Moderator: Peter Tenhula, FCC

WI-FI Networks and the Reorganization of Wireline-Wireless Relationship

Harmeet Sawhney, Indiana University

Supercommons: Toward a Unified Theory of Wireless Communication

Kevin Werbach, Supernova Group LLC

Assessing Cooperative Action in 802.11 Networks Christian Sandvig, *University of Illinois*

Adaptive Spectrum Access: Using the Full Spectrum Space

William Horne, The MITRE Corporation

2:00pm-3:40pm Room 221

COMPETITION POLICY 1

Moderator: Chris Savage, Cole Raywid and Braverman

Economic Case for Voluntary Structural Separation

William Lehr, *Massachusetts Institute of Technology* R. Glenn Hubbard, *Columbia University*

Pricing on Markets with Network Externalities and Coalitionally Rational Consumers

Rossella Argenziano, Yale University Attila Ambrus, Yale University

Pricing of Complementary Goods and Network Effects

Nicholas Economides, Stern School of Business, New York University V. Brian Viard, Stanford Graduate School of Business

Imperfect Competition in Internet Markets: The Role of Network Effects in Determining Market Structure

Jay P. Kesan, *University of Illinois at Urbana-Champaign* Andres A. Gallo, *University of Illinois at Urbana-Champaign*

2:00pm-3:40pm Room 332

SPECIAL PANEL – Linking Barriers and Proposed Policy Initiatives: The Case of Telemedicine and E-Health

Moderator:

Pamela Whitten, *Dept. of Telecommunications, Michigan State University*Pamelists:

Lammot Dupont, TOP, NTIA

William England, Universal Subsidy Fund, FCC

Jon Linkous, American Telemedicine Association

Dena Puskin, Office for the Advancement of Telehealth, HRSA

Robert Waters, Center for Telemedicine Law, Arent Fox EHealth and Telemedicine

The use of telecommunication technologies to deliver e-Government services, online education and especially health services over a distance has enjoyed significant development over the past decade. Yet actual utilization often falls short of the potential offered by this innovative means of delivery. This panel will focus on the case of telemedicine and e-health, to link lessons learned from telemedicine research with current and future policy activities. The case of telemedicine can inform policy research in other related areas such as digital libraries, e-Government and online education.

Topics covered will include an overview of telecommunication initiatives related to telemedicine, a synthesis of research on challenges/barriers in telemedicine deployment and analysis of federal priorities. Further discussion will touch on the convergence of legal issues with actual delivery of health services. We'll finish with a discussion of current and future policy initiatives necessary to maximize telemedicine.

2:00pm-3:40pm Room 224

COPYRIGHT and COMMUNICATIONS

Moderator: Gigi Sohn, Public Knowledge

Stopping Digital Copyright Infringement Without Stopping Innovation

Mark A. Lemley, *University of California at Berkeley* R. Anthony Reese, *University of Texas School of Law*

Analysis of Security Vulnerabilities in the Movie Production and Distribution Process

Patrick McDaniel, AT&T Labs – Research Simon Byers, AT&T Labs – Research Lorrie Cranor, AT&T Labs – Research Eric Cronin, University of Pennsylvania David Kormann, AT&T Labs – Research

The Celestial Jukebox Revisited: Best Practices and Copyright Law Revisions for Subscription-Based Online Music Services

Adam David Marcus, Georgetown University

3:40pm-4:10pm Atrium

COFFEE BREAK

4:10pm-5:50pm Room 225

SPECIAL PANEL – Spectrum Auctions with Package Bidding

Moderator:

Evan Kwerel, FCC

Panelists:

Larry Ausubel, *University of Maryland*Peter Cramton, *University of Maryland*Karla Hoffman, *George Mason University*David Parkes, *Harvard University*

With worldwide wireless markets, services, and applications growing faster than any other telecom sector, spectrum is the keystone to growth. This panel brings together scholars and researchers who will describe alternative approaches to introducing package bidding in spectrum auctions.

4:10-5:50pm Room 221

COMPETITION POLICY 2

Moderator: Don Stockdale, FCC OSP

The Satellite Home Viewer Improvement Act: Price and Quality Impact of Direct Broadcast Satellite Companies' Provision of Local Broadcast Networks

Michael E. Clements, *United States General Accounting Office* Stephen M. Brown, *United States General Accounting Office*

Valuing New Goods in the Presence of Complementarities: Online News Matthew Gentzkow, Harvard University

The Effect of Entry and Market Structure on Cellular Pricing Tactics

Katja Seim, Standford Graduate School of Business V. Brian Viard, Standford Graduate School of Business

Vertical Integration and Local Station Carriage in the Cable Television Industry: Results from Logit Analysis Michael Zhaoxu Yan, *University of Michigan*

4:10pm-5:50pm

Room 332

SPECIAL PANEL – Game-Changing Technologies and Their Policy Implications

Moderator:

Kevin Werbach, Supernova Group

Panelists:

Michael R. Nelson, IBM Corporation

Clay Shirky, Consultant

Mitch Waldrop, author of "The Dream Machine"

Elliot Maxwell, Johns Hopkins University

New technologies, such as wireless broadband, optical networks, Grid computing, Web services, social software, pervasive computing, and RFID tags, are enabling a new generation of Internet applications. At the same time, they are posing thorny new policy challenges. For instance, as Web services and Grid enable more and more mission-critical software to run "on the network" rather than on a single computer, who will be liable when the application fails? What regulations and law will apply to the new virtual communities being created on Friendster and Tribe.net? How do national privacy rules apply when personal data is spread over a distributed storage system in six different countries? Should the privacy of geo-location data from wireless devices be protected by law? Panelists will describe several new Next Generation Internet technologies and the work that will be needed to understand and address the policy issues they may create.

4:10pm-5:50pm Room 224

INTERNET GOVERNANCE

Moderator: Robin Layton, NTIA Office of International Affairs

Governing E-Commerce - Prospects and Problems

Seamus Simpson, *Manchester Metropolitan University* Rorden Wilkinson, *University of Manchester*

Cohesion and Coherence in the UDRP

Thomas Lee, *University of Pennsylvania*Dan Hunter, *University of Pennsylvania*Dan Orr, *Vanderbilt University Law School*

The W3C and its Patent Policy Controversy: A Case Study of Authority and Legitimacy in Internet Governance

Andrew L. Russell, Johns Hopkins University

The Post-.COM Internet: Towards Regular and Objective Procedures for Internet Governance

Milton Mueller, Syracuse University School of Information Studies Lee McKnight, Syracuse University School of Information Studies 5:30pm Atrium

6:30pm Atrium

7:30pm Atrium

RECEPTION

DINNER

SPEAKER

Telecommunications Meltdown

For several decades, US policy in telecommunications and electronic mass media focused on the encouragement of competition. What has been the impact of this policy? A recent academic project has focused on one dimension: the impact of liberalization on competitive market structure. This question has acquired some urgency in light of the recent meltdown in the telecom sector. As instability becomes part of the environment, what will telecom companies do? This session will begin with the academics presenting the results of a recent project that examined the liberalization of competitive market structure and its impact on the recent telecommunications industry meltdown. Then, a panel of select industry representatives would give their reaction and response.

Panelists:

Jim Alleman Bob Blau Mike Nelson Eli Noam Larry Strickling George Vradenburg

SOCIAL EVENT

Sunday, September 21, 2003

8:00am

Atrium

CONTINENTAL BREAKFAST and REGISTRATION

8:30am-10:10am Room 225

ISSUES IN WIRELESS COMMUNICATIONS

Moderator: Barry Ohlson, Legal Advisor, Commissioner Adelstein

Household Demand for Wireless Telephony: An **Empirical Analysis**

Paul Rappoport, Temple University and Columbia Institute for Tele-Information James Alleman, University of Colorado and Columbia Institute for Tele-Information Lester Taylor, University of Arizona

Legislators v. Regulators: The Case of Low Power FM Radio

Thomas W. Hazlett, Manhattan Institute for Policy Research and Columbia Institute for Tele-Information Bruno E. Viani, Manhattan Institute for Policy Research

Investing in the Development of a Space-Based Information Network Infrastructure

Serena Chan, Massachusetts Institute of Technology

Interlicense Competition: Spectrum **Deregulation without Confiscation or Giveaways**

Coleman Bazelon, Analysis Group, Inc. Michael Rothkopf, Rutgers University

8:30am-10:10am Room 221

STANDARDS

Moderator: Richard Hovey, FCC OET

Policy Impact Assessments: Considering the **Public Interest in Internet Standards** Development

John Morris, Center for Democracy & Technology Alan Davidson, Center for Democracy & Technology

The Failure of a Regulatory Threshold and a Carrier Standard in Recognizing Significant Communication Loss

Andrew P. Snow, J. Warren McClure School of Communication Systems Management, Ohio University

Strategic Interoperability Standards and Trade Policy for Industries with Network Externalities Mikhail M. Klimenko, *University of California, San Diego*

8:30am-10:10am Room 332

SECURITY: NATURAL EXPERIMENTS and POLICIES to MOTIVATE IMPROVED SECURITY

Moderator: Donald Weightman

The Impact of National Infrastructure and Cyberspace Security Strategies on Legal Rights and Liabilities

Jeffrey H. Matsuura, University of Dayton

Rewarding IT Security in the Marketplace Walter S. Baer, RAND

The Internet Under Crisis Conditions: Learning from September 11

Jon Eisenberg, *Computer Science and Telecommunications Board, The National Academies*Craig Partridge, *BBN*

Why Do the Graphs of the "Slammer Worm" Differ So Much?

John Quarterman, *Matrix NetSystems* Peter Salas, *Matrix NetSystems*

8:30am-10:10am Room 224

REGULATION of ONLINE ACTIVITY

Moderator: Lee Rainie, Pew Internet

Free Speech: The First Amendment and Distributive Values of Copyright

Molly Shaffer Van Houweling, University of Michigan Law School

Hope and Hype v. Reality: The Role of the Commercial Internet in Democratic Discourse and Prospects for Institutional Change

Mark Cooper, Stanford Law School Center for Internet and Society

Search and You Shall Find? The Effects of Online Commercial Interests on People's Ability to Find Content on the Web

Eszter Hargittai, Northwestern University

10:10am-10:40am Atrium **COFFEE BREAK**

10:40am-12:20pm Room 225

BROADBAND DEPLOYMENT

Moderator: Brad Ramsey, NARUC

Promises and False Promises of PowerLine Carrier (PLC) Broadband Communications - A Techno-Economic Analysis

Rahul Tongia, Carnegie Mellon University

An Economic Analysis of the Factors that Influence the Deployment of Advanced Telecommunications Services

Eugene Floyd, City University of New York David Gabel, Queens College

International Broadband Deployment: The Impact of Unbundling

Martha Garcia-Murillo, Syracuse University David J. Gabel, Queens College

Towards Technologically and Competitively Neutral Fiber to the Home (FTTH) Infrastructure

Anupam Banerjee, *Carnegie Mellon University* Marvin Sirbu, *Carnegie Mellon University*

10:40am-12:20pm Room 221

MASS MEDIA

Moderator: Barbara Esbin, FCC Media Bureau

The Effects of Technological Change on the Quality and Variety of Information Products

David Waterman, Indiana University

The Technological Revolution Will Not be Televised: Canadian Copyright and Internet Transmission

Matt Jackson, Pennsylvania State University

Underlying Motivations in the Broadcast Flag Debate

Allan Friedman, Harvard University
Roshan Baliga, Massachusetts Institute of Technology
Deb P. Dasgupta, Massachusetts Institute of Technology
Anne Dreyer, Massachusetts Institute of Technology

Localism and Media Firms in Smaller Local Markets: Challenges in the New Media Market Landscape

Jenghoon Lee, Florida State University
Stephen D. McDowell, Florida State University

10:40am-12:20 pm Room 332

USER STUDIES

Moderator: Jim McConnaughey, NTIA

Internet Health Resources: Health Searches and E-mail Have Become More Commonplace, but There Is Room for Improvement in Searches and Overall Internet Access
Susannah Fox, PEW Internet & American Life Project
Deborah Fallows, PEW Internet & American Life Project

Old and New Channels: Traditional Communications Practices with the Development of E-Government Elena Larsen, PEW Internet & American Life Project

Price Discrimination amid Heterogeneous Switching Costs: A Competitive Strategy of the Long Distance Telephony Fringe Nancy Epling, Indiana University

10:40am-12:20pm Room 224

INTERNET REGULATORY APPROACHES

Moderator: Marjory Blumenthal, Georgetown University

On Copyright's Communications Policy Timothy Wu, University of Virginia Law School

Virtual Worlds, Real Rules

Caroline Bradley, University of Miami School of Law A. Michael Froomkin, University of Miami School of Law

The Internet: Still Wide Open and Competitive? Eli Noam, Columbia Institute for Tele-Information, Columbia Business School

12:20pm

CONFERENCE ADJOURNMENT