

Spectrum Markets Workshop

Panel Discussion Questions
Bruce Hajek

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What new technical ideas related to wireless networks might be useful for spectrum policy makers to understand? How can advances in these areas better facilitate dynamic spectrum markets?

- ▶ Ability of a radio systems to aggregate available bandwidth, and avoid interfering with incumbent users.
- ▶ Tight interference mitigation methods are likely to increase the benefits of owner integration.
- ▶ Flexible licensing reduces spectrum policy managers' need to know.

Spectrum Workshop Northwestern University 2-3 June 2011 2

What aspects of spectrum policy/economics do you think the research community in wireless networking could benefit from better understanding?

- ▶ Tangible analogies, especially for sharing within a small location.
- ▶ Importance of identifying packages/bundles of assets for dynamic reassignment. Increased focus on compatibility of standards and lightweight Internet Protocol (IP) like overlay.
- ▶ Importance of interference across boundaries (externalities)

Spectrum Workshop Northwestern University 2-3 June 2011 3

What role might spectrum sensing/cognitive radio play in such markets?

- ▶ Increase spectral efficiency.
- ▶ Allow sharing of spectrum by multiple agents

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On what spatial and temporal scales should spectrum be traded? What technical considerations might determine this?

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What are the technical challenges around policing misbehaving users in such environments?

- ▶ Types of misbehavior could include: denial of service, shill bidding to drive up costs, stealing bandwidth without paying, privacy, security of payments
- ▶ Seems misbehavior could be detected.
- ▶ Adjudication involving lawyers

Spectrum Workshop Northwestern University 2-3 June 2011 6