

Spectrum Policy Working Group: Designing the Wireless Future for Market-based Spectrum Sharing

William Lehr

Communications Futures Program

Massachusetts Institute of Technology

wlehr@mit.edu

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Spectrum WG

- Background
- Charter
- Chair and Organization
- Participation
- Proposed Tasks/Topics
- Deliverables

Background

An Open Future for Wireless Communications? Cambridge University, April 19 & 20	Interest? YES.
CRN/CFP Biannual Meeting Cambridge University, June 29 – July 1	Announce plans to form WG
IEEE DySPAN Baltimore, MD, November 8-11	“Liquids Protocol” panel with Crowcroft, Lehr, Reed, and Tse
Is the Future Wireless? Cambridge University, December 14-15	Road-mapping wireless

Spectrum Policy WG Charter

- *Vision:* Wireless future will entail more market-based management of spectrum access.
 - under both flexible licensed and unlicensed (commons) policy frameworks.
 - heterogeneous networks, devices, and applications need to be interoperable and interconnected
 - *Goal:* Engineer the policy frameworks to support more decentralized, distributed, and dynamic spectrum sharing among devices, applications, network infrastructure, and end-users.
 - “Policy” involves co-design of technology, business models, *and* regulatory/market institutions.
 - Must address international harmonization of regulatory frameworks to promote global growth
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Chair and Organization

- ❑ Co-chairs: Mike Chartier (Intel) & Bill Lehr (MIT)
- ❑ Organization:
 - Monthly (maybe biweekly) conference calls
 - Email list and websites
 - Semiannual CFP meetings
- ❑ Workplan and deliverables
- ❑ Coordinate with related CRN and CFP activities
 - Jon Crowcroft (Cambridge) – spectrum
 - Andy Lippman/David Reed – viral
 - etc.

Participation

- Goal is to engender lively multidisciplinary discussion of technical, business, and policy issues.
 - Avoid religious, normative debates
 - Focus on practical solutions to expanded spectrum sharing via licensed and unlicensed regimes
- Diverse backgrounds and perspectives, including technical R&D, business strategy/product marketing, and regulatory affairs should be represented
- Include non-CFP/CRN participants as needed

Proposed Topics/Focus Tasks

- ❑ International harmonization of spectrum regulation frameworks (e.g., beyond harmonized allocations)
- ❑ Rules for unlicensed operation (e.g., improved “Part 15” rules)
- ❑ Conformance assurance for next-generation radios (e.g., software radio certification)
- ❑ Policy reform to support UWB
- ❑ Secondary market mechanism design
- ❑ Protocol design for spectrum commons

Deliverables

- ❑ Active WG participation and networking opportunities
- ❑ White papers
 - Industry consensus position statement
 - Frame issues and educate (intra/extra company)
 - (Pre-) standards/regulatory proceeding filing
- ❑ Research papers for trade and academic press
 - CFP-funded students and researchers
- ❑ Panels/sessions at industry and academic conferences and workshops