

## **Innovative Spectrum Sharing Technology Day**

Co-hosted by

U.S. Commerce Department's  
National Telecommunications and Information Administration (NTIA) and  
the National Institute of Standards and Technology (NIST)

**Tuesday, November 5, 2013**  
**10:00 am to 3:00 pm EST**

U.S. Department of Commerce, Herbert C. Hoover Building Auditorium and Lobby  
1401 Constitution Avenue, N.W., Washington, D.C.  
(Entrance on 14th Street between Pennsylvania and Constitution Avenues, NW)

### **Agenda**

Morning Session (10:00 am to 12:15 pm) – Auditorium

#### **Welcome/Introductory Remarks** **(10:00 am to 10:40 am)**

The Honorable Patrick D. Gallagher ([bio](#))  
Acting Deputy Secretary of Commerce, Under Secretary of Commerce for  
Standards and Technology, and Director of NIST

The Honorable Lawrence E. Strickling ([bio](#))  
Assistant Secretary of Commerce for Communications and Information  
and Administrator of NTIA

Dr. Jason Furman ([bio](#))  
Chairman, Council of Economic Advisers, Executive Office of the President

#### **Panel Discussion: Spectrum Sharing Policy and Research Initiatives** **(10:40 am to 11:50 am)**

##### Panelists:

Byron Barker, Co-Chair, Wireless Spectrum Research and Development Senior  
Steering Group ([WSRD SSG](#)), and Chief, Strategic Planning Division, Office of  
Spectrum Management, NTIA ([bio](#))

Dr. Jason Boehm, Director, Program Coordination Office, Office of the Director,  
NIST ([bio](#))

Dr. John Chapin, Program Director, Defense Advanced Research Projects Agency (DARPA) ([bio](#))

Dr. Andrew Clegg, Co-Chair, WSRD SSG, Program Director, National Science Foundation ([NSF](#)) ([bio](#))

Julius Knapp, Chief, Office of Engineering and Technology, Federal Communications Commission ([FCC](#)) ([bio](#))

Karl Nebbia, Associate Administrator, Office of Spectrum Management ([OSM](#)), NTIA ([bio](#))

Thomas Power, Deputy Chief Technology Officer, Telecommunications, Office of the Chief Technology Officer, Office of Science and Technology Policy ([OSTP](#)) ([bio](#))

John Quinlan, Analyst/Program Examiner, Office of Management and Budget ([bio](#))

Moderator: Peter Tenhula, Senior Advisor, Office of the Assistant Secretary, NTIA ([bio](#))

## **Overview of Exhibits and Demonstrations (11:50 am to 12:15 pm)**

### Afternoon Exhibits and Demonstrations (12:30 pm to 3:00 pm)

#### Participants: Demonstration/Exhibit

- *Cantor Fitzgerald & Co*: radio frequency exchange for purposes of creating a market for spectrum use rights.
- *Dynamic Spectrum LLC/Stevens Institute of Technology*: dynamic spectrum sharing and management capabilities over Wi-Fi and 4G networks for public safety communications.
- *Google Inc.*: Spectrum Access System with ability to ensure non-interference between a mix of primary, secondary, and tertiary users; TV band device spectrum sharing database.
- *Idaho National Laboratory*: spectrum agile RF cognitive radio platform based on Filter Bank Multi-Carrier Spread Spectrum technology.
- *Illinois Institute of Technology Wireless Communications and Networks Research Center*: low-cost spectrum sensors performing spectrum occupancy audits and supporting spectrum sharing and dynamic spectrum access.
- *InterDigital Communications Inc.*: live video/FTP streaming over 4-channel aggregated TV white space link with timely detection of TV signals and interface to database.
- *Qualcomm Inc./Nokia Solutions and Networks*: Authorized Shared Access technology for U.S. 3.5 GHz and Europe 2.3 GHz bands.
- *Shared Spectrum Company/Corning Inc.*: spectrum sensing to improve spectrum efficiency in current bands while enabling new capacity in bands such as TVWS.
- *Silicon Image*: A robust system of 6 WirelessHD video links with full high definition 1080P60 video and less than 6 ms of latency.

- *xG Technology Inc.*: xMax cognitive radio networking operating in shared spectrum bands.

**Contacts:**

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Jennifer Huergo, NIST, at [jennifer.huergo@nist.gov](mailto:jennifer.huergo@nist.gov) or (301) 975-6343.

**Additional Information:**

*Presidential Memorandum*: “Expanding America’s Leadership in Wireless Innovation” (June 14, 2013) ([Fact Sheet](#)) (NTIA/OSTP [Blog Post](#))

*Presidential Memorandum*: “Unleashing the Wireless Broadband Revolution” (June 20, 2010)

*Press Release*, “[NTIA](#) and [NIST](#) to Host Innovative Spectrum Sharing Technology Day Event” (Oct. 21, 2013) and [Federal Register Notice](#) (Oct. 28, 2013).

Innovative Spectrum Sharing Technology Day Event Page on [NIST Web Site](#).

NITRD, Wireless Spectrum Research and Development Senior Steering Group (WSRD SSG), Testing Facility Portal at [NTRD.gov](http://NTRD.gov) and [Data.gov](http://Data.gov).

*Press Release*, “[NIST](#) and [NTIA](#) Announce Plans to Establish New Center for Advanced Communications” (June 14, 2013).

DARPA, Advanced RF Mapping ([RadioMap](#)) program and Shared Spectrum Access for Radar and Communications ([SSPARC](#)) program.

NSF, Enhancing Access to the Radio Spectrum ([EARS](#)) program.