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**COMMISSIONER, FEDERAL COMMUNICATIONS COMMISSION**  
**HEARING BEFORE THE SUBCOMMITTEE ON COMMUNICATIONS AND**  
**TECHNOLOGY OF THE UNITED STATES HOUSE OF REPRESENTATIVES**  
**COMMITTEE ON ENERGY AND COMMERCE**

**“KEEPING THE NEW BROADBAND SPECTRUM LAW ON TRACK”**

DECEMBER 12, 2012

Chairman Walden, Ranking Member Eshoo, and Members of the Subcommittee, it is a privilege to appear before you today. The Spectrum Act originated in the efforts of this Subcommittee and was the result of bipartisan leadership, hard work, and compromise by you and many other dedicated Members of Congress. You deserve great credit for the passage of this historic legislation.

I began my term at the Federal Communications Commission just a few months after Congress passed the Spectrum Act, and thus a large part of my time at the agency has been spent evaluating and implementing the responsibilities that Congress entrusted to us in the statute.

The Commission’s primary charge in this regard is to release additional spectrum into the commercial marketplace to address the looming spectrum crunch. As an advocate of an all-of-the-above approach to spectrum policy, I have happily embraced the challenge.

When it comes to FCC implementation of the Spectrum Act, two factors counsel in favor of prompt action. First, consumers are adopting devices like data-hungry smartphones and tablets operating on 4G LTE networks that are straining the capacity of the airwaves. More spectrum is needed to meet this demand. Second, the broadcast incentive auction is our best opportunity to push a large amount of spectrum well-suited for mobile broadband into the commercial marketplace. Accordingly, this past summer, I called for the FCC to commence the incentive auction rulemaking process in the fall. To his credit, Chairman Genachowski launched a timely proceeding in September, and I thank him for that.

As the Commission moves forward, I believe that four principles should animate our work. *First*, we must be faithful to the statute. It is our job to implement this legislation, not to rewrite it to conform to our policy preferences. *Second*, we must be fair to all stakeholders. This is especially important because the incentive auction will fail unless both broadcasters and wireless carriers choose to participate. *Third*, we must keep our rules as simple as possible. The broadcast incentive auction is inherently complicated; unnecessary complexities are likely to deter participation. And *fourth*, we need to complete this proceeding in a reasonable timeframe. I believe that we should set a deadline for conducting these auctions no later than June 30, 2014. I am optimistic that fidelity to these principles will result in a successful broadcast incentive auction.

That said, I do have some concerns with the direction of our proceeding. Most notably, September’s Notice of Proposed Rulemaking appears to envision an auction that will yield no net revenues. That would mean no money for the First Responder Network Authority (FirstNet) to build out a nationwide, interoperable public safety broadband network; no money for state and local first responders; no money for public safety research; no money for deficit reduction; and

no money for next-generation 911 implementation. The Spectrum Act mentions each of these items, which makes it difficult to square that legislation with an auction that would provide no funding for them.

Most of the problem stems from the structure of the proposed auction. The only closing condition set forth in the NPRM is that the revenues from the forward auction must cover the costs of the reverse auction.<sup>1</sup> I do not believe that this closing condition is sufficient since it is essentially like ending a traditional auction as soon as the reserve price is met.

Another part of the problem derives from limits the Commission might place on auction participation. We need robust participation from television broadcasters, current wireless operators, and new entrants. The more people at the party, so to speak, the better the party will be. But if the Commission preemptively tells broadcasters “You may bid this high, but no higher,”<sup>2</sup> many may not show up for the reverse auction. And if the Commission starts picking and choosing who may participate in the forward auction—such as by setting a spectrum cap or narrowing the spectrum screen despite the robust competition in the wireless market<sup>3</sup>—it will result in less participation, less revenue, less spectrum available for mobile broadband, and less funding for public safety.

It’s worth exploring a bit further the implication of the last item I mentioned. Ensuring interoperable public safety communications has been a national priority for over a decade. Indeed, the 9/11 Commission identified the lack of interoperability as a serious hole in our nation’s public safety communications and demanded that it be addressed.<sup>4</sup> Given the importance of constructing an interoperable public safety network, as well as the need to reduce the deficit and fund next-generation 911, I believe the FCC must seek to maximize the net revenues obtained through the commercial broadcast incentive auction.

We have yet to hear from the public about the Commission’s proposed structure for that auction. But I hope that commenters will point us in the right direction. I also look forward to continuing to receive input from Congress, particularly Members of the Subcommittee. Given your key role in crafting this legislation, it is vital that the Commission keep open the lines of communication with you.

Aside from the broadcast incentive auction, the Spectrum Act sets several additional targets for getting more spectrum to market. An important one involves the so-called H Block, a set of frequencies that has lain fallow for years. This afternoon, we will propose rules for auctioning that spectrum. It has been four long years since the Commission last held a major

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<sup>1</sup> See *Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions*, Docket No. 12-268, Notice of Proposed Rulemaking, 27 FCC Rcd 12357, 12379, paras. 67, 69 (2012).

<sup>2</sup> See *id.* at 12377, para. 53 (“[W]e also will consider implementing a reserve price, or maximum payment, that would be made to broadcasters relinquishing spectrum usage rights. This reserve price could take the form of a maximum dollar payment to a broadcaster based on characteristics of the station such as population or viewership.”); *id.* at 12564 (same).

<sup>3</sup> See *Policies Regarding Mobile Spectrum Holdings*, WT Docket No. 12-269, Notice of Proposed Rulemaking, 27 FCC Rcd 11710, 11720, 11728, paras. 20–21, 39 (2012); *id.* at 11758–59 (Concurring Statement of Commissioner Ajit Pai) (outlining concerns about certain proposals), available at <http://go.usa.gov/gQWe>.

<sup>4</sup> See *The 9/11 Commission Report* at 292–93 (2004) (observing that lack of interoperability impeded coordination of New York Port Authority Police Department’s response); *id.* at 398 (recommending establishment of “communications connectivity between and among civilian authorities, local first responders, and the National Guard”).

spectrum auction. Although the 10 MHz of H Block spectrum is much less than the 52 MHz we sold in Auction 73, the upcoming auction may create the momentum needed to free up more commercial spectrum.

Next, I hope and expect that in the near future we will commence a proceeding on making available almost 200 MHz of spectrum for unlicensed use in the 5 GHz band. Doing so is a legal obligation—the Spectrum Act directs us to do so—but I am especially excited about it because it’s smart policy. The standard for next-generation Wi-Fi—IEEE 802.11ac—already has been developed. That standard requires large, contiguous swaths of spectrum for high-speed, high-capacity data transfers. The 5 GHz spectrum identified in the Spectrum Act is tailor-made for this innovative standard. For one thing, there are relatively few incumbents compared to, say, the broadcast television spectrum, which mitigates coordination and relocation difficulties. For another, the propagation of 5 GHz spectrum is relatively short, which minimizes interference and makes 5 GHz perfect for common unlicensed applications such as in-home use. Finally, the technical attractiveness of this spectrum will encourage manufacturers to focus their investments on what consumers want: faster processing with less power consumption at lower prices.

The Spectrum Act also directs the Commission to auction off the 25 MHz of spectrum adjacent to AWS-1 (2155–2180 MHz). This spectrum would ideally be paired with another 25 MHz block adjacent to AWS-1: 1755–1780 MHz. These bands are already internationally harmonized for commercial use, which means deployment will be swifter and cheaper than other options. If we auction off this spectrum in the next two years, it could raise billions of dollars.

But as you know, this spectrum is currently allocated to the federal government. Reallocating it for commercial purposes will require the cooperation of the National Telecommunications and Information Administration (NTIA) and incumbent users. Unfortunately, recent developments on this front are less than encouraging. In March, the NTIA relayed what other federal agencies told them: that it would cost \$18 billion and take at least ten years to relocate federal incumbents to clear a substantially larger band of spectrum.<sup>5</sup> These claims were not verified, nor did the NTIA’s report identify what it would take to clear just the 1755–1780 band. In July, the President’s Council of Advisors on Science and Technology recommended that the government divert its efforts from clearing spectrum and focus instead on sharing it.<sup>6</sup> In short, it has become apparent that some have given up on clearing this spectrum in favor of auctioning off “shared rights.”

I’m not opposed to spectrum sharing. For example, geographic sharing by creating exclusion zones around certain areas can be a useful tool. And spectrum sharing may be a workable alternative when auctions can’t be used to raise funds for relocation, such as in higher bands like the 5 GHz band. But if our goal is to incentivize investment in wireless networks, nothing beats clearing.

Spectrum sharing is a complicated and largely untested endeavor that requires a lot of coordination among potentially hundreds of federal users and licensees. The largest wireless providers in America may be both willing *and able* to do so. But I doubt that smaller ones who lack the time or resources are. Indeed, the GAO recently reported to Congress that federal

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<sup>5</sup> U.S. Department of Commerce, *An Assessment of the Viability of Accommodating Wireless Broadband in the 1755–1850 MHz Band* (Mar. 2012).

<sup>6</sup> President’s Council of Advisors on Science and Technology, *Report to the President: Realizing the Full Potential of Government-Held Spectrum to Spur Economic Growth* (July 2012).

sharing would require a lengthy and unpredictable process that would be especially costly for new entrants.<sup>7</sup>

And sharing could embroil the Commission in lengthy and sensitive interference disputes. After all, an interference dispute between a commercial licensee and a government user is far more likely to become mired in politics than an argument between two private parties—especially if the government agency uses that spectrum for defense or other high-priority operations. Recent experience suggests that we should be reluctant to enter this thicket.<sup>8</sup>

The better course, in my view, would be to prioritize the clearing of federal spectrum and to develop proposals that could enable productive collaboration between and among the FCC, the NTIA, commercial users, and federal users. We need to think creatively about all options, such as establishing financial incentives for federal users to relocate. And we should be proactive in this effort, for the opportunities—and opportunity costs—are tremendous. I can't put it any better than the House Energy and Commerce Committee's bipartisan Federal Spectrum Working Group: "Finding more efficient ways for the government to use this valuable public asset without compromising critical objectives would not only produce dividends for government agencies, but also inject additional resources into the private sector to spur our economy."<sup>9</sup>

So those are some of the projects we are working on at the Commission with regard to commercial spectrum. But what about the other goal of the Spectrum Act: improving public safety? Most of the work on public safety will be done at other agencies, especially the NTIA, which hosts the First Responder Network Authority (FirstNet). The Act did, however, require the Commission to facilitate the transition of the public safety broadband spectrum to the new administrator. We have worked efficiently toward this goal in three basic ways.

*First*, the Commission created a Technical Advisory Board for First Responder Interoperability and on June 21, 2012 transmitted the Board's minimum technical requirements to FirstNet via the NTIA.

*Second*, on July 31, 2012, the Commission adopted an order replacing the waivers held by certain state and local early-adopters with a process we call "Special Temporary Authority" or STA. This gives jurisdictions permission to continue to deploy and operate their wireless public safety networks if they meet the interoperability standards, have completed significant deployment, and demonstrate a specific safety need. (Unfortunately, only Harris County, Texas has been able to obtain an STA to date.)

*Finally*, the Commission granted FirstNet its official license with call sign WQQE234 on November 15, 2012. The Commission is still working on a proceeding to establish service rules and other requirements related to this license, and I hope we complete that proceeding in a timely fashion.

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<sup>7</sup> See Government Accountability Office, *Spectrum Management: Incentives, Opportunities, and Testing Needed to Enhance Spectrum Sharing*, GAO-13-7, at 14 (Nov. 2012).

<sup>8</sup> See, e.g., Letter from Lawrence Strickling, Assistant Secretary of Commerce for Communications and Information, to Julius Genachowski, Chairman, Federal Communications Commission at 1, 8 (Feb. 14, 2012) (describing potential impact of LightSquared's proposed terrestrial operations on Global Positioning System services and stating that no mitigation strategy could alleviate concerns about potential interference), *available at* <http://go.usa.gov/gQZj>.

<sup>9</sup> Letter from House Energy and Commerce Committee Federal Spectrum Working Group to Lawrence Strickling, Assistant Secretary of Commerce for Communications at 1 (July 10, 2012), *available at* <http://go.usa.gov/gQ5d>.

The Act also required the FCC to establish a Do-Not-Call registry for telephone numbers used by Public Safety Answering Points (PSAPs) and to prohibit the use of automatic dialing equipment to contact registered numbers. Congress recognized that when Americans call 911, it is vital that they reach emergency personnel quickly. Public safety lines can't be tied up with non-emergency calls, and those who staff Public Safety Answering Points (PSAPs) can't be diverted by such calls. I am pleased that the Commission adopted rules on October 17, 2012 to allow for the creation of the PSAP Do-Not-Call registry. Our rules provide effective protection for public safety while at the same time minimizing the compliance burdens on those who operate automatic dialing equipment.

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The Spectrum Act gave the Federal Communications Commission some very challenging tasks. But if we accomplish them, our nation's commercial and public safety communications capabilities will improve dramatically. Chairman Walden, Ranking Member Eshoo, and Members of the Subcommittee, I thank you again for holding this important hearing. I look forward to listening to your views, answering your questions, and continuing to work with you and your staff to implement this landmark legislation.