Information for Policymakers from the National Coordination Office for Space-Based Positioning, Navigation, and Timing (PNT)

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Wireless Communications Proposal Poses Interference Risk to GPS Users

On November 18, 2010, the FCC received an application from LightSquared Subsidiary LLC, seeking permission to broadcast a terrestrial wireless communications service in the L-band frequencies typically reserved for mobile satellite communications systems and satellite navigation systems like GPS. LightSquared intends to field thousands of transmitters that could interfere with the GPS signal in many cities across the United States.

Many industry groups, including the U.S. GPS Industry Council, are concerned about the possible impacts on the millions of existing GPS users. The Departments of Commerce, Defense, Transportation, Homeland Security, and Interior, NASA, FAA, and the National Coordination Office for Space-Based PNT, are all on record opposing FCC approval of LightSquared's proposed operations until the GPS interference effects are better understood and minimized.

Continuing Resolution Leaves GPS Funding in Limbo

Several GPS-related programs slated to receive increases in FY 2011 remain underfunded due to a continuing resolution freezing all funding at FY 2010 levels. The President requested the Air Force receive \$1.057 billion in FY 2011 for the core GPS program, an increase of \$227 million. Senate appropriators matched the request, but the House never took action. The President also requested \$58.5 million for the FAA to fund new, civil-unique GPS capabilities, an increase of \$15.1 million. Both House and Senate appropriators recommended full funding for this line item. For more information about FY 2011 GPS program funding, visit www.pnt.gov/policy/legislation/funding/2011.shtml.

Defense Authorization Act Requires Military GPS User Equipment Modernization

The FY 2011 National Defense Authorization Act, signed January 7, includes a provision requiring all military GPS user equipment purchased after FY 2017 to be capable of receiving the new M-Code signal, except in the case of cars or where waived by the Secretary of Defense. M-Code is designed to be more secure, jam-resistant, and spectrally separated from civilian satellite navigation signals. A prior version of the defense bill also called for a study of "mini-GPS" satellites, but this was not included in the final legislation.

Application Spotlight: Snow Removal



State and local governments across the nation have been integrating GPS into snow removal operations for many years. In response to the recent holiday snow crisis in New York, Mayor Michael Bloomberg announced plans to add the technology to his city's snow plows.

GPS-based snow plow tracking systems greatly improve routing, planning, and employee accountability. Managers can see the location of every plow in the field and know whether salt dispensing equipment and snow plow blades are working at full capacity. The technology also helps street crews keep track of roads that have already been plowed, while paying more attention to those that need to be cleared.

Many snow plow tracking systems, including those deployed in the Metro D.C. area, allow citizens to view realtime maps of plowed streets. For examples, visit <u>snowmap.dc.qov</u> and howardcountymdpublic.eroadtrack.com.



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