Opening Remarks for:
"Spectrum issues - a place where competitors become colleagues?"

Christopher J. Hegarty

2 March 2011

March 2010 - U.S. Federal Communication Commission's *National Broadband Plan*

CONNECTING
AMERICA:
THE NATIONAL
BROADBAND PLAN

The FCC should make 500 MHz newly available for broadband use within the next 10 years, of which 300 MHz between 225 MHz and 3.7 GHz should be made newly available for mobile use within five years.

The FCC should accelerate terrestrial deployment in 90 megahertz of Mobile Satellite Spectrum (MSS).

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White House Memoranda

THE WHITE HOUSE

Office of the Press Secretary

For Immediate Release   June 28, 2010

June 28, 2010

MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES

SUBJECT: Unleashing the Wireless Broadband Revolution

America's future competitiveness and global technology leadership depend, in part, upon the availability of additional spectrum. The world is going wireless, and we must not fall behind. The resurgence of American productivity growth that started in the 1990s largely reflects investments by American companies, the public sector, and citizens in the new communications technologies that are what we know today as the Internet. The Internet, as vital infrastructure, has become central to the daily economic life of almost every American by creating unprecedented opportunities for small businesses and individual entrepreneurs. We are now beginning the next transformation in information technology: the wireless broadband revolution.

Few technological developments hold as much potential to enhance America's economic competitiveness, create jobs, and improve the quality of our lives as wireless high-speed access to the Internet. Innovative new mobile technologies hold the promise for a virtuous cycle -- millions of consumers gain faster access to more services at less cost, spurring innovation, and then a new round of consumers benefit from new services. The wireless revolution has already begun with millions of Americans taking advantage of wireless access to the Internet.

Expanded wireless broadband access will trigger the creation of innovative new businesses, provide cost-effective connections in rural areas, increase productivity, improve public safety, and allow for the development of mobile telemedicine, telework, distance learning, and other new applications that will transform Americans' lives.

Spectrum and the new technologies it enables also are essential to the Federal Government, which relies on spectrum for important activities, such as emergency communications, national security, law enforcement, aviation, maritime, space communications, and numerous other Federal functions. Spectrum is also critical for many State, local, and tribal government functions. As the wireless broadband revolution unfolds, innovation can enable efficient and imaginative uses of spectrum to maintain and enhance the Government's capabilities.

In order to achieve mobile wireless broadband's full potential, we need an environment where innovation thrives, and where

more

(OVER)

June 10, 2010 – Directs the Executive Branch to work with FCC towards making 500 MHz available for wireless broadband.

The White House

Office of the Press Secretary

For Immediate Release   February 10, 2011

President Obama Details Plan to Win the Future through Expanded Wireless Access

Initiative expands wireless coverage to 98% of Americans, reduces deficit by nearly $10 billion, invests in nationwide public safety network

WASHINGTON—President Barack Obama will today detail his plan to win the future by catalyzing the buildout of high-speed wireless services that will enable businesses to grow faster, students to learn more, and public safety officials to access state-of-the-art, secure, nationwide, and interoperable mobile communications.

In his State of the Union address, President Obama called for a National Wireless Initiative to make available high-speed wireless services to at least 98 percent of Americans. The Wireless Innovation and Infrastructure Initiative laid out today will make it possible for businesses to achieve that goal, while freeing up spectrum through incentive auctions, spurring innovation, and creating a nationwide, interoperable wireless network for public safety. It will also reduce the national deficit by approximately $10 billion.

The President will announce the new initiative at Northern Michigan University in Marquette, Michigan, a city where local businesses have been able to grow as a result of broadband access, with particular benefit in exporting goods to new markets around the world. He will also see a demonstration of how the university's WiMAX network has enabled distance learning for university and community students.

For more details on the President's Wireless Innovation and Infrastructure Initiative, please see the fact sheet below:

The White House

FACT SHEET: President Obama's Plan to Win the Future through the Wireless Innovation and Infrastructure Initiative

In his State of the Union address, President Obama set the goal of enabling businesses to provide high-speed wireless services to at least 98 percent of all Americans within five years. The rollout of the next generation of high-speed wireless—the "4G" technology now being deployed in the United States by leading carriers—promises considerable benefits to our economy and society. More than 10 times faster than current high speed wireless services, this technology promises to benefit all Americans, bolster public safety, and spur innovation in wireless services, equipment, and applications. By catalyzing private investment and innovation and reducing the deficit by $9.6 billion, this initiative will help the United States win the future and compete in the 21st century economy.

Nearly Double Wireless Spectrum Available for Mobile Broadband: The President has set the goal of freeing up 500 MHz of spectrum for everything from smartphones to wireless broadband connectivity for laptops to new forms of machine-to-machine communication within a decade. Critical to realizing this goal are "voluntary incentive

Feb 10, 2011 – Reiterates 500 MHz commitment and details plans for $27.8B, estimated to be raised through auctions.
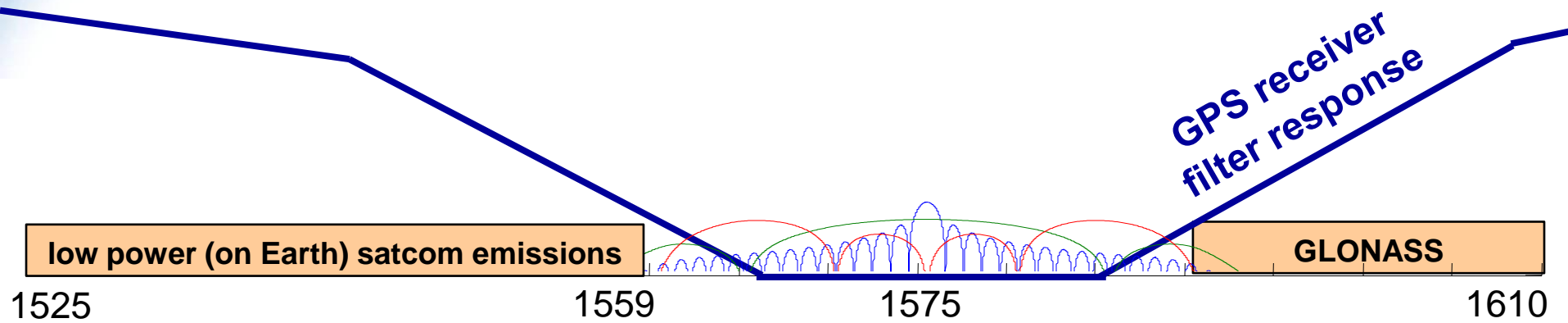
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LightSquared

- **Formed by March 2010 Harbinger acquisition of SkyTerra**
  - **Mobile satellite service (MSS) licensee in the 1525-1559 MHz/1626.5-1660.5 MHz band**
  - **Authorized in 2004 to operate ancillary terrestrial component (ATC) for dual-mode MSS/ATC devices**
  - **Lightsquared's goal is to build out a nationwide 4G ATC network (to cover 260M in U.S. by end 2015)**
- **Nov 18, 2010 – Request submitted to FCC for modification of its ATC authority**
- **Jan 26, 2011 – FCC Order & Authorization**
  - **Granted conditional waiver (ATC-only handsets)**
  - **Requires addressing GPS concerns; final report to be submitted by June 15**

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Illustration of Concerns with LightSquared

Situation before LightSquared

low power (on Earth) satcom emissions

GPS receiver filter response

GLONASS

1525   1559   1575   1610

Situation with LightSquared

← Up to 15 kW base station emissions →

low power (on Earth) satcom emissions

GPS receiver filter response

GLONASS

1525   1559   1575   1610

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