# THE NATIONAL ACADEMIES

Advisers to the Nation on Science, Engineering, and Medicine

Computer Science and Telecommunications Board

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# FINAL AGENDA

# IMPROVING SPECTRUM MANAGEMENT THROUGH ECONOMIC OR OTHER INCENTIVES: A WORKSHOP

# Lecture Room National Academy of Sciences 2101 Constitution Ave (entrance at 2100 C St.), NW, Washington, D.C.

# February 28 – March 1, 2006

# Sponsored by the National Telecommunications and Information Administration

Online registration is now closed. We will be accepting on-site registration on a space-available basis.

# Tuesday, February 28, 2006

10:30 - 10:45

Break

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8:00 – 8:30 a.m.	Registration
8:30 – 8:45	Welcome Jon Eisenberg, Acting Associate Director, Computer Science and Telecommunications Board, The National Academies Dale Hatfield, Adjunct Professor, University of Colorado, Boulder, Workshop Chair John M.R. Kneuer, Acting Assistant Secretary of Commerce for Communications and Information
8:45 – 9:00	Opening Remarks David A. Sampson, Deputy Secretary, U.S. Department of Commerce
9:00 - 10:30	Topic 1: Efficiency, Quantification, and Valuation of Spectrum
	An introductory panel will present and discuss underlying concepts and goals for spectrum efficiency.  Moderator: Adele Morris, Senior Economist, Department of Treasury
	Merri Jo Gamble, Spectrum Manager, Department of Justice Ellen Goodman, Associate Professor, Rutgers University Darrin Mylet, Vice President, Cantor Fitzgerald Pablo Spiller, Professor, University of California, Berkeley Lawrence White, Professor, New York University
	Q&A

## **Topic 2: Mechanisms, Tools, and Approaches**

The 3 panels that follow each cover a class of approaches for providing incentives for more efficient use of spectrum. Each will address particular approaches and the associated legal/policy, economic, and technical considerations; implementation issues; and lessons learned from recent initiatives. Speakers are encouraged to include in their remarks specific proposals for the use of incentive mechanisms.

#### 10:45 - 12:15

# 2.1 Exclusive Spectrum Rights and Secondary Markets

Moderator: Michael Katz, Professor, University of California, Berkeley

Stuart Benjamin, Professor, Duke University

Thomas Hazlett, Professor, George Mason University

Evan Kwerel, Senior Economic Advisor, Federal Communications Commission *Discussants:* 

Mark Crosby, President, Enterprise Wireless Alliance

Jennifer Manner, Vice President, Regulatory Affairs, Mobile Satellite Ventures Randolph May, Senior Fellow, Progress and Freedom Foundation

Q&A

#### 12:15 - 1:30

Break for Lunch

### 1:30 - 3:00

# 2.2 Unlicensed, Short-Term, Dynamic, and Shared-Use of Spectrum

Moderator: Kevin Werbach, Assistant Professor, University of Pennsylvania

Paul Kolodzy, Consultant

William Lehr, Research Associate, Center for Technology, Policy & Industrial Development, Massachusetts Institute of Technology

Jon Peha, Professor, Carnegie Mellon University

Discussants:

Vanu Bose, President and CEO, Vanu, Inc.

David Donovan, President, Association for Maximum Service Television (MSTV) Preston Marshall, Program Manager, Defense Advanced Research Projects Agency

O&A

# 3:00 - 3:15

Break

# 3:15-4:45

#### 2.3 Fee-Based and Other Mechanisms

Moderator: Simon Wilkie, Director, Center for Communication Law and Policy, University of Southern California

Martin Cave, Director, Centre for Management under Regulation, University of Warwick, UK

Michael Connolly, Senior Director, Spectrum Management Operations, Industry Canada

Discussants:

Peter Cramton, Professor, University of Maryland, College Park

Randolph Lyon, Branch Chief, Commerce Branch, U.S. Office of Management and Budget

O&A

#### 4:45

Adjourn

# Wednesday, March 1, 2006

5:00

Adjourn

8:30 - 8:40 a.m. Welcome (and introduction of Keynote Speaker) Dale Hatfield, University of Colorado 8:40 - 9:40Keynote: Hugh Railton, Former Deputy Executive Director, Asia Pacific Telecommunity 9:40 - 10:0010:00 - 11:30**Topic 3: International Experiences in Market-based Approaches** Moderator: Janice Obuchowski, President, Freedom Technologies, Inc. Martin Cave, Professor, University of Warwick, UK Bruce Emirali, Defence Frequency Manager, New Zealand Defence Force Wayne Leighton, Senior Economist, Federal Communications Commission Peter Pitsch, Director of Communications Policy, Intel François Rancy, Director General, Agence Nationale des Frequences Q&A 11:30 – 1:00 p.m. Break for Lunch **Topic 4: User Perspectives** Speakers have 10 minutes to provide brief perspective on spectrum incentive approaches and mechanisms. 1:00 - 2:30**4.1 Government Users** Moderator: Peter Tenhula, Shared Spectrum Company Tomas Gergely, Program Manager, National Science Foundation James J. Miller, Senior GPS Technologist, Space Operations Mission Directorate, National Aeronautics and Space Administration Daniel O'Rear, Electronics Engineer, Spectrum Planning & International Office, Federal Aviation Administration Victor Sparrow, Deputy Director, Spectrum Management, Department of Defense Q&A 2:30 - 2:45Break 2:45 - 4:154.2 Commercial Users Moderator: John Muleta, Partner, Venable LLP Prudence Parks, Federal Legislative Representative, United Telecom Council (UTC) Robert Pepper, Senior Managing Director-Global Advanced Technology, Cisco Charla Rath, Executive Director, Spectrum and Public Policy, Verizon Wireless Joslyn Read, Assistant Vice President, Regulatory & International Affairs, Hughes Network System Steve Sharkey, Director, Spectrum and Standards Strategy, Motorola Q&A 4:15 - 5:00Wrap Up Panel Dale Hatfield, University of Colorado, Boulder William Lehr, Massachusetts Institute of Technology Jon Peha, Carnegie Mellon University **Closing Remarks** John M.R. Kneuer, Acting Assistant Secretary of Commerce for Communications and Information