

Written Statement

Of

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On

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INTRODUCTION

Good Morning Chairman Stevens, Co-Chairman Inouye, and members of the Committee. I appreciate the opportunity to appear before you today to discuss wireless issues and spectrum reform.

In my testimony, I will describe briefly the background and development of the Federal Communications Commission's (FCC) spectrum and other regulatory policies for wireless services. I will also discuss our efforts to implement these policies to license and manage the nation's non-federal spectrum resources and wireless services.

BACKGROUND

As you know, the FCC is an independent agency charged with regulating interstate and international communications by radio, television, wire, satellite and cable. The FCC's role is to regulate non-federal use of electromagnetic spectrum, while the National Telecommunications and Information Administration (NTIA) oversees federal use of spectrum. The two agencies work cooperatively to encourage sharing of spectrum when possible, and to transition spectrum use between federal and non-federal users.

I am Cathy Seidel, Acting Chief of the Wireless Telecommunications Bureau. Under the direction of Chairman Martin and the Commissioners, the Bureau oversees the use of spectrum for domestic terrestrial services. In developing and implementing the Commission's spectrum policy, we collaborate with our colleagues in the Office of Engineering and Technology, which oversees spectrum allocation for non-federal use, the Media Bureau, which oversees broadcast radio and television services, and the International Bureau, which oversees satellite services.

SPECTRUM MANAGEMENT

The central focus of the FCC's early spectrum policy and regulation was management of the problem of interference among adjacent spectrum users. Initially, the FCC sought to address this problem by employing a prescriptive, band-by-band approach whereby it allocated spectrum blocks to limited categories of spectrum users for specific services subject to detailed and restrictive service rules.

Spectrum policy, however, must keep up with the dizzying pace of change and innovation in wireless technologies. In the last several decades, wireless technology has advanced rapidly, bringing new services and capabilities to the American people. These technological advances create the potential for systems to use spectrum more intensively than in the past. The Commission's challenge has been to accommodate more intensive spectrum use while ensuring that existing spectrum users are protected from harmful interference.

To increase opportunities for technologically innovative and economically efficient spectrum use, the FCC has sought to move its spectrum policy toward more flexible and market-oriented regulatory models, both licensed and unlicensed, as alternatives to more traditional spectrum regulation. The licensed model has focused on providing exclusive, more easily transferable licensed rights to flexible-use frequencies, subject to limitations on harmful interference. The Commission has also used the "commons" or "open access" model, which allows users to share frequencies on an unlicensed basis, with usage rights that are governed by technical standards, but with no right to protection from interference.

Because each of these models offers benefits to spectrum users and the public, the Commission has sought to apply them in a balanced way, rather than attempting to rigidly apply a single regulatory model to all spectrum. This balanced approach has yielded positive results.

Wireless licensees have provided consumers with advanced mobile communications capabilities through use of exclusive and technically flexible licenses. Unlicensed services, on the other hand, have provided a wealth of innovation recently. Both models have proven valuable because they give service providers the freedom to develop innovative new service offerings and to structure their networks efficiently.

Wireless communications are also vital to the federal, state and local authorities responsible for maintaining public safety and responding to emergencies. Accordingly, the Commission has taken steps to ensure that public safety authorities have access to sufficient spectrum to meet their needs. Over the past year, the Commission has continued to dedicate significant effort to implementing a reconfiguration of the 800 MHz band to eliminate interference problems caused by the historical interleaving of public safety and commercial wireless channels in the band. The Commission is also addressing whether public safety broadband communications can be accommodated within the current twenty-four megahertz of public safety spectrum in the 700 MHz public safety band.

Another essential aspect of the FCC's role as spectrum steward is to promote the use of spectrum to provide wireless voice and data services throughout the country, including in rural and hard-to-serve areas. Over the past year, the Commission has implemented a number of policies in order to fulfill this goal. For example, the Commission reconsidered its band plan for the Advanced Wireless Service to ensure that it contains a mix of spectrum block sizes and geographic license areas. The revised band plan provides additional spectrum for licensing on a smaller geographic basis, both to promote entry by smaller and regional carriers, and to provide all potential bidders with the flexibility to obtain spectrum in the increments that best suit their needs. This band revision builds on other Commission policies intended to increase the

efficiency and flexibility with which service providers can obtain access to spectrum in rural areas, including permitting licensees to partition, disaggregate, and lease their spectrum in secondary market transactions.

AUCTIONS

A central foundation of the Commission's spectrum management policy is the mechanism it uses to award spectrum licenses. Since 1993, when Congress authorized the Commission to assign licenses through competitive bidding, the Commission has used auctions to assign commercial spectrum. All FCC licenses are subject to auction except public safety, public broadcasting, and international satellites.

The Commission's experience has shown that auctions efficiently distribute spectrum to applicants that value it most and compensate the public for use of a valuable and scarce resource. In the years since we received auction authority, bidders have won over 28,500 licenses at auction, and paid over \$14.5 billion to the General Fund of the U.S. Treasury.

Later this year, the Commission will conduct several significant auctions, including:

- *Air-Ground* – The auction of four megahertz of spectrum in the 800 MHz band for new nationwide air-ground services is scheduled to begin on May 10, 2006. For this spectrum, the Commission has developed a flexible licensing approach, offering three alternative band plan configurations. Thus, the band will ultimately be configured and licenses will be awarded based on the band plan that receives the highest aggregate bid.
- *Advanced Wireless Service* – On June 29, 2006, the auction of 90 MHz of paired spectrum in the 1710-1755 and 2110-2155 MHz band is scheduled to begin. The Commission has adopted flexible service rules for the Advanced Wireless Service, to promote innovation and development of next-generation services and capabilities in the band. Notably, this auction will occasion the first use of the Spectrum Relocation Trust Fund. Established by Congress in the Commercial Spectrum Enhancement Act, the Trust Fund allows the use of auction proceeds to reimburse federal agencies for the cost of relocating existing operations in the 1710-1755 MHz band. Another potential change to the Commission's auction processes that could facilitate the transition of non-federal incumbent spectrum users in future auctions would be the use of "two-sided auctions" or "auction vouchers."

We are also taking steps to implement Congress's directive with respect to the auction of commercial spectrum in the 700 MHz band that is being made available by the digital television transition. Congress has recently passed legislation directing the Commission to begin an auction for this spectrum no later than January 28, 2008. This spectrum is particularly well-suited for wireless broadband uses, and promises to yield significant benefits and innovative services for consumers.

In granting the Commission the authority to assign license by competitive bidding, Congress directed that we ensure that small businesses have the opportunity to participate in the provision of spectrum-based services. To achieve this mandate, the Commission has established various incentives, such as bidding credits and spectrum set-asides, to provide small businesses with opportunities to participate in auctions. As the Commission's spectrum policies have developed, we have repeatedly examined these incentives to ensure that our rules achieve their purpose – promotion of opportunities for small businesses – without unintended consequences. Currently, the Commission has an open rulemaking examining proposed modifications to the Commission's rules regarding relationships between small businesses and large communications service providers.

WIRELESS SERVICE REGULATION

In its regulation of the wireless industry generally, the Commission has relied largely on competition to drive innovation, lower prices, and protect consumer interests. This light-handed approach has produced robust competition in the commercial mobile wireless sector, to the benefit of consumers. In the past five years, the number of subscribers to commercial mobile services has more than doubled from 97 million in June 2000 to 195 million in June 2005. Mobile telephones have gone from high-end luxury services to commonly available

communications devices. In addition to providing voice services, wireless providers are increasingly bringing broadband capability to subscribers in the places that they live and work.

Although the Commission has taken a light-handed regulatory approach to wireless regulation, the government continues to play an important role in setting the rules for spectrum use, such as protection from harmful interference. The government also plays an important role in national consumer protection issues. For example, the Commission has implemented regulations to ensure the hearing disabled have access to wireless handsets and that all wireless consumers have access to enhanced 911 and local number portability.

CONCLUSION

Thank you for the opportunity to testify before you today regarding wireless issues and spectrum reform. I would be pleased to answer any questions.