



Computer Systems Policy Project

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Mr. Norbert Schroeder
Strategic Spectrum Planning
and Reform Division
National Telecommunications and Information Administration
U.S. Department of Commerce
1401 Constitution Avenue, NW, Room 4082
Washington, DC 20230

Re: Docket No. 040127027-4027-01: United States Spectrum Management for the 21st Century, Notice of Inquiry

Dear Mr. Schroeder:

The Computer Systems Policy Project (CSPP) appreciates this opportunity to provide recommendations to the National Telecommunications and Information Administration (NTIA) regarding improving the U.S. spectrum management system, in response to the above-referenced Notice of Inquiry (NOI) dated January 28, 2004.

I. Introduction

CSPP is a public policy advocacy group comprised of the Chairmen and Chief Executive Officers from America's leading information technology companies.¹ CSPP provides recommendations on public policies with a transformative impact on society, including broadband deployment and networked world infrastructure, digital rights management, privacy, export controls, and international trade.

CSPP commends the Administration for initiating in June 2003 a comprehensive review of the systems for managing both private commercial and government spectrum. As the President stated in the Executive Memorandum directing this one-year effort, "[t]he existing legal and policy framework for spectrum management has not kept pace with the dramatic changes in technology and spectrum use." (Presidential Memorandum on Spectrum Policy for the 21st Century, published in 69 FR 1568 (Jan. 9, 2004)). CSPP wholly agrees with that assessment. Spectrum is a critical component of our national competitiveness and innovation infrastructure and improving spectrum management is a top policy priority of the IT sector. CSPP strongly supports this initiative and hopes that it paves the way for near-term improvements as well as strategic long-term spectrum planning for the U.S.

¹ CSPP's members include Dell, Inc., EMC Corporation, Hewlett-Packard Company, IBM Corporation, Intel Corporation, Motorola, NCR Corporation and Unisys Corporation.

Wireless technologies are playing an increasingly central role in accelerating deployment of broadband services that will lead to innovation, economic growth and quality of life improvements for all Americans. The astonishing growth and popularity of Wireless Fidelity (WiFi) in less than five years has revealed the huge untapped potential of wireless technologies to revolutionize and dramatically improve how consumers, businesses and the government communicate. WiFi's success has demonstrated that wireless technologies and services will be major catalysts for making broadband truly ubiquitous and economical.

The Administration's 21st Century spectrum initiative provides a critical opportunity to establish a long-term strategic and national vision for spectrum management building on a foundation of recent case-by-case successes such as WiFi. In Section II, CSPP describes in more detail why a national spectrum vision and strategy is vital to the IT sector in particular, and to U.S. competitiveness and economic growth generally. Section III outlines several policy recommendations which CSPP urges the NTIA and the Department of Commerce to include in the final report to the President scheduled to be completed by mid-2004.

II. Improved Spectrum Management Will Jumpstart Innovation and Advance American Technological and Economic Leadership

In a 2002 policy report, *Building the Foundation of the Networked World*, CSPP outlined the importance of establishing and implementing a national spectrum strategy linked to national broadband deployment goals. CSPP stated:

If we are to take advantage of the economic, social and security benefits of the Networked World, effective broadband deployment and spectrum management should be a major priority for this country. In the past the two have been bifurcated; CSPP proposes that together, the wired and wireless networks make up the basic platform of a robust Networked World infrastructure and should support future IT applications that can dramatically improve our quality of life...a vision of a next-generation broadband platform that includes both wired and wireless applications to stimulate investment, create new jobs, and respond to the current need for economic growth and increased security.

Building the Foundation of the Networked World at 2. In the report, CSPP urged the U.S. government to establish an interagency National Spectrum Management Policy Group that would assess how to expedite and improve spectrum policy decisionmaking and to create a long-term national strategy for both government and non-government spectrum in a way that embraces next-generation technologies. *Id.* at 21-22.

CSPP believes that the NTIA's work in the 21st Century spectrum initiative is central to realizing the benefits outlined above. The Administration and the FCC face substantial challenges in managing a system that preserves public safety, national security and other vital public interest spectrum applications while leaving room for new technology. However, very recent successes by the FCC and the Administration in negotiating creative spectrum sharing arrangements between government and commercial users to open up more unlicensed spectrum for WiFi and WLANs, increasing allocations for 3G and authorizing new Ultra Wide Band (UWB) uses, among other initiatives, demonstrate the benefits to the economy and to U.S. IT leadership that flow from tackling these challenges. These results also demonstrate

that to maintain our leadership and competitiveness we need to embrace and nurture breakthroughs in wireless network performance that IT companies are creating. Spectrum policymakers and managers should work to ensure that our spectrum management system takes advantage of new network technologies having the ability to dramatically enhance spectrum capacity. Our regulatory and policy approaches to spectrum management must move forward with technological innovation and not stand as barriers to it.

III. Policy Recommendations

CSPP urges the NTIA and the Department of Commerce to incorporate the following recommendations for improving the spectrum management system in the final report to the President:

A. Formalize and Direct the Interagency Coordinating Process for Commercial and Government Spectrum Planning and Management, and Emphasize Informed Long-Term Planning (NOI Questions 1 and 8)

The Administration and the FCC have made good progress in achieving additional allocations for innovative spectrum services on both a licensed and unlicensed basis. For example, they have accommodated emerging UWB services and are continuing to assess UWB's potential and evolution; they substantially increased unlicensed spectrum for WLANs at 5 GHz; and expanded allocations for 3G services.

CSPP believes that, in fact, many of the elements for a long-term cohesive and successful approach to spectrum management can be found in the above cases. CSPP urges the Administration to formalize and direct the interagency coordinating process for commercial and government spectrum planning and management based on these accomplishments. The ability to make substantial progress in expanding 3G, WLANs and other innovative wireless services has frequently been based more on the shared commitment of the leaders at any given time who are responsible for spectrum management in the Administration and at the FCC. Rather than allowing spectrum reform improvements and breakthroughs to depend on fortuitous efforts of specific policymakers, CSPP urges the Administration to work to formalize on a government-wide basis the coordination processes that led to these tremendous achievements. Absent that, progress may remain ad hoc and the bifurcated management system (FCC and NTIA) may continue to present obstacles to the U.S. achieving the most efficient and beneficial use of the spectrum, a position inconsistent with sustaining our global IT leadership.

CSPP believes that achieving fundamental organizational changes in interagency spectrum management coordination would have the added benefit of providing a consistent, open forum in which affected interests could engage all spectrum policymakers in a dialogue on a timely and routine basis, thereby improving both short and long term spectrum planning. For example, IT companies as well as service providers could better educate spectrum policymakers at both the FCC and within the Administration about emerging technological advances having the potential to increase spectrum capacity and sharing; business users and consumers would have a consistent forum for sharing their views and identifying their needs. A good deal of this outreach occurs today, and while it has been extremely beneficial, it has also

tended to be ad hoc. CSPP believes that establishment of a permanent, coordinated forum would help to accelerate progress in spectrum reforms and ensure that a national, long term spectrum strategy develops in sync with the needs of consumers, businesses and the government.

B. Maintain Sufficient System Flexibility to Provide Incentives for Technological Innovation (NOI Question 12)

Because wireless technologies are evolving rapidly, the U.S spectrum management system must be sufficiently flexible to accommodate advances in wireless networking and spectrum sharing that make spectrum usage more efficient. The FCC and the Administration have already recognized this issue in specific situations—e.g., the use of new techniques for avoiding interference and enabling sharing in the 5 GHz band that paved the way to make an additional 255 MHz of unlicensed spectrum available for WiFi and other WLAN uses.

To provide incentives and support for technological innovation in wireless networking, CSPP urges the Administration to promote regulatory and operational flexibility to the maximum extent possible in the spectrum management system. The system should ensure that promising “smart” technologies having the ability to increase spectrum capacity are not disadvantaged unfairly by a “legacy” regulatory and policy framework. A 21st century spectrum management system should give users the freedom to innovate and respond to market forces. It should also require government spectrum managers to specify interference protection and other rights and obligations objectively and in a manner that fosters innovation and supports industry planning and investment.

C. Strengthen U.S. Global Leadership in Spectrum Harmonization (NOI Question 7)

CSPP recommends that NTIA consider ways to improve the methods by which the U.S. government plans for and participates in spectrum policymaking at the global level. As demonstrated at the 2003 World Radio Conference (WRC), particularly by the deliberations regarding world-wide WLAN/RLAN operations at 5 GHz, spectrum harmonization is vital to IT companies’ and service providers’ global marketing and sales capabilities and to U.S technological leadership.

Rapid changes and innovations in wireless technologies require that World Radio Conferences be held at reasonable intervals. In addition, CSPP believes that the Administration should consider appointing a permanent WRC Ambassador responsible for leading the promotion of U.S. spectrum policy positions world-wide. CSPP sees significant value in designating a permanent WRC Ambassador to lead proactive U.S. participation in the international spectrum regulatory process and ensure timeliness of U.S. negotiations with foreign administrations. The Ambassador would consistently advance global spectrum harmonization in order to achieve manufacturing economies of scale, accelerate service deployment and address overseas market opportunities.

IV. Conclusion

CSPP strongly supports the Administration's 21st century spectrum management policy initiative and urges the NTIA to incorporate CSPP's recommendations for improvements to U.S. spectrum management. We believe these changes will help to position the U.S. for continued economic growth, technological progress and sustained investment in a 21st century innovation infrastructure that improves our quality of life.

Respectfully submitted,



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cc: Honorable Donald Evans, Secretary, U.S. Department of Commerce
Honorable Michael Gallagher, Acting Assistant Secretary and Administrator, NTIA,
U.S. Department of Commerce