## **SUPERNOVA 2004**

### Panel Discussion on "Disruptive Wireless"

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www.ntia.doc.gov

June 25, 2004



### **Promoting Economic Growth**

• The President's Economic Policies Continue to Strengthen America:

- Over 1.4 million new jobs added since August -- 9 consecutive months of gains.
- The national unemployment rate remained at 5.6% in May, below the national average of the 1970s, 1980s, and 1990s.
- President Bush's Actions are Helping to Drive Our Economic Recovery:
  - Tax relief has given businesses powerful incentives to invest in broadband technology:
    - Accelerated depreciation for capital-intensive equipment.
    - Support permanent extension of the Internet tax moratorium.
    - Support permanent extension research and experimentation credit.
- The President will not be satisfied until every American who wants a job has a job.

## The National Telecommunications and Information Administration (NTIA)

- NTIA, under the leadership of Commerce Secretary Don Evans, serves as the President's principal adviser on telecommunications and information policy matters, but is not the regulator of telecommunications, which is the job of the independent Federal Communications Commission.
- Our second major function is to be the manager of the nation's airwaves, or radio spectrum, by federal government agencies, including the military. We have joint jurisdiction with the FCC over spectrum allocation and use.
- NTIA's goal is to enhance the public interest by promoting quality service, competition, consumer welfare, and economic and social opportunities for all.



# Universal, Affordable Access to Broadband by 2007

#### Goal

"This country needs a national goal for broadband technology . . . universal, affordable access for broadband technology by 2007."

- President George W. Bush, Albuquerque, NM, March 26, 2004

#### Government's Role

"The role of government is not to create wealth; the role of our government is to create an environment in which the entrepreneur can flourish, in which minds can expand, in which technologies can reach new frontiers."

- President George W. Bush, Technology Agenda, November, 2002

"If you want something to be used more, you don't tax it."

- President George W. Bush, Waco, TX August 3, 2002

## Expanding Competition — Wireless Broadband and New Technologies

The Administration has made additional radio spectrum available for wireless broadband technologies:

- Advanced Wireless Services ("3G")
  - NTIA directed 45 new MHz of spectrum
- Ultra-wideband (UWB)
  - NTIA tested and analyzed UWB effects
  - Result Devices operate in over 7 GHz of spectrum at power levels so low that it effectively underlays some of the most congested frequencies

#### **5 GHz Spectrum**

- Additional 255 MHz of spectrum made available for shared unlicensed use
- Resolved a complex management issue that posed a potential barrier to the deployment of devices using 802.11(a) WiFi technology
- **70/80/90 GHz** 
  - Web-based mechanism to coordinate of federal and non-federal operations
  - Non-federal users can determine potential frequency conflict with federal users in a matter of minutes

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

- On May 29, 2003 President Bush signed an Executive Memorandum to develop and implement a comprehensive United States Spectrum Policy for the 21<sup>st</sup> Century.
- The Initiative was designed to foster economic growth, ensure national and homeland security, maintain U.S. global leadership in communications technology development and satisfy other vital U.S. needs such as public safety, scientific research, federal transportation infrastructure and law enforcement.

### Recommendations to Improve Spectrum Policy for the 21<sup>st</sup> Century

- Yesterday, the U. S. Department of Commerce released two spectrum reports with recommendations to develop a U.S. spectrum policy for the 21st century:
  - Report 1: Recommendations of the Federal Government Spectrum Task Force
  - Report 2: Recommendations for Spectrum Use by State and Local Governments and the Private Sector.
    NOTE: Reports can be downloaded at <u>www.ntia.doc.gov</u>

Highlights of the Recommendations in the Two Reports:

- Encourage Innovation and New Technologies
- Modernize the Spectrum Management System
- Establish Economic and Efficiency Incentives
- Ensure the Protection of Critical Government Spectrum Users and Services

### Broadband Over Power Lines: Promoting Broadband Innovation

"Broadband over power lines [BPL] holds promise to be the 'Third Wire' into American homes – a competitive, facilities-based, cost-effective new way to deliver high-speed Internet services to American citizens." - NTIA Acting Assistant Secretary Michael Gallagher

- Phase 1 Technical Study: NTIA'S R&D is Showing How Radio and BPL can Co-exist
- Over 10 million measurements taken & analyzed.
- Over 800 BPL emission models assessed.
- Characterized federal use of 59,000 radio frequency assignments between 1.7 and 80 MHz.
  - Special protections needed in 41 narrow frequency bands (5.4% of 1.7 80 MHz spectrum).
- Showed that interference risks are high under existing FCC Part 15 rules.
- Showed how risks can be reduced through refined compliance measurement procedures.
- Identified numerous other means for reducing risk and mitigating interference if it occurs.



HomePlug Modem can turn an electrical outlet into an Internet connection.



- Communications are the backbone of our economic and national security.
- Spectrum is the rocket fuel for the next wave of technological innovation and job creation.
- This Administration and FCC have met the call of innovative spectrum policy and have made significant real achievements.
- We intend to lay the groundwork for the next 5-10 years of progress in spectrum policy – whether licensed, unlicensed, property rights or commons.