

# Law Seminars International Spectrum Management Conference

## NTIA: SPECTRUM POLICY FOR THE 21<sup>st</sup> CENTURY The Federal Government Spectrum Management Perspective

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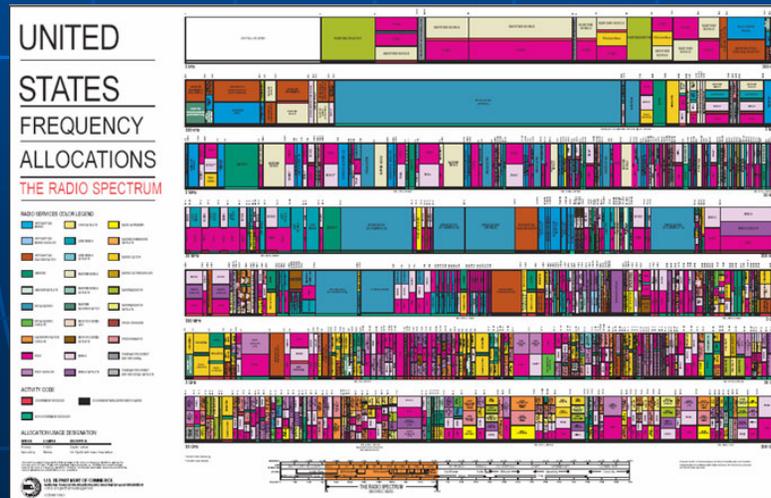


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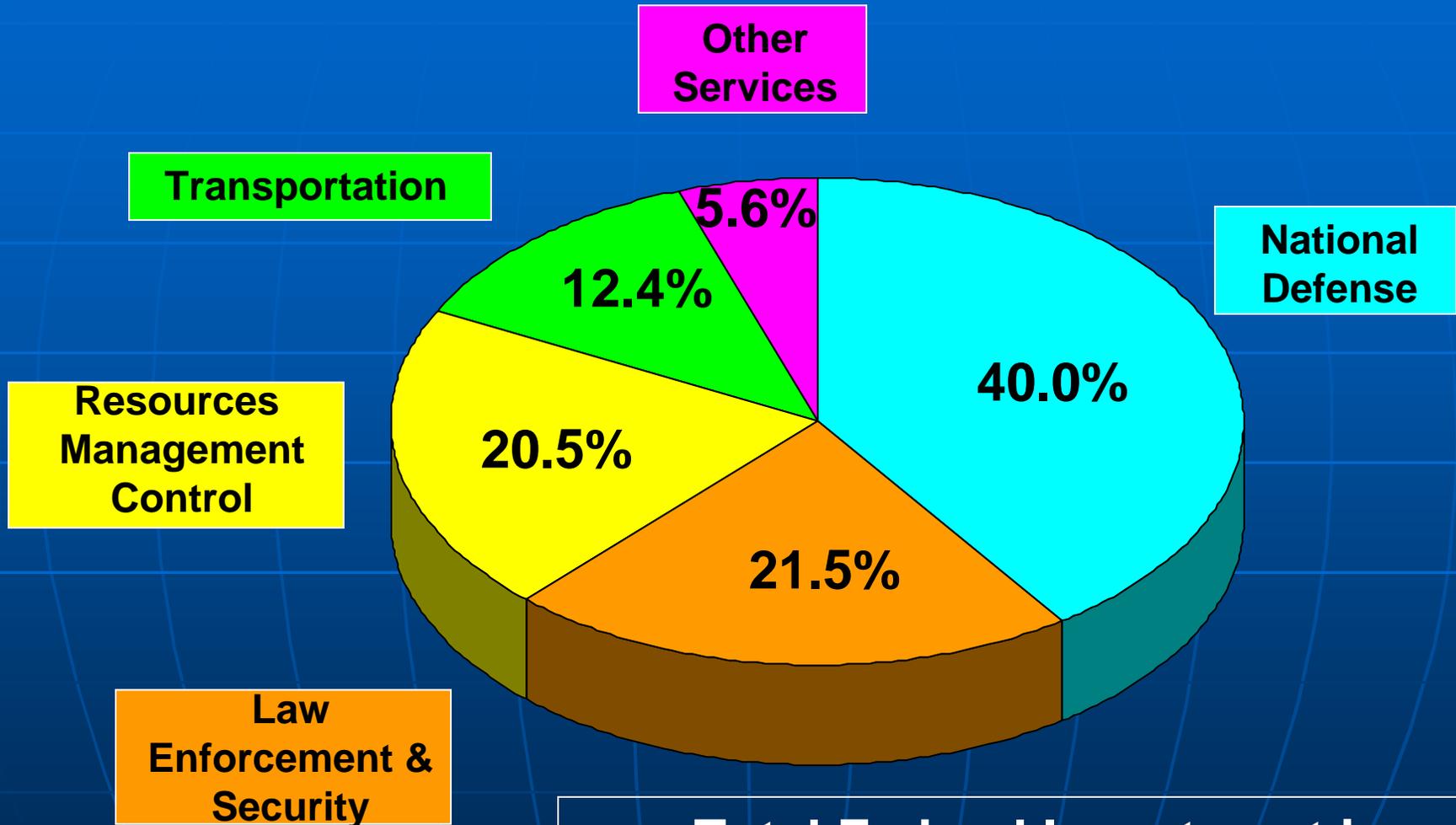


# Overview

- Role of NTIA in Spectrum Management
- State of the Telecommunications Industry
- Wireless Broadband and New Technologies
- President's Spectrum Policy Reform Initiative



# Federal Government Spectrum Use



**Total Federal Investment in  
Spectrum Bands = \$281 Billion**

# President's Spectrum Policy Initiative

*“The existing legal and policy framework for spectrum management has not kept pace with the dramatic changes in technology and spectrum use.”*

- President George W. Bush, Presidential Memorandum, May 29, 2003

## Stated Purposes:

- To foster economic growth,
- Ensure national and homeland security,
- Maintain U.S. global leadership in communications technology development and services,
- Satisfy other vital U.S. needs such as public safety, scientific research, federal transportation infrastructure and law enforcement.

# **President's Spectrum Policy Initiative Milestones**

**President's Executive Memorandum to Federal Departments and Agencies (June 2003)**

- **Stated Need and Objectives**

**Two Reports from Secretary of Commerce to the President (June 2004)**

- Recommendations of the Federal Government Spectrum Task Force
- Recommendations from State and Local Governments and Private Sector Responders

**Second Executive Memorandum (November 2004)**

- Adopted recommendations as policy
- Assigned responsibilities and deadlines for implementation

**Secretary of Commerce Implementation Plan**

- To implement those recommendations of the reports not expressly directed to other agencies and offices

# President's Spectrum Policy Initiative Mission and Objectives

From the President's June 2003, Executive Memorandum:

- A) Establish incentives for achieving improved efficiencies in spectrum use and for providing incumbent users more certainty of protection from unacceptable interference
- B) Modernize and Improve the Spectrum Management System
- C) Promote the timely implementation of new technologies and services while preserving national and homeland security, enabling public safety, and encouraging scientific research
- D) Develop means to address the spectrum needs of critical governmental missions

# President's Spectrum Initiative Implementation Plan Projects

- **Project A:** Improve Stakeholder Participation and Maintain High Qualifications of Spectrum Managers
- **Project B:** Reduce International Barriers to United States Technologies and Services
- **Project C:** Modernize Federal Spectrum Management Processes with Advanced Information Technology
- **Project D:** Satisfy Public Safety Communications Needs and Ensure Interoperability
- **Project E:** Enhance Spectrum Engineering and Analytical Tools
- **Project F:** Promote Efficient and Effective Use of Spectrum
- **Project G:** Improve Planning and Increase Use of Market-based Economic Mechanisms in Spectrum Management

# Project A. Improve Stakeholder Participation and Maintain High Qualifications of Spectrum Managers

- Stakeholder Involvement
  - Department of Commerce established high level interagency group (PPSG), Jan. 2005
  - NTIA will use White House Policy Coordinating Committee
  - NTIA will petition FCC to expand Role of FCC Defense Commissioner
- Personnel Resources
  - NTIA will develop career development program for spectrum managers
  - NTIA Will develop spectrum management training

# **Project B. Reduce International Barriers to United States Technologies and Services**

- **Review & Improve International Management Policies**
  - Released report with recommendations on improving U.S. World Radio Conference process, May 2005
  - Will coordinate & review international policy and framework

# Project C. Modernize Federal Spectrum Management Processes with Advanced Information Technology

- Expanded efforts to improve processes associated with:
  - Coordination of operations
  - Frequency assignment
  - Spectrum certification
  - Business processes

## **Project D. Satisfy Public Safety Communications Needs and Ensure Interoperability**

- NTIA will examine the feasibility of sharing spectrum among commercial, federal and local public safety, and critical infrastructure applications through a demonstration program
  - Will likely be a program currently underway
  - NTIA will work closely with DHS

# Project E. Enhance Spectrum Engineering and Analytical Tools

- NTIA will develop standard methods for evaluating the efficiency of spectrum use by the federal government
- NTIA will develop and recognize spectrum engineering & procedures through a best practices handbook for spectrum engineers
- Federal/Non-Federal Spectrum Sharing demonstration program:
  - NTIA and the FCC will each identify 10 MHz of spectrum for pilot program
  - NTIA will develop objectives, rules, guidelines and responsibilities needed for the cooperative effort among government agencies and with the private sector.
  - NTIA will evaluate program and make recommendations two years after start of testing
- NTIA will evaluate efficiency & effectiveness of all federal government spectrum use

# Project F. Promote Efficient and Effective Use of Spectrum

- NTIA will develop a standard format for summarizing the analyses and assessments performed by the federal agencies to select spectrum dependent systems (and consider the use of commercial services, when appropriate), and a process for reviewing these analyses.

# Project G. Improve Planning and Increase Use of Market-based Economic Mechanisms in Spectrum Management

- NTIA will assist the federal agencies in developing strategic spectrum plans and will consolidate these plans into a National Strategic Spectrum Plan by December 2007
- NTIA will identify and propose economic incentives to encourage efficient spectrum use, and will develop a plan by November 2005 to identify and implement incentives for improving efficiency in spectrum use
- NTIA will:
  - Analyze incentives appropriate to federal government spectrum use and make recommendations
  - Work with the Congress, the FCC, and other Administration agencies to advance legislation for the efficient use of spectrum and otherwise promote the implementation of a wide range of incentives

# Spectrum Relocation Fund Legislation

- President Bush signed the Commercial Spectrum Enhancement Act (CSEA) into law in December, 2004. It governs payment of costs incurred to federal agencies required to relocate from spectrum vacated for non-federal use and licensed by competitive bidding (auctions).
- Prior law may require winning bidders to negotiate with federal entities upon the close of an auction and to pay each agency directly for relocation costs. This led to uncertainty to both federal agencies and prospective commercial licensees regarding:
  - The final amount to be paid by each licensee,
  - Coordination of payments to incumbents among multiple auction winners, and
  - Whether the negotiation between the licensee and incumbent federal user would be successful. May require an arbitrator.

# Spectrum Relocation Fund Legislation

- CSEA establishes a spectrum relocation fund from auction proceeds:
  - The funds are available to federal agencies required to locate from eligible frequencies.
  - Six months prior to an auction subject to CSEA, NTIA must submit, after OMB review, the affected federal agencies' estimated relocation costs and timeline for relocation to the FCC.
  - The law prohibits the FCC from concluding an auction unless total cash proceeds from any auction equals at least 110% of such estimated costs.
- On December 29, 2004, the FCC notified NTIA that the auction of the 1710-1755 MHz and 1432-1435 MHz bands will commence as early as June 2006.
- In early January 2005, NTIA notified the federal agencies of the new relocation procedures and expected auctions. NTIA has requested certain information from the agencies to meet the requirements of the CSEA.
- NTIA is holding monthly meetings with agencies and has requested that the agencies submit all information to NTIA by September 15, 2005.

# Relocation Schedule

- **Dec 23, 2004** – CSEA signed
- **Dec 29, 2004** – FCC notified NTIA of auction for 1710-1755 MHz and 1432-1435 MHz bands as early as June 2006
- **Jan 6, 2005** – NTIA notifies affected agencies of auction, establishes working group, and requests agencies submit cost estimates by Sept 15, 2005
- **Feb 25, 2005** – Working Group/NTIA/OMB Meeting & NTIA letters to agencies on data required in estimate
- **Feb 25 – Sep 15, 2005**: Meetings as required
- **Sept 15, 2005**: Final cost estimates/timeline to NTIA
- **Oct 15, 2005**: Cost estimates/timeline to OMB
- **Dec 23, 2005**: NTIA reports (progress & policy options) to Congress
- **Dec 29, 2005**: Cost estimate/timeline to FCC & Congress
- **June 06, 2006**: Expected auction date
- **Start of 2007**: Expected auction receipts deposited in Treasury
- **2007-2010**: Agency relocation and requests for funds from OMB

# Summary

- Spectrum dependent services are the backbone of our economic and national security.
- Spectrum is the engine for economic growth and job creation.
- This Administration is committed to developing and implementing spectrum policies that establish a domestic and international environment for economic growth while removing barriers to the timely implementation of American innovation in new technologies and services.
- NTIA has developed a program strategy that over the next 5-10 years will result in the implementation of spectrum policy that satisfies the United States' requirements for using the spectrum domestically and globally.