March 2, 7, 9 & 14 (Lehr) – Spectrum Policy

This module of four lectures will focus on the rationales for regulating radio frequency (RF) spectrum and current topics associated with the reform of the mechanisms.

We will begin by considering the history of spectrum regulation and the evolution of wireless services from command and control assignment to auctions to the current debate over spectrum commons versus property rights. This will include discussion of issues pertaining to the economic and public policy rationales for spectrum regulation and why/how traditional mechanisms need to be modified in light of evolving technical and industry trends for wireless services. We will then move on to an introduction to the current debate over regulatory models to support licensed and unlicensed spectrum and proposals for spectrum management reform under consideration in the United States and Europe.

Assigned Readings for this module include:


Some questions to consider include:

- Please comment on the benefits/problems associated with traditional spectrum management policies.
- What ought to be the appropriate goals (roles) for spectrum management policy?
- What has changed in wireless technology, markets, and regulatory policy to make spectrum reform more likely today? What are the biggest challenges to achieving spectrum reform?
• Do you agree with the FCC's Spectrum Policy Task Force's recommendations regarding how policy should be reformed? Is this applicable elsewhere around the globe (e.g., in the developing world)?
• What are the benefits/problems with:
  • Spectrum auctions
  • Property rights applied to spectrum
  • Unlicensed spectrum access
• What are the benefits (costs) of allocating spectrum to unlicensed use instead of licensed use? Which model has produced more benefits to date? Is likely to produce more benefits in the future?

Additional (Optional) Readings (both lectures) Include:

(of these, the Marcus/WIK report provides a good recent summary overview of reform policies in a number of countries).


Lehr, William and Lee W. McKnight "Wireless Internet access: 3G vs. WiFi?", Telecommunications Policy, Volume 27, Issues 5-6, June-July 2003, Pages 351-370


