# **2010 TPRC**

# The 38th Research Conference on Communication, Information and Internet Policy October 1-3, 2010

Hosted by George Mason University School of Law Arlington, VA

#### **Conference Schedule**

#### Friday, October 1

#### 1:00 pm Registration

### 2:00 pm Panels

government.

Cybersecurity: The Role of Incentives, Policy, and **Regulation** - The session addresses the technical. economic, behavioral, and political challenges that need to be overcome on the road to enhancing cybersecurity. A key problem is the mismatch between the strong public good characteristics of security and its provision by individual stakeholders, including ISPs, software vendors, hardware manufacturers, as well as commercial and private end-users. Due to the high interconnectedness of cyberspace, these decentralized decisions are afflicted with externalities that can result in suboptimal security levels. Moreover, addressing the issues has to overcome collective action issues as individual stakeholders may prefer to endorse solutions that impose costs on players in other segments of the value network. Devising effective solutions is further complicated by the global nature of cyberspace, the interdependence of stakeholders, as well as the diversity and heterogeneity of players. The panel explores these issues with representatives from academia, industry, and

#### National Broadband Strategies: A Comparative Review, Lessons Learned and a Possible Research

**Agenda** - This panel will examine a selected set of national broadband strategies, with a view to finding out what worked, what did not, the problems encountered and whether there are lessons to be learned that are of general applicability. A dialogue between policymakers and researchers could help to develop the outline of a medium term Policy Research Agenda, covering identified current and future issues which will require further work.

Moderator: Prabir Neogi, panelists: Rob Atkinson, Judith Mariscal and Gabriel Laender

# 4:00 pm Panels Regulating Privacy in an Evolving Information

**Environment** - Technology continues to raise new and perplexing challenges for the protection of privacy. Recent

concerns focus on contexts such as social networking, behavioral advertising, cloud computing and location-based services. Our legal machinery for meeting these challenges – including the Electronic Communications Privacy Act, the Privacy Act, the Fourth Amendment's third party doctrine, and the Fair Information Practices – looks increasingly antiquated by comparison. Various approaches to these issues are championed, including legislative reform of ECPA, Congressional passage of European-style general privacy legislation, more vigorous action by the Federal Trade Commission, and self-regulation. This panel will discuss the current status of reform efforts and debate the value of competing approaches.

#### Transitioning from the Circuit-Switched PSTN to

**VOIP Networks** As part of its *National Broadband Plan*, the FCC has proposed that over the next decade, the circuitswitched PSTN should be decommissioned in favor of voice services provisioned over broadband networks (VoIP). The transition from circuit-switched voice (POTS), which has been the world's flagship telecommunications service for the last 135 years, to VoIP, will be one of the most complex evolutions ever. It will require customers, carriers, equipment manufacturers and regulators to address an immense expanse of issues for it to be successful. Among these issues are:

- Standardization and responsibility for voice encoding into IP
- Specifications for network and service interconnection technologies and locations
- Permissible business plans and compensation requirements
- Universal service responsibilities
- Regulatory jurisdiction, governance and other requirements
- Device standards
- Reliability/security requirements
- Assignment of responsibilities during the transition period

The panel will include participants who are state and federal regulators, as well as network and customer representatives.

**Media Concentration Across the Globe**: A Report of the International Media Concentration Project Working Group -The panel presents initial findings of the International Media Concentration Project. The Project is a collaboration of scholars from 30 nations aiming to use a uniform methodology in order to provide a comprehensive comparative view of media concentration trends across the globe. The Project, headed by the Columbia Institute of Tele-Information (CITI), uses a quantitative approach based on market share data for major media industries, for a period of about 20 years. The goal of the project is to provide an academic, empirical, dispassionate, and datadriven analysis of media concentration trends and their drivers, taking into account peculiar country circumstances. Panelists: Eli Noam, Columbia and Helmut Muller, Center for Digital Technology and Management, Munich; Regional comparisons: Kiyoshi Nakamura, Waseda University; Dwayne Winseck, Carleton University; Sonia Moreira, Rio de Janeiro State University; Paulo Faustino, Portuguese Catholic University: Juan Pablo Artero, University of Navarra: Petrus Potgieter, University of South Africa, Amit Scheiter, Penn State; Moran Yemini, University of Haifa

## 5:30 pm Reception

6:30 pm Dinner

**7:15 pm Keynote Speaker** – The Honorable Mignon Clyburn, Commissioner, *Federal Communications Commission* 

#### Saturday, October 2

#### 8:00 am Registration and Continental Breakfast

9:00 am Paper Sessions (outlined in grid)

10:40 am Coffee Break

11:10 am Paper Sessions (outlined in grid)

12:50 pm Lunch and Student Paper Awards

2:00 pm Paper Sessions (outlined in grid)

3:40 pm Coffee Break

**4:10 pm Paper Sessions** (outlined in grid)

6:00 pm Reception

**7:00 pm Dinner and Keynote Panel** - *The Rise of the Wireless Industry* - The wireless industry emerged from an afterthought in the early 1980s—AT&T's CEO did not know whether the wireless licenses would be divested along with the local Bell operating companies or remain with AT&T—to a juggernaut twenty years later. The formative years of the wireless industry involved a series of constitutive decisions about technical architecture, technologies, and business models. To discuss some of those decisions, and regulatory policy issues that helped shape the industry, this panel will bring together some of the leaders of this industry from the 1980s and 1990s.

#### Sunday, October 3

8:00 am Continental Breakfast
9:00 am Paper Sessions (outlined in grid)
10:40 am Coffee Break
11:10 am Paper Sessions (outlined in grid)
12:50 pm Conference Adjourned

#### **Conference Information**

The 38th Annual Telecommunications Policy Research Conference will be held at George Mason University School of Law in Arlington, VA. Situated in the Washington, DC area, the School of Law offers an ideal atmosphere to explore policy issues within the shadow of the Capitol. For detailed directions, visit www.law.gmu.edu/geninfo/directions.html.

#### **Hotel Information**

Rooms have been reserved at the L. William Seidman Center Hotel at 3451 N. Fairfax Ave., Arlington, adjacent to the GMU School of Law. The hotel is an FDIC facility. Luxury accommodations including spacious rooms with kitchen facilities are available. Please note, the Seidman Center will not split hotel room charges among registrants. The person reserving the room is responsible for full payment. Please call the hotel directly to reserve a room, (703) 516-4630.

Alternate hotels are available in the Ballston area. For more information check our website, www.tprc.org. The GMU School of Law and the Seidman Center Hotel are located near the Virginia Center station of the Orange line of the Metro.

Hotel reservations should be made directly with the FDIC Seidman Center Hotel by calling (703) 516-4630 and referring to the GMU TPRC Conference Room Block.

#### **Conference Registration**

Online registration is available at <a href="www.tprc.org">www.tprc.org</a>. A downloadable hard copy of the registration form is also available.

#### **Conference Fees**

|                             | Before  | After   |  |
|-----------------------------|---------|---------|--|
|                             | Aug. 31 | Aug. 31 |  |
| Student                     | \$100   | \$250   |  |
| Authors/Co-Authors          | \$160   | \$310   |  |
| Academic, Gov't, Non-Profit | \$375   | \$525   |  |
| Industry                    | \$550   | \$700   |  |

Registration fees cover all conference sessions, conference materials, continental breakfast and coffee breaks.

Meal package (Lunch and dinners): \$110

An additional \$100 will be charged for on-site registration.

#### Host



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# Paper Sessions Saturday, Oct. 2, and Sunday, Oct. 3

| Sat.<br>Oct. 2<br>9:00 –<br>10:40 | Network Management and Innovation Product Life Cycle Theory and the Maturation of the Internet - Christopher S. Yoo  From Herding Sheep to Herding Cats: Balancing Compliance and Innovation in the Modular Age of the Internet - Chintan Vaishnav  Cooperatives as Innovators in the Argentinean Information Industry - Martha Garcia-Murillo, Fatima Espinoza                       | Broadband Investment 1 Has Telecom Investment Peaked? - Eli Noam, Bob Atkinson  Supply and Demand for Telecommunication Infrastructure - Tobias Veith  Assessing the Merits of Network Neutrality Obligations at Low, Medium and High Network Layers - Rob Frieden   | Media Policy Maximizing Newspaper Profits from the Internet and Print - Steven S. Wildman  The Emergence of eBooks: Just Another Media Industry Joining the Converging Digital World? An Explorative Study on User Preferences and Industry Structure Changes - Claudia Loebbecke  Broadcast Localism and Community Identity - George Williams                  | Privacy Policy 1 Is Security Lost in the Clouds? - Marjory S. Blumenthal Privacy and the Smart Grid: A Policymaking Case Study - Janice Tsai An End to Privacy Theater: Exposing and Discouraging Corporate Disclosure of User Data to the Government - Christopher Soghoian   | Spectrum Control SCADA for the Rest of Us: the Future of Wireless Control Networks - William Lehr, John Chapin  Dynamic Geospatial Spectrum Modelling: Taxonomy, Options and Consequences - Martin BH Weiss, Mohammed Altamaimi, Liu Cui  Wireless Grids or Personal Infrastructure: Policy Implications of an Emergent Open Standard - Lee W. McKnight, Joseph Treglia, Andreas Kuehn |
|-----------------------------------|---|--|---|--|--|
| Sat<br>Oct. 2<br>11:10 –<br>12:50 | Regulatory Design 1 Using Computer Simulation to Improve ICT Governance - Johannes M. Bauer, Kurt DeMaagd, Erik Goodman, Samuel Atkins, Tithi Chattopadhyay, Kendall Koning Network Policies and Economic Doctrines - Dr. Robert D. Atkinson The New Cartographers: Trust and Social Order within the Internet Infrastructure - Ashwin J. Mathew, Coye Cheshire                       | Residential Broadband Household Demand for Broadband Internet Service - Gregory Rosston, Scott Savage, Don Waldman Understanding Broadband Speed Measurements - Steven Bauer, David Clark, Bill Lehr Bottom Up Planning/Top-Down Network: Local Engagement in Spurring Broadband - Charles Kaylor            | Policymaking Processes What the Advocate's Playbook Reveals about FCC - Brad Bernthal  Influencing Internet Governance Through Social Networks and Delegations: The Case of Secure Routing - Brenden Kuerbis  Constructing the Information Society: The Binding Nature of Non-binding Debates about Internet Governance - Dmitry Epstein (student paper winner) | Universal Access Policy The Socio-Economics of Digital Exclusion in America: - Mark Cooper The Manifold Definitions of the Digital Divide and their Diverse Implications for Policy Responsibility - Martin Hilbert Funding Public Computing Centers: Balancing Broadband Availability and Expected Demand - Krishna Jayakar, Eun-A Park | Spectrum Auctions Edge License Discounts in Cellular Auctions - Pierre de Vries, Cheng- Yu Chan  Determinants of Wireless Spectrum Prices: An International Comparison, 1995-2008 - K. H. Tiedemann  The Indian 3G and BWA Auctions - Coleman Bazelon  |
| Sat.<br>Oct 2<br>2:00 –<br>3:40   | Comparative Network Neutrality A Comparison of Network Neutrality Approaches in U.S., Japan, and the European Union Kenneth R. Carter, Tomoaki Watanabe  Network Neutrality in the EU: Is there Scope for the Application of Competition Rules - Katerina Maniadaki  Open Access Broadband Networks in Australia, Canada, New Zealand and Singapore - Catherine Middleton, Jock Given | Broadband Investment 2 Deployment of Broadband Infrastructure in the Competitive Framework: Case of Japanese FTTH - Masatsugu Tsuji, Yuji Akematsu  Connecting Rural Canadians: A Review of Policy, Measurement and Outcomes — Josie Brocca  The Rural Effect of Broadband Internet Service — Peter Stenberg | Regulatory Lessons from Virtual Space Creativity: The Goose that Laid the Golden Egg - D. Linda Garcia, Garrison LeMasters  Mixed Reality - Joshua Fairfield Building Policy that Crosses Virtual Borders – Andrea Tapia, Bridget Ward  | Privacy Policy 2 Beliefs and Behaviors: Internet Users' Understanding of Behavioral Advertising - Aleecia M. McDonald, Lorrie Faith Cranor  Automated Tracking of Online Service Policies - Trent Adams, Kevin Bauer, Dirk Grunwald, Asa Hardcastle, Joshua Kline, Douglas Sicker  Mixed Context and Privacy - Jesse Sowell              | Comparative Telecom Evolutions Role of Policy and Governance in Unlocking the Potential from Convergence: Lessons from India - Rekha Jain  Mapping the Future of China's Telecommunications Regulatory Regime: A Layered Perspective - Chun Liu  Facilities to Service Based Competition: A Case Study of United States and South Korea - Sujin Choi (student paper winner)            |

| Sat.<br>Oct. 2<br>4:10 –<br>5:50   | Network Neutrality Regulation Spillovers and Network Neutrality - Christiaan Hogendorn  I Can See Right through You: An Experimental Study on Transparency Regulation in Broadband Markets - Jasper P. Sluijs, Florian Schuett, Bastian Henze  | Broadband in Europe Very High Speed Broadband Deployment in Europe: the Netherlands and Bulgaria Compared - Hendrik Rood Key Success Factors of Successful Facilities-based Entrants in European Broadband Markets - Bruno Soria, Inmaculada de la Cruz, Loubna Eljihad Toward Open Access for Innovation, Public-Private Partnerships (PPPs) in the Netherlands - Bert Sadowski, Alberto Nucciarelli | Who's Connected to Whom: the Impact of Liabilities and Network Structures on the Costs of Bad Behaviour Online - Jonathan Cave  The Role of Internet Service Providers in Botnet-Mitigation: An Empirical Analysis Based on Spam Data - Michel van Eeten, Johannes M. Bauer, Hadi Asghari, Shirin Tabatabaie, Dave Rand  The French Copyright Authority (HADOPI), the Graduated Response and the Disconnection of Illegal File-Sharers - Nicolas Jondet | Privacy Policy 3 The Risks and Regulation of Location - Dirk Grunwald, Kevin Bauer, Douglas Sicker Should the Whole World be Watching? The Tension between Social Networks and National Privacy Policies - Phyllis Bernt  Data Breaches and Identity Theft: When is Mandatory Disclosure Optimal? - Sasha Romanosky, Richard Sharp, Alessandro Acquisti               | Public Safety and Emergency Policies for Public Safety Use of Commercial Wireless Networks - Ryan Hallahan, Jon Peha The FCC Plan for a Public Safety Broadband Wireless Network - Stagg Newman, Jon Peha, Jennifer Manner Policy Issues Facing the Use of Social Network Information During Times of Crisis - Douglas C Sicker, Leysia Palen, Dirk Grunwald, Ken Anderson, Lisa Blumensaadt  |
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| Sun.<br>Oct. 3<br>9:00 –<br>10:40  | Network Neutrality Case Studies Network Neutrality and Vertical Control: Lessons from Cable TV - David Waterman, Sujin Choi  Do Wireless Networks Merit Different Net Neutrality than Wired Networks? - Scott Jordan  The Economics of Network Neutrality - Nicholas Economides  | Broadband Adoption Closing the Broadband Adoption Gap: Policy Priorities in the Context of an Upward Adoption Trajectory - John Horrigan, Ellen Satterwhite  Demand-Side Programs to Stimulate Adoption of Broadband: What Works? - Janice Hauge, James Prieger  The Need for Broadband Acceptance: A New Policy Framework for Promoting Digital Inclusion - Jon Gant, Nicol Turner-Lee               | Copyright Policy The Google Book Settlement as Copyright Reform - Pamela Samuelson The Social Efficiency of Fairness - Marshall Van Alstyne, Gavin Clarkson Free Speech Unmoored in Copyright's Safe Harbor: Chilling Effects of the DMCA on the First Amendment - Wendy Seltzer  | Broadband and Development Broadband and Local Economic Development - Jed Kolko The Importance of Broadband Provision to Knowledge Intensive Firm Location - Elizabeth A. Mack, Luc Anselin, Tony H. Grubesic Spill-over Effects of ICT Use in School to Thai Communities - Pitikorn Tengtrakul, Jon M. Peha   | Telecom Access Policy An Empirical Analysis of Regulator Mandates on the Pass Through of Switched Access Fees for In-State Long-Distance Telecommunications in the U.S Debra J. Aron, David Burnstein, Ana Danies, Gerry Keith  "Access Stimulation": Subsidizing Rural Customers with Porn, or Saving Rural Service? - Richard D. Taylor, Krishna Jayakar, Amit Schejter   |
| Sun.<br>Oct. 3<br>11:10 –<br>12:50 | Network Management Policy Dis-empowering Users vs. Maintaining Internet Freedom: Network Management and Quality of Service (QoS) - Benjamin Lennett Incentive Problems around Net Neutrality: Literacy on Best Effort QoS - Toshiya Jitsuzumi Network Neutrality - What a Non- discrimination Rule Should Look Like - Barbara van Schewick | Regulatory Design 2 Experimenting with Governance for U.S. Broadband Infrastructure: The Wisdom of Retaining or Dismantling Prior Legal Innovations - Barbara A. Cherry  Platform Types and Regulatory Concerns in the European ICT Markets - Pieter Ballon, Eric Van Heesvelde  The Framing Years: Policy Fundamentsl in the internet Design Process: 1969-1979 - Sandra Braman                      | Hot Topics Panel This panel will be assembled in early September to reflect new and active topics in the field.   | Broadband Universality Broadband Expansion in the United States: The Role of Citizen Perception in Policy Effectiveness - Dawn Nafus, Scott D. Mainwaring Broadband Universal Service in Europe: A Review of Policy Consultations 2005-2010 - Erik Bohlin, Orada Teppayayon Residential Broadband Competition in the United States - Scott Wallsten, Colleen Mallahan | Spectrum Service Diffusion Empirical Analysis of 3G Dynamic Model of 3G Mobile Phone Diffusion by Focusing on Three Major Carriers in Japan - Yuji Akematsu, MasatsuguTsuji High Fences or Overflight Oversight? Adapting Australia's Strict Boundary-defined Spectrum Licensing Regime to Enable Deployment of Passenger Aircraft Picocell/Jammers Danny Kotlowitz Cell vs Internet: The Impact on Democratization in Africa — Patience Akpan-Obang, Nicholas Alozie, William Foster |