

## **EXPERTS URGE FEDERAL GOVERNMENT TO ADOPT INCENTIVES TO IMPROVE SPECTRUM EFFICIENCY**

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Experts today called on the federal government to adopt incentives to encourage more efficient use of the nation's airwaves, such as providing property rights to licensees and requiring federal agencies to pay for their frequencies.

During the first day of a two-day workshop sponsored by the National Telecommunications and Information Administration, speakers also advocated incentives to encourage greater use of unlicensed frequencies and spectrum-sharing technologies and the creation of spectrum "commons," as well as the imposition of spectrum fees and other mechanisms. NTIA is holding the event to gather expert opinions on spectrum-efficiency incentives to allow it to develop recommendations as part of the Bush administration's spectrum-management reform initiative, according to Dale Hatfield, former chief of the FCC's Office of Engineering and Technology. Mr. Hatfield is chairing the Washington event, which is being held at the National Academy of Sciences.

Deputy Commerce Secretary David Sampson asked workshop participants to "move past just theory" in proposing incentives for more efficient spectrum use, adding, "We want you to put new ideas on the table." He said those recommendations should include proposals for actions that Congress and the FCC should take to provide incentives for spectrum efficiency. He stressed that more efficient use of frequencies will free up spectrum for new applications and technologies, saying, "We're not as efficient as we could be."

Among the questions that policy-makers and lawmakers should consider are (1) whether sharing can be improved, (2) whether there needs to be increased spectrum trading and leasing, and (3) whether government agencies can use commercial providers more often, Mr. Sampson said. He also said that several other countries have made great strides in developing market incentives for efficient spectrum use, including New Zealand, Australia, and Guatemala. Reforms also are being adopted in the United Kingdom and the European Union, he added.

The most politically sensitive recommendation discussed today was requiring federal government agencies to pay for the spectrum they use. Such a practice would prompt more efficient use of government frequencies, which currently aren't being used as well as they could, the speakers said.

Lawrence White, an economics professor at New York University, said the public sector must pay for spectrum just like public safety agencies pay for police cars and radios. He also called for the "complete propertization" of spectrum rights and, like several others speakers, compared frequencies to real estate.

Michael Katz, a business and economics professor at the University of California at Berkeley, agreed and said legislators should appropriate funds to pay for needed frequencies. Thomas Hazlett, a law and economics professor at George Mason University, said the economic incentives for prompting more efficient spectrum use by government agencies was “straightforward,” adding, “It’s really a matter of getting political incentives right.”

But Merri Jo Gamble, spectrum manager for the Department of Justice, said requiring agencies to pay for their frequencies would result in tax hikes. She also said that federal government agencies shouldn’t be held to the same standards as commercial operators when measuring spectrum efficiency because of their public function, which include safety-of-life applications.

“The challenges for federal agencies are significantly different than those facing the private sector,” she said. She cited the federal budget and acquisition process as a key obstacle agencies experience in managing frequencies and acquiring new technologies and equipment. “We’re just bound by this process, and it is a political process,” she added.

An audience member, Linda Moore, a telecom policy analyst for the Congressional Research Service, said government agencies can’t compete with companies for spectrum at auctions. “There are a lot of legal issues,” she added. “There has to be a compromise.”

Ellen Goodman, an associate law professor at Rutgers University, said Congress should allow private ownership in spectrum and require the FCC to develop an interference dispute resolution process. She suggested that FCC administrative law judges be used to handle interference disputes. Randolph May, senior fellow at the Progress and Freedom Foundation, agreed..

Pablo Spiller, a business and technology professor at UC-Berkeley, described Guatemala’s success in deploying a property rights-based spectrum management system more than a decade ago. Among the lessons the U.S. can learn from the experience is the need for a spectrum conflict resolution process, he said.

Other speakers noted the difficulties in adopting a property rights regime in spectrum. Evan Kwerel, a senior economic adviser in the FCC’s Office of Strategic Planning and Policy Analysis, said that in order to limit interference, there’s a need to specify the interference obligations of licensees. The goal would be to allow licensees flexibility in choosing how to use frequencies without needing to negotiate with neighbors in other bands, he said.

While Mr. May said Congress should modify section 301 of the Communications Act of 1934, as amended, to allow private ownership in spectrum, Stuart Benjamin, a law professor at Duke University, said much can be done to provide “meaningful exclusive use” and “more robust secondary markets” without congressional action.

Jennifer Manner, vice president-regulatory affairs for Mobile Satellite Ventures, suggested that the FCC and the International Telecommunication Union reconsider outdated frequency allocations at a time when communications services are converging.

**Darrin Mylet, VP for Cantor Fitzgerald, outlined his company's new spectrum exchange, which pairs up licensees and entities seeking frequencies. While some speakers today said that commercial mobile radio service spectrum is used efficiently, Mr. Mylet said "there's a lot of spectrum outside the core markets."**

William Lehr, a research associate at the Massachusetts Institute of Technology Center for Technology, Policy & Industrial Development, urged the creation of an "ecosystem for unlicensed devices" that includes sharing protocols and the use of cognitive radios. He also suggested the Commission adopted "enhanced" part 15 rules for devices that use spectrum commons. And he said that - like licensed frequencies - the unlicensed commons regime must have a successful business model.

Paul Kolodzy, a consultant and former director of the FCC's spectrum policy task force, also suggested incentives for using unlicensed spectrum. He said, however, that either users will have to exchange interference information or interference standards will need to be imposed.- Paul Kirby, [paul.kirby@wolterskluwer.com](mailto:paul.kirby@wolterskluwer.com)