



QUELLO CENTER

Telecommunication Management & Law

2005 annual report

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2005 highlights

In addition to its ongoing program of research, the Quello Center maintains a vigorous schedule of sponsored lectures, workshops, conferences and other outreach activities. This section of our report highlights several events worthy of special note during 2005.

On April 18, the Quello Center, in collaboration with the Community and Economic Development Program at MSU, hosted a half-day conference at MSU's Kellogg Center on the state of advanced information infrastructure, with a particular focus on the State of Michigan. Before an audience of about 100, three panels of public officials, academic experts, and industry and consumer representatives addressed issues relating to next generation networks, both wireless and fixed, and broadband policy and deployment.

In a two-day research workshop organized and hosted by the Quello Center at MSU on May 16 & 17, a multidisciplinary group of researchers from around the country discussed the cutting edge of research relating to engineering, economics and policy for unlicensed wireless communication services. This event was one component of a three-year collaboration between the Quello Center and spectrum engineers at Rutgers University's WINLAB funded by the National Science Foundation to explore mechanisms for governing wireless communications services that use spectrum set aside by the Federal Communications Commission for use on an unlicensed basis.

On October 12, the Quello Center, in collaboration with the Communication, Culture and Technology Program at Georgetown

University, hosted a half-day conference on the Georgetown campus on "Interoperability and Access in the Network Economy". The program drew a diverse crowd of government officials, academics, industry representatives and officials from public interest groups from the Washington policy community.

Partnering with the College of Communication Arts & Sciences' Office of Multicultural Affairs, the Quello Center organized and hosted "Minorities in the Media: Opportunities and Policies" on November 2. Targeted to minority students in high school and college interested in media careers, the half-day workshop featured two panels of industry professionals and legal and policy experts to provide practical advice to minority youths pursuing media careers.

The Fifth Annual Quello Lecture was delivered by James E. Katz, Professor of Communication and Director of the Center for Mobile Communication Studies at Rutgers University, to a standing room-only audience at MSU's Kellogg Center on November 5. Professor Katz spoke on the social and societal consequences of the rapid diffusion of wireless communication services, a subject on which he has achieved an international reputation.



Standing room only at the 2005 Quello Lecture.

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2005 center activities

Initiatives during 2005 aimed at expanding the Quello Center's leadership role as a hub for the exploration and discussion of local, regional and national communication policy and management issues.

Important events contributing to this goal were conferences, symposia, public lectures and workshops on the campus of Michigan State University in East Lansing and in Washington, DC. Center staff presented more than a dozen papers at national and international conferences and served as speakers at professional seminars and workshops. We continued to expand relations with partner organizations, including the Internet Governance Project at Syracuse University; the Communication, Culture and Technology Program at Georgetown University; and the Community and Economic Development Program at MSU.

Quello Center Conferences

In 2005, the Quello Center organized two conferences and two symposia. In addition, the Center co-sponsored several events. An April 2005 conference on "Advanced Information Infrastructure: Building Block for the Knowledge Economy" was designed to provide critical reflection

and analysis at the outset of the legislative debate on the rewrite of the Michigan Telecommunications Act. Nearly 100 attendees from industry, public interest groups, research, and government were briefed about recent developments in wireline and wireless information infrastructure from state, national, and international perspectives. Speakers included Commissioners Laura Chappelle and Robert Nelson (Michigan Public Service Commission), Lauren Van Wazer (Federal Communications Commission), Richard Wolfe (Comcast), Kevin A. Schoen (ACD Net), Philip R. Bertolini (Oakland County), and Arnold Picot (University of Munich).

An interdisciplinary conference on "The Technology, Economics, and

Policy of Unlicensed Spectrum" brought together engineers, economists, political scientists, and communications experts from research, government, and industry to explore the opportunities and challenges posed by unlicensed spectrum. The conference was part of a National Science Foundation (NSF) project (Grant No. CCF-0205281) conducted by the Quello Center in collaboration with WINLAB at Rutgers University and Eric Friedman at Cornell University. Among the attendees were leading international experts on wireless communications and spectrum issues including Francois Bar (Annenberg School, University of Southern California), Milind Buddhikhot (Lucent Technologies); Joe Evans (NSF); Gerald R. Faulhaber (Wharton School, University of Pennsylvania); Eric Friedman (Cornell University); Kevin Kahn (Intel); P.R. Kumar (University of Illinois, Urbana-Champaign); Ewan Kwerel and Lauren Van Wazer (FCC); William Lehr (MIT); Narayan Mandayam, Chris Rose, and Roy Yates (WINLAB, Rutgers University):

continued on next page



Alwin Mahler, VP Strategy, Telefónica Germany.

2005 activities *continued*

James Neel (Virginia Tech); John Peha (Carnegie-Mellon University); Christian Sandvig (University of Illinois); Anant Sahai and David Tse (University of California, Berkeley; and J.H. Snider (New American Foundation). Unique in its format and scope, the conference initiated an important trans-disciplinary dialog, which was continued at subsequent events, including the DySPAN conference organized by IEEE in November 2005 in Baltimore and the upcoming TAPAS conference in Boston.

Co-sponsored Events

Jointly with the Communication, Culture and Technology Program at Georgetown University, the Center organized a symposium on “Must History Repeat Itself: Interoperability and Open Access in the Network Economy” in October 2005 at Georgetown University. The timely event was among the first to address the important issues related to net neutrality and the future regulatory model for a broadband environment. The public policy debate has since broadened considerably, including a hearing by the U.S. Senate Committee on Commerce, Technology, and Transportation.



Above: Lauren Van Wazer (FCC) addressing the Advanced ICT Infrastructure Conference at Michigan State University. Panelists (from left): Phil Bertolini, Rex LaMore, Robert Nelson, John Ogren, Scott Oppman.



Left: Quello Lecturer James E. Katz, Rutgers University.

A half-day symposium “Minorities in the Media: Opportunities and Policy” attracted an enthusiastic audience of MSU and high school students from surrounding cities. Featuring nationally recognized experts, such as Dwight Ellis (President, DE and Associates and former Vice President of the National Association of Broadcasters). The event provided

practical insights regarding career options in broadcasting. The Center also co-sponsored a session during the “Whither the Middleman” conference of the MSU College of Law and a half-day symposium, “Internet Governance after WGIG,” with the Internet Governance Project at Syracuse University in Washington, D.C. Moreover, the Center was a prominent co-sponsor of two policy-oriented sessions during the Future Play conference on video gaming at Michigan State University. The two sessions on the effects of violent games on behavior and possible policy measures to curb undesired effects of violent games stimulated heated debates.

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2005 outreach & service

Public Lectures

This year's Quello Lecture was delivered by James E. Katz, Director of the Center for Mobile Communication Studies and Professor at Rutgers University. Speaking to a standing-room only crowd of more than 120 people, Dr. Katz explored social aspects of mobile communications and possible future scenarios for the sector.

The Center continued its series of public lectures with talks by Eszter Hargittai (Northwestern University), Peng Hwa Ahn (Nanyang Technological University, Singapore), and Alwin Mahler (Vice President Strategy, Telefónica Germany). Professor Hargittai reported on her research on Internet literacy and conducted an informal seminar for graduate students. Professor Ahn, a member of the Working Group on Internet Governance (WGIG), presented his insights as to the future policy model for the Internet. Mr. Mahler outlined the challenges facing Telefónica and other carriers in an era of convergence and migration to IP networks and services.

Center staff expanded its service to the professional community by serving on the boards of two of the most prestigious associations of researchers as well as on the organizing committees of several international conferences.

Among others, Wildman continued to serve as the Vice Chair of the Research Conference on Communication, Information and Internet Policy (TPRC) and also served on the Board of Directors of the International Telecommunications Education and Research Association (ITERA); Bauer was elected to the Executive Board of the International Telecommunications Society (ITS) and serves on the program committees of several national and international conferences.

Several presentations were given to professional audiences. Wildman delivered the keynote address to the Conference on Operational Issues for the Cable and Satellite TV Industry, Taipei, Taiwan. Bauer delivered an invited talk at the Annenberg School of Communication in Los Angeles. Bauer and Wildman also contributed to the NARUC Regulatory Studies Program, the

Michigan Summit, and Bauer served as pro bono adviser to organizations such as the Detroit Regional Chamber of Commerce and the Michigan Public Service Commission.

In 2005, the Center became the academic home of the Journal of Media Economics, published by Lawrence Erlbaum, one of the leading academic publications in the field.

The Center's international presence was further enhanced by sponsoring the 33rd Research Conference on Communication, Information and Internet Policy (TPRC) in Alexandria, VA and supporting the Communications Law and Policy Division at the annual conference of the International Communications Association (ICA) in New York.

Peng Hwa Ahn (Nanyang Technological University, Singapore)



During 2005, Center staff finished work on two externally funded research grants and initiated work on several new projects.

Our National Science Foundation project on “Achieving Innovative and Reliable Services in Unlicensed Spectrum”

is nearly completed. The project generated several presentations at international conferences, including the IEEE DySPAN conference in Baltimore, MD; the International Telecommunications Society conference in Berlin, and multiple presentations at the Research Conference on Com-

munications, Information, and Internet Policy (TPRC). Moreover, its findings are reported in refereed articles in Telecommunications Policy, and Info as well as a dissertation. Findings and additional project information are available at <http://www.quello.msu.edu/research/nsf-unlicspec.htm>. The Ford Foundation-sponsored project “Making U.S. Telecommunications Policy: Who Participates and Who is Heard?” also was completed. The study explores the contribution of research to the U.S. policy-making process and its outcomes. The resulting White Paper and other findings are available at <http://www.quello.msu.edu/research/FORD01/index.htm>.

Among the new research initiatives two stand out for their long-run implications. With start-up funding from the College of Communication Arts and Sciences, the Center established the ICT Observatory dedicated to the development of innovative benchmarks that can help improve public policy and private sector management in advanced communication networks and services. A second project explores the effect of new media, such as Internet television and content delivered via mobile phones, on traditional media, both from revenue and strategic management perspectives. The initiative brings together a team of experts from the

Key Findings:

NSF Project on Spectrum Governance

The project developed a framework and method for assessing the welfare effects of alternative spectrum governance mechanisms. A simulation approach was used to compare different forms of spectrum management, including open access, spectrum commons, and private property models. Key findings include:

- Welfare is extremely sensitive to errors by policy makers that result in too few owners in an ownership regime, while allowing too many owners has a comparatively modest effect on welfare.
- Profit-maximizing firms find it in their best interest to set device robustness very close to the level that maximizes the contribution of robustness to welfare (given the number of firms). For this reason, there is little to be gained from regulating robustness.
- If a government-set robustness requirement only sets a lower bound on robustness, firms will still set robustness close to its optimum level if government errs by setting a robustness requirement that is too low. However, the market cannot correct for a robustness requirement set too high.
- While an open commons will never perform as well as an ownership regime managed by perfectly-informed policy makers, in many cases the performance difference is small enough that mistakes made by imperfectly-informed policy makers can easily result in performance by an ownership regime that is considerably worse what might be expected from an open commons.

For more information visit <http://www.quello.msu.edu/research/nsf-unlicspec.htm>

Department of Telecommunication, Information Studies, and Media and Quello Center staff.

In addition to these larger funded and start-up projects, the Center and its research associates pursued several other research topics, including:

- Bundling as a convergence strategy in U.S. communications markets
- Antitrust and regulation of vertical relationships for communications industries
- Pricing of television and radio commercial time
- The economics of media audiences
- Targeted commercials for interactive media
- Application of complexity theory to information and communications policy
- Factors shaping the diffusion of broadband in industrialized and developing countries
- The business and economics of the wireless broadband industry
- Pricing of mobile voice and data services in the U.S.
- Effects of industry consolidation on sector performance
- A scorecard of U.S. telecom policy

Quello Center staff presented research papers at numerous

national and international conferences, including meetings of the European Communications Policy Research Conference (Potsdam, Germany), the European Conference of the International Telecommunications Society (Porto, Portugal), the Research Conference on Communication, Information and Internet Policy (Alexandria, VA) and the International Communication Association (ICA, New York). Center research was published in journals, including

Telecommunications Policy, Communications and Strategies, the Michigan State Law Review, and several book chapters. Several new papers were released in the Quello Center Working Paper series, available at <http://quello.msu.edu/research/>, which was initiated in 2003 to disseminate research findings prior to formal publication.

Key Findings:

U.S. Telecommunications Policy-making

Telecommunications policy research has grown significantly during the past decades. The number of journals pertinent to the field expanded from four in 1970 to 22 in 2004. Academic communications researchers contributed about 24% of the articles to the overall body of research; legal scholars contributed about 12%; economists about 10%; management scholars 7%; journalism scholars nearly 4%; and engineering 2%. The remainder was generated by a few other academic disciplines and experts in public and private sector institutions. Overall, the report demonstrates the importance of research but also provides hints that a significant body of potentially important research is not introduced in the policy-making process. In part, this has to do with the social dynamics of the policy process. In part it has to do with the organization and funding of research. There is evidence that conservative groups have recognized the importance of basic research and the development of policy visions more clearly than non-conservative forces with their emphasis on advocacy and grass roots movements. Moreover, we found evidence that many issues that are important for policy makers are not addressed by the research community. For more details visit: <http://www.quello.msu.edu/research/FORD01/index.htm>.

staff & affiliates

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people

- **Johannes M. Bauer** assumed the duties of co-director of the Center.
- **Gary Reid**, distinguished senior specialist in the Department of Telecommunication, Information Studies, and Media, who has been a strong supporter and contributor, accepted the position of associate director.
- **Thomas F. Baldwin**, professor of telecommunications (emeritus) was named senior fellow of the Center and will collaborate in research projects.
- **Carol Y. F. Ting**, research assistant and collaborator in the NSF research project, accepted a position as assistant professor in the School of Communications Systems Management at Ohio University.
- **Pamela Whitten**, Quello Center associate, accepted a position at Purdue University.
- **Hyun Chul Suh**, formerly executive producer with Korea Broadcasting, who spent part of 2005 as a visiting scholar at the Quello Center, was promoted to senior correspondent, Korea Broadcasting, stationed in New York.
- We welcome **Bill Zhang**, **Benjamin Johnson**, and **Nick Van Howe** as new research and office assistants.

James H. and Mary B. Quello

In a remarkable life now spanning over 90 years, James H. Quello has been a war hero, a broadcaster, and served as a FCC Commissioner for 23 years, including a year as Acting Chairman. He is also a graduate of Michigan State University. In each of these endeavors he has compiled a record of distinction that has been recognized by awards and honors to numerous to list in their entirety. Mary Quello and Jim Quello met as undergraduate students at Michigan State University and were married on September 14, 1937. While assisting Jim in his careers in broadcasting and at the FCC, she made her own mark as a distinguished designer of women's fashions.

Mission

The Quello Center maintains a national and international program of trans-disciplinary research addressing critical issues in information and communication policy and management and serves as a catalyst for the development, implementation, and evaluation of public policies and the advancement of management principles, helping to better align private sector interests with the economic and political conditions of the communication industries.