

**Before the
National Telecommunications and Information Administration
Washington, DC 20230**

In the Matter of)
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Relocation of Federal Systems in the 1710-) Docket No. 0906231085-91085-01
1755 MHZ Frequency Band: Review of the)
Initial Implementation of the Commercial)
Spectrum Enhancement Act)
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COMMENTS OF THE TELECOMMUNICATIONS INDUSTRY ASSOCIATION

The Telecommunications Industry Association (TIA) hereby submits comments to the National Telecommunications and Information Administration (NTIA) in the above-captioned proceeding.¹ TIA, on behalf of its member companies, applauds NTIA for its efforts to maximize Federal spectrum use efficiency and seek ways to make unneeded Federal spectrum available for commercial use. A vital step in this effort is this proceeding's focus on collecting assessments of the administration and processes of the Commercial Spectrum Enhancement Act (CSEA).

The Telecommunications Industry Association (TIA) represents the global information and communications technology (ICT) industry through standards development, advocacy, tradeshow, business opportunities, market intelligence and world-wide environmental

¹ Relocation of the Federal Systems in the 1710-1755 MHz Frequency Band: Review of the Initial Implementation of the Commercial Spectrum Enforcement Act, Notice of Inquiry, 74 Fed. Reg. 32131, 32132 (July 7, 2009) (NTIA CSEA NOI).

regulatory analysis. Its 600 member companies manufacture or supply the products and services used in the provision of broadband and broadband-enabled applications. With roots dating back to 1924, TIA enhances the business environment for broadband, mobile wireless, information technology, networks, cable, satellite and unified communications. Members' products and services empower communications in every industry and market, including healthcare, education, security, public safety, transportation, government, the military, the environment and entertainment.

TIA is a proponent of good stewardship of government and commercial spectrum with the goal of ensuring that the U.S. is supported by both effective government systems able to meet mission needs and commercial spectrum uses, including broadband. TIA supported the CSEA and continues to urge for effective spectrum management. TIA also believes that an essential part of such management is conducting a spectrum inventory. While TIA has not been a party to the most recent use of the CSEA — for the relocation of government users in the AWS band — its member companies, in working to provide new technologies operating in the AWS band, have identified areas for improvement in the administration of the CSEA.

SUMMARY

Wireless innovations are deeply impacted by spectrum availability. Future services will require higher data rates and lower latency than those available today. The ability of wireless technology to provide high data rates wirelessly largely depends on the amount of spectrum that can be harnessed for use as a contiguous unit. However, based on the current limited and fragmented commercial spectrum allocations, further evolution of wireless technologies and services is severely hampered. NTIA and the Federal Communications Commission (FCC) play

a very important role in the future growth of mobile broadband by improving their spectrum management processes and improving the CSEA process to reallocate spectrum in a predictable and cost-efficient manner. Thus, NTIA and the FCC should develop an inventory of Federal spectrum used for terrestrial telecommunications systems that may be suitable for allocation for, and sharing with, commercial use.

CSEA is extremely important to the future of wireless broadband deployment, as it provides a means to implement spectrum policy decisions and fund efficient spectrum reallocations through the Spectrum Relocation Fund (SRF) in a manner intended to meet the needs of the effective parties. The CSEA process of considering relocation of users, both Federal and non-Federal, is an ongoing one. For Federal users, it is dependent upon the availability of cost effective equipment, alternative comparable spectrum optimized for the mission, and funding for relocating impacted systems and services or the purchase of new systems. CSEA, as implemented, generally achieves these priorities well. However, in order to most effectively make former Federal-use spectrum available to commercial parties in a way that will maximize that spectrum's potential public benefits, NTIA should enhance the CSEA's process with more transparent rules and efficient procedural efforts. Further, recent Office of Management and Budget (OMB) rules regarding the technologies that the SRF can fund should be applied in a way that allows for Federal use of the best technologies while maintaining costs below the funds received in spectrum auctions. Finally, it is vital that NTIA work with all Federal agencies to educate Federal users about the need for and opportunities inherent in better spectrum management. Through these initiatives, NTIA has a unique and critical opportunity to dramatically increase the effectiveness of Federal spectrum use and drive wireless technology and service innovation.

I. NTIA Should Improve the Clarity and Efficiency of the CSEA Process.

TIA agrees with NTIA's assertion that CSEA, with effective administration, can provide three concurrent benefits:

- i. Commercial firms and consumers benefit from expediting the process for freeing additional radio frequencies for new or expanded services;
- ii. Federal agencies benefit from the funds the Spectrum Relocation Fund (SRF) provides for state-of-the-art systems they will use in new spectrum locations; and
- iii. The Federal budget process is enhanced by providing that unused spectrum auction receipts revert to the Treasury's general fund.²

However, the current CSEA process has been both lengthy and uncertain for the agencies whose systems are relocating and for the commercial entity that purchased the spectrum rights. In order to maximize CSEA's potential, the CSEA process should be refined by increasing certainty in spectrum relocation processes and creating an overall plan for providing spectrum for commercial use.

As indicated by the Commerce Spectrum Management Advisory Committee (CSMAC) in its latest report detailing methods to increase government adoption of commercial technologies, increase spectrum efficiency, and improve the process for identifying spectrum for reallocation, potential commercial bidders of available Federal spectrum have not had clear guidance as to benchmark auction and other procedural timelines, thereby limiting the interest in acquiring Federal spectrum for innovative commercial services.³ To make the CSEA spectrum auction process successful, bidders need to have such information at the outset of the auction process.

² NTIA CSEA NOI at 32,132.

³ Commerce Spectrum Management Advisory Committee Transition Report, Dec. 13, 2008, 30 (Dec. 2008 CSMAC Report) (available at: [http://www.ntia.doc.gov/advisory/spectrum/meeting_files/CSMAC_Transition_Report_\(121208b_-_CLEAN\).pdf](http://www.ntia.doc.gov/advisory/spectrum/meeting_files/CSMAC_Transition_Report_(121208b_-_CLEAN).pdf) (last visited Aug. 20, 2009)).

Moreover, as the Dec. 2008 CSMAC Report also stated, NTIA should develop and make publicly available a plan that will clearly lay out each step it will take to identify and swiftly make commercially available spectrum currently used by the Federal government.⁴ These recommendations, and many others that CSMAC makes, should swiftly be implemented to make the CSEA process effective for both Federal spectrum incumbents and commercial entities.

Concurrent with developing clear auction timelines, transparent related procedural rules, and an overall spectrum availability plan, NTIA should establish a spectrum reallocation process that can be completed within two or three years, contrasting with the seemingly open-ended nature of recent reallocation efforts.⁵ To accomplish this, there may be an opportunity for NTIA to work with colleagues in the Office of Management and Budget, who control the SRF and are in a position to speed the auction process along from both a financial and administrative perspective. Market-based approaches and incentives are also needed to encourage Federal agency incumbents to seek more efficient spectrum arrangements.

II. NTIA Should Reexamine the “Same Functionality Rule” and Ensure That it Does Not Impede Provision of State-of-the-Art Technologies for Federal Agencies.

In its role of governing the SRF under the CSEA and approving funding levels and timelines which finance Federal spectrum relocation activity, the OMB released a Memorandum on October 14, 2008 providing guidance to agencies receiving funding from the SRF.⁶ A key provision in this Memorandum that could impede the overall goals of the CSEA, if not

⁴ See *id.*

⁵ See *id.* at 28-30.

⁶ Memorandum from Jim Nussle, Director of Office of Management and Budget, to Heads of Executive Departments and Agencies, Spectrum Relocation Fund Guidance (Oct. 14, 2008).

contextually applied, is the “same functionality rule.” The OMB stated that initial or subsequent requests for SRF funding should be limited to maintain “comparable capability of systems,” which is a replacement telecommunications system’s ability to provide the same functions as the legacy systems, regardless of whether that capability is achieved by relocating to a new frequency assignment or by utilizing an alternative technology.⁷ The OMB made clear that replacement by state-of-the-art technology is only permitted when the system functions are not significantly expanded.⁸ The OMB then noted that SRF funding is not authorized to increase the functional capabilities of telecommunications systems.⁹

While this rule serves an important purpose — to provide some certainty to the commercial bidders of relocation costs — newer radio-based systems have dramatically improved functionality compared to those that the government used in the spectrum being reallocated. Therefore, to satisfy the “same functionality rule” and provide Federal systems with the technology matching their original capacities, only older telecommunications products could be used, making the systems less effective and more costly. Moreover, this seems inconsistent with NTIA’s goals as stated in the NOI to provide Federal agencies with state-of-the-art systems for use in new spectrum locations.¹⁰ TIA urges NTIA to work with OMB to ensure that the “same functionality rule” is applied in a way that enables government spectrum users to benefit from advances in technologies and technology capabilities, provided that the basic economic equation

⁷ See id. at 2.

⁸ See id.

⁹ See id.

¹⁰ See NTIA CSEA NOI at 32,132.

underlying the CSEA can still be met: that proceeds from commercial auctions should exceed predictable relocation cost.

III. Information and Education is Needed for Federal Agencies to Assess What Technologies and Spectrum Opportunities are Available to Them.

Federal government spectrum managers and their IT departments will benefit from education, leadership, and input from NTIA, the FCC, and industry on the various ways their spectrum-based ICT needs might be met by more spectrally efficient radio/satellite systems, non-radio-based technologies, service provider broadband, and IP-based applications. In taking this initiative, spectrum and IT managers will have a clear idea of their options and likely cost. This process should occur on an ongoing basis.

As noted by CSMAC, “[t]he efficient use of spectrum allocated to government usage requires ongoing monitoring and proactive management. Such management involves monitoring allocations and usage, considering future needs and new technologies, and planning and adapting equipment and services to best suit the changing situations.”¹¹ The recent advent of terrestrial wireless broadband is just one example of how the facts about applicable technologies and applications are rapidly changing, and might change the government’s spectrum use. New capabilities are also available from satellite vendors as well.

TIA recommends that, in addition to reviewing the operations of the CSEA, NTIA begin the education and review process with Federal agencies to determine if Federal communications mission needs could be met with different spectrum and technologies or via commercial

¹¹ Dec. 2008 CSMAC Report at 29.

broadband service provider architectures. In addition, NTIA should consider whether the spectrum that might be repurposed could be utilized by commercial providers.

The AWS transition took many years from the time government started its review to when the auction winner could begin offering commercial services.¹² That transition continues today.

Mindful of this history, NTIA should begin the cycle anew, motivated by the need to ensure that the missions of the Federal agencies are met. The country's future commercial broadband capabilities depend upon good stewardship of spectrum.

¹² The Omnibus Budget Reconciliation Act of 1993 required the Secretary of the Department of Commerce to identify at least 200 MHz of spectrum allocated for use by Federal agencies that could be reallocated. See Pub. L. No. 103-66, § 6001, 107 Stat. 312 (1993). To that end, in February 1995, the Department of Commerce released its final report which identified such frequencies bands, including 1710-1755 MHz. See Spectrum Reallocation Final Report, Response to Title VI – Omnibus Budget Reconciliation Act of 1993, NTIA Special Publication 95-32 (1995). Then, the Balanced Budget Act of 1997 required the FCC to identify spectrum for assignment to licensees using competitive bidding including 40 MHz at 2110-2150 MHz. See Pub. L. No. 105-33, § 3002, 111 Stat. 251, 262 (1997); House Conf. Rep. No. 105-217 at 574. After additional NTIA and FCC proceedings concerning these bands, they were auctioned in the AWS Auction (Auction 66), which was completed on September 18, 2006. Licensees were legally permitted to begin offering service once the licenses were granted following auction. After the completion of the AWS auction, the first licenses were granted on November 29, 2006. See News Release, FCC Grants First Advanced Wireless Services Licenses Won in Auction 66 (Nov. 29, 2006). On April 30, 2007, the FCC completed its review of the applications for AWS licenses won and granted all but one of the licenses (the lone exception being subject to a special certification with regard to the Tribal Land Bidding Credit). See News Release, Wireless Telecommunications Bureau Completes Review of Applications for Licenses for Advanced Wireless Services (Apr. 30, 2007). However, as a practical matter, because of the incumbencies, it has taken substantially longer for the rollout of commercial services in the AWS-1 band – with variations on a market-by-market basis depending on incumbent operations. See August 6, 2009 Notice of Ex Parte Contacts filed by Kathleen O'Brien Ham, Vice President of Federal Regulatory Affairs, T-Mobile, filed in GN Docket No. 09-51; WT Docket No. 06-150; PS Docket No. 06-229; WT Docket No. 05-265; WT Docket No. 00-193; and WC Docket No. 05-25 (noting ongoing challenges in different regions and among federal entities to clear AWS-1 spectrum).

IV. Conclusion.

For the reasons stated above, TIA urges the NTIA to revise its CSEA process by increasing certainty among stakeholders in spectrum relocation processes, creating a comprehensive plan for providing spectrum for commercial use, balancing the “same functionality” rule so that Federal users are provided the best technologies possible in the context of SRF revenue funding, and educating Federal agencies on how best to address their spectrum needs and identify spectrum available for commercial use.

Respectfully submitted,

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ASSOCIATION

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