

Spectrum Policy Task Force

One Year Later

Presentation to the Federal Communications Commission

November 13, 2003





Quick Review: Principal Task Force Recommendations

Task Force Objectives and Key Functions

Full-Speed Implementation





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Principal SPTF Recommendations



- Migrate from current command and control model to market-oriented exclusive rights model and unlicensed device/commons model.
- Implement ways to increase access to spectrum in all dimensions for users of both unlicensed devices and licensed spectrum.
- Implement a new paradigm for interference protection.





Quick Review: Principal Task Force Recommendations

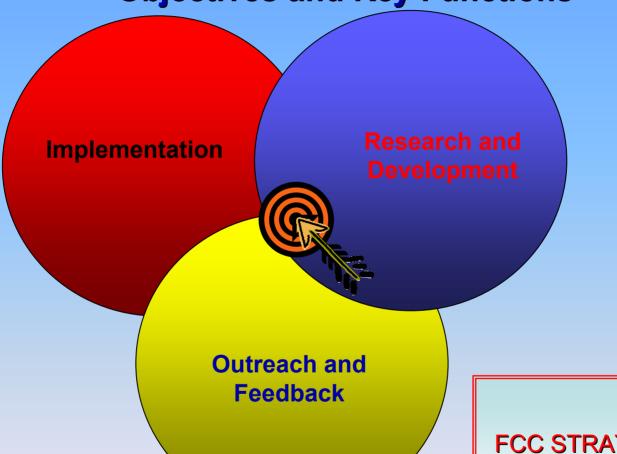
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Spectrum Policy Task ForceObjectives and Key Functions



FCC STRATEGIC GOALS



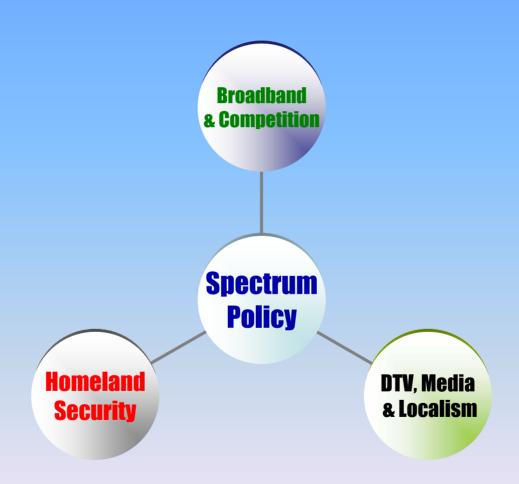
Task Force Objectives: Maintain Focus on FCC's Strategic Goals for Spectrum

- Encourage the highest and best use of spectrum domestically and internationally in order to encourage the growth and rapid deployment of innovative and efficient communications technologies and services.
- > Ensure that spectrum is used efficiently and effectively.
- > Facilitate domestic and international deployment of new spectrum-based technologies and services.





Task Force Objectives: Connect to Other Strategic Policy Goals







SPTF Objectives and Key Functions

Implementation

 Facilitate and coordinate the implementation of substantially all of the SPTF Report's recommendations, focusing especially on how they further other FCC initiatives (broadband, competition, homeland security and media/DTV).

Outreach and Feedback

- Promote transparency & awareness of spectrum-related initiatives.
- Seek input from the public, governmental agencies (including international) and experts in various fields.

Research and Development

 Collaborate across disciplines (technical, economic, legal, etc.) and institutions (academia, government, industry, etc.) to implement and improve upon SPTF recommendations, and to develop additional recommendations.



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Ongoing FCC Proceedings Full-Speed Implementation

- Eliminating Barriers to Secondary Markets in Spectrum
- Allocating Additional Spectrum for Unlicensed Devices
- Improving Access to Spectrum in Rural Areas
- Studying Receiver Interference Immunity Performance Specifications
- Facilitating Cognitive Radio Technologies
 - Service/Band Specific Proceedings



Implementation

Increasing Access to Spectrum Through Secondary Markets

Secondary Markets decision:

- > Authorizes spectrum leasing in broad array of wireless radio services;
- Adopts streamlined processing for certain categories of license transfer and assignment applications; and
- Seeks further comment on additional steps to improve the functioning of secondary markets, and to facilitate access to spectrum by new technologies that make "opportunistic" use of licensed but unused spectrum.



Implementation

Additional Spectrum for Unlicensed Devices

Ultra-wideband Communications Systems (3.1-10.6 GHz)

2002 decision affirmed on reconsideration.

Below 900 MHz and in 3 GHz Bands

December 2002 Notice of Inquiry attracts over 100 formal comments.

5 GHz (U-NII)

Final rules adopted yesterday!

90 GHz

Unlicensed rules adopted (with licensing rules) October 2003

2.5 GHz (MDS/ITFS)

 April 2003 NPRM sought comment on unlicensed use of unused ITFS spectrum and spectrum underlays.



ImplementationOther Broad Proceedings

Improving Access to Spectrum in Rural Areas

- Notice of Inquiry issued December 2002
- Notice of Proposed Rulemaking adopted October 2003

Receiver Interference Immunity Performance Specifications

Notice of Inquiry issued March 2003

Interference Temperature Metric

Commission action today!

Cognitive Radio Technologies

- Public workshop held May 2003
- NPRM on advanced antenna technologies adopted Sept. 2003

Streamlining Satellite Space Station and Earth Station Licensing

Space Station R&O/FNPRM adopted July 2003





Implementation

Service/Band Specific Proceedings

4.9 GHz (Public Safety)

Final rules adopted May 2003.

70-90 GHz (Broadband, Pencil-Beam Communications)

Final rules adopted October 2003.

2.5 GHz Wireless Broadband (MDS/ITFS)

Proposed rules adopted March 2003.

Advanced Wireless Services (3G)

- Service/Auction Rules Adopted October 2003.
- Additional spectrum allocations proposed.

800 MHz (Public Safety)

 Proposed rules adopted March 2002, additional analysis and comments 2003.

DTV Periodic Review (Distributed Transmission Technologies)

Notice January 2003





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The Road Ahead

Full-Speed Implementation - No Slowing Down!

SPTF Recommendations for Getting from "Inquiry to Action" (i.e., Charting the Critical Path):

- ➤ Rural NOI → Rural NPRM → Report & Order
- ➤ Secondary Markets FNPRM → 2nd Report & Order
- ➤ Unlicensed NOI → NPRM → Report & Order(s)
- ➤ Receiver Specifications NOI → Constructive Record → TBD
- ➤ Interference Temperature NOI → Constructive Record → TBD



The Road Ahead

Full-Speed Implementation – No Slowing Down!

- Cognitive Radio Technologies Proceeding
- Transitioning to Newer Policy Models & Improving Access
 - Band-by-band, service-by-service
 - Wireless Broadband in 2.1 & 2.5 GHz R&O
 - Wireless Broadband above 5 GHz NPRM
 - Streamlining and Harmonization of Antiquated Service Rules
 - Consideration and Application of Task Force Principles and Concepts, Plus Other Innovative Approaches
 - Spectrum Audits and Auctions



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Other Activities Outreach and Feedback

- Public Workshops, Forums, and Showcase Events
- Chairman and Commissioner Speeches
- Public Comments on Report
- International Exchanges
- FCC University ("In-Reach")
- SPTF Web Site, E-Mail and 202-418-SPTF
 - New Online Implementation Tracking Tool







Internet

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Other ActivitiesResearch & Development

- OET's Columbia Lab; Enforcement Bureau Field Engineers and Monitoring Equipment
- Commission's Technological Advisory Council (TAC): Focus on Interference Measurement and Management (July 2003)
- Staff Working Papers:
 - Kwerel & Williams (OSP 2002); Bykowsky & Marcus (TPRC 2002);
 Carter, McNeil & Lahjouji (OSP 2003); Margie (TPRC 2003)
- Establishing Strategic Relationships and Collaboration Opportunities
 - DARPA, National Science Foundation & NTIA
 - Labs, Universities & Other Agencies
- Inspiring Study and Debate at Universities, Think Tanks and Around the World
 - Multi-Disciplinary Research Clearing House





Conclusion







Thank you!

For more information:

http://www.fcc.gov/sptf

