

# Quality and Reliability of Telecommunications Infrastructure

Conference Organizers: Eli Noam  
William Lehr

8:30-9:00	Registration	1:30-3:00	<b>Session # 3</b> <b>Quality Incentives: the Regulatory Challenge</b> <i>A New Index of Telephone Service Quality</i> Sanford Berg, University of Florida  <i>Dynamic Effect of Price Cap Regulation on Exchange Carrier Incentives</i> Neal Stolleman, Bellcore
9:00-10:30	<b>Session # 1:</b> <b>Network Quality: Economic Perspectives</b> <i>Vertical Integration, Interconnection and Network Quality</i> Nicholas Economides, NYU  <i>An Approach to the Pricing of Broadband Telecommunications Services</i> William Sharkey, Bellcore	3:00-3:30	<b>Coffee</b>
10:30-11:00	<b>Coffee</b>	3:30-5:00	<b>Session # 4:</b> <b>Network Reliability</b> <i>Network Utilization Principles and Pricing Options for Network Reliability: Who pays?</i> Raymond Lawton, National Regulatory Research Institute, Ohio State University  <i>Reliability, Technology and Policy</i> A representative of GTE Corporation
11:00-12:30	<b>Session # 2:</b> <b>Quality of Service: Empirical Issues</b> <i>Quality of Service Measurement at the FCC</i> Jonathan Kraushaar, FCC  <i>The Impact of Local Competition on Network Quality</i> Richard Tomlinson, Connecticut Research	5:00-6:00	<b>Cocktails: Faculty House</b>
12:30-1:30	<b>Lunch</b>		
<b>Discussants will include:</b>			
Jill Butler, Florida PUC Art Deacon, AT&T Gerald Faulhaber, University of Pennsylvania Greg Lipscomb, FCC Nelson, Ledbetter, Ameritech Page Montgomery, ETI		Al Novell, NYNEX David Peyton, ITAA Ed Regan, Chemical Bank Laura Rovizzi, Cath. U. Milan Leonard Sawicki, MCI and others.....	

Public concern is growing with respect to the effect of changes in technology, regulation and industry structure on the quality and reliability of our telecommunications infrastructure. High capacity fiber optics and software-control make it possible to offer a dizzying array of new services, but do they increase our vulnerability to systemic failure? Deregulation and increased competition may help to lower prices, but will service quality increase or decrease? How should we define and measure quality when the range of services offered and our reliance on those services have increased dramatically? Who should or is likely to bear the costs of increased (or decreased) reliability? These questions suggest a deeper, more general question about whether we can rely on the market's "Invisible Hand" to assure the provision of appropriate levels of quality in our communications infrastructure.

Policy-makers neither can nor will wait until this threat becomes manifest or recedes. Sparked by a series of well-publicized failures of the telephone network, Congress severely criticized the FCC for not being more proactive in protecting the quality and reliability of our information infrastructure in its December 1991 report, "Asleep at the Switch?". Several state PUCs have initiated proceedings and/or have issued orders which modify rate of return regulations to reflect changes in service quality. Policies are emerging in an environment where a number of important questions remain unanswered (e.g., has service quality/reliability increased or decreased in recent years? will increased facilities-based competition enhance or weaken incentives to provide quality?). To help inform the policy debate, the Columbia Institute of Tele-Information is organizing a day-long conference to present new empirical and theoretical research into how recent trends are likely to affect the quality of the Public Switched Telecommunications Network (PSTN) and an assessment of alternative policy responses. The conference will provide a forum for a broad mix of academics, government policy-makers, and industry executives representing both supplier and customer interests to share their views and expertise on this important, and until now, inadequately addressed, issue.

## Registration Information

Name \_\_\_\_\_

Title \_\_\_\_\_

Affiliation \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_

Phone (     ) \_\_\_\_\_

Fax (     ) \_\_\_\_\_

## Registration Fees:

Corporate	\$100
CITI Affiliate	\$ 50
Gov't/Academic/Non-Profit	\$ 25
[includes lunch and refreshments]	

Please return this registration form, with a check payable to:

Columbia Institute for Tele-Information  
809 Uris Hall  
New York, NY 10027

## Directions

**140 Uris Hall**  
**Columbia Business School**

The Columbia University local subway (#1/9) Stops at Broadway & 116th St. Uris Hall is located directly north of Low Library (a large domed building at the center of campus). Limited public garage space is available at Apple Garage, between 113th/114th St. on Broadway.

## About The Institute

The Columbia Institute for Tele-Information, C.I.T.I. (formerly the Center for Telecommunications and Information Studies, CTIS) was established at Columbia University's Graduate School of Business to encourage independent study of economic, management and policy issues in telecommunications and information. It provides a research environment and national meeting ground in New York City for academic researchers, government policymakers, and private and non-profit sector experts.

Economics and allied disciplines are the analytical methodologies central to C.I.T.I. research. The Institute has published over 500 working papers and 15 books. A further five volumes will be published during the next year.

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23 April 1993



**Columbia Institute**  
**for Tele-Information**