

Expand Unlicensed Spectrum, But Retain Public Interest Review and Dedicated Uses Computer Professionals for Social Responsibility

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Unlicensed spectrum is critical for the development of wireless computer networking. Since 1984, this form of spectrum allocation allowed the rapid development of technologies like the cordless phone and the garage door opener. Today the pressing demand for wireless Internet provides us an opportunity to reconsider this nineteen-year experiment in unlicensed spectrum blocks for low-powered devices. What allocation method would promote the development of wireless Internet and our national interests?

Unlicensed Spectrum Promotes Innovation in Computer Networking. Congress should expand the spectrum available for unlicensed low-powered devices, facilitating innovation and the development of new technologies, through both unlicensed parks and underlays.

Dedicated Spectrum is Still Needed for Computer Networking. At the same time, wireless Internet technology can also be promoted through the allocation of spectrum dedicated to the specific use of successful and high priority technologies like wireless Internet. Expanding the unlicensed blocks for all technologies is one successful strategy (as with the 1997 allocation of the 5.2-5.7 GHz UNII band), but spectrum allocated to particular purposes is still essential, such as the recent preservation of 216-217 MHz for Assistive Listening Devices for the hearing impaired. One proposed alternative to these strategies, auctions, is not responsible.

Spectrum Auctions are Irresponsible. As they have been used in the US, auctions have imposed high entry costs and removed any governmental responsibility for deciding which services should be offered in what regions. In this manner, spectrum auctions have suppressed the introduction of new, experimental computer networking technologies, biased the licensing process toward well-financed entities, and have presupposed that only very profitable services likely to provide a strong return on investment should be allowed.

Wireless Internet Infrastructure is a Top National Priority. Needed resources for wireless computer networking must be found even if this requires the reorganization of other services that inefficiently occupy large assignments of the electromagnetic spectrum. Compared to computer networking, the large segments assigned to many licensees for analog services are proportionally incommensurate with their national importance.

Public Interest Review Must be Retained. The use of unlicensed spectrum as a method of allocation should not be a substitute for thorough consideration of the public interest in spectrum allocation. While a block of spectrum may be unlicensed, this does not mean that we collectively abdicate responsibility to decide what services should be offered to whom. Market forces alone will not provide the needed range of communication services to all parties, and unlicensed blocks should be carefully monitored.

Universal Access to High Technology is Still Essential, and Should be Reaffirmed. Providing wireless Internet infrastructure through unlicensed stations (as in 802.11 networking or "Wi-Fi") shifts responsibility for infrastructure development from the carrier to the consumer. In the case of Wi-Fi, access points are now relatively cheap. However, if future systems are more expensive, non-profit organizations and low-income consumers will lack the expertise and resources to participate. Congress should reaffirm its commitment to equity and universal access to high technology as stated in Sec. 254(b)(3) of the Telecommunications Act of 1996.

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