The Committee on Energy and Commerce

Memorandum

March 12, 2013

To: Members and Staff, Subcommittee on Communications and Technology

From: Majority Committee Staff

Re: "Oversight of FirstNet and Emergency Communications"

The Subcommittee on Communications and Technology will hold a hearing on Thursday, March 14, 2013, at 10:30 a.m. in 2123 Rayburn House Office Building entitled "Oversight of FirstNet and Emergency Communications." The hearing will focus on oversight of public safety communications systems.

I. **WITNESSES**

Two panels of witnesses will testify:

Panel One—FirstNet

Sam Ginn, Chairman, First Responder Network Authority

Chris McIntosh, Statewide Interoperability Coordinator, Virginia

Ray Lehr, Director, Statewide Communications Interoperability Coordinator, Maryland

Adm. James A. Barnett, Jr., Rear Admiral USN (ret.), Former Chief, Public Safety and Homeland Security Bureau, Federal Communications Commission (FCC); Partner and Co-Chair, Telecommunications Group, Venable LLP

Declan Ganley, Chairman & CEO, Rivada Networks

Panel Two—Emergency Communications

David Turetsky, Chief, Public Safety and Homeland Security Bureau, Federal Communications Commission

Diane Kniowski, President and GM, WOOD/WOTV/WXSP, LIN Media

Christopher Guttman-McCabe, Vice President, Regulatory Affairs, CTIA—The Wireless Association

Trey Forgety, Director, Government Affairs, National Emergency Number Association

This hearing will examine how public safety officials and the public communicate in times of emergency. The first panel will focus on implementation of provisions in the Middle Class Tax Relief and Job Creation Act of 2012 establishing FirstNet, an independent entity within the National

Telecommunications and Information Administration intended to help build a nationwide, interoperable broadband public safety network. The second panel will focus on tools for communicating with the public, such as 9-1-1 service and the broadcast and wireless emergency alert systems.

II. FirstNet

In the 112th Congress, both the House and Senate embarked on legislation to help facilitate construction of a nationwide, interoperable broadband public safety network, although they each took different approaches. The chambers ultimately reached a compromise as part of the Middle Class Tax Relief and Job Creation Act of 2012.

A. House Approach

The House approach, embodied in Communications and Technology Subcommittee Chairman Greg Walden's "Jumpstarting Opportunity with Broadband Spectrum Act," passed the House in December 2011 as part of the Middle Class Tax Relief and Job Creation Act of 2011. That approach would have empowered States or groups of States to negotiate with commercial wireless providers to build out their portions of the nationwide network so long as they met FCC-determined minimum interoperability requirements. The act would have made $5 billion in implementation grants available to the States, administered by the NTIA, and funded with spectrum auction proceeds.

B. Senate Approach

The Senate approach, embodied in Commerce, Science, and Transportation Committee Chairman Jay Rockefeller's "Public Safety Spectrum and Wireless Innovation Act," passed the Committee in June 2011. That approach would have created a national, non-profit, quasi-governmental corporation akin to Amtrak, with access to $11.75 billion in spectrum auction proceeds to build the network.

C. Final Compromise

The final compromise, embodied in the Middle Class Tax Relief and Job Creation Act of 2012, created FirstNet, an "independent authority" within the NTIA to oversee construction of a national public safety broadband network. The law makes up to $7 billion from net spectrum auction proceeds available for FirstNet to use toward construction of the network. FirstNet is allowed to borrow up to $2 billion of those proceeds up front, but does not have access to the additional funding unless and until raised by future auctions. FirstNet will build and operate the core and radio access networks that comprise the national system. States are permitted to "opt out" and build their own radio access networks, subject to interoperability rules created by FirstNet and approved by the FCC.

The law authorizes FirstNet to charge the States user fees for access to the core network as well as leasing fees for access to the 700 MHz public safety spectrum. Although FirstNet is prohibited from offering commercial services to the public, it is permitted to offer wholesale access to wireless providers. States that build their own radio access networks are similarly prohibited from offering commercial services to the public. Unlike FirstNet, they are also prohibited from offering wholesale

services unless they do so as part of a public-private partnership for the construction, maintenance and operation of the State's radio access network.

Under the statute, the Secretary of Homeland Security, the Attorney General, and the Director of the Office of Management and Budget are permanent FirstNet board members. The NTIA announced the remaining 12 members on August 20, 2012, with Sam Ginn, former CEO of AirTouch, appointed Chairman. The other board members, as announced by the Department of Commerce, are:

- Tim Bryan, CEO, National Rural Telecommunications Cooperative
- Charles "Chuck" Dowd, Deputy Chief, New York City Police Department
- F. Craig Farrill, Wireless telecommunications executive
- Paul Fitzgerald, Sheriff, Story County, Iowa
- Jeffrey Johnson, Fire Chief (retired); former Chair, State Interoperability Council, State of Oregon; CEO, Western Fire Chiefs Association
- William Keever, Telecommunications executive (retired)
- Kevin McGinnis, Chief/CEO, North East Mobile Health Services
- Ed Reynolds, Telecommunications executive (retired)
- Susan Swenson, Telecommunications/technology executive
- Teri Takai, Department of Defense Chief Information Officer; former CIO, states of Michigan and California
- Wellington Webb, Founder, Webb Group International; former Mayor, Denver, Colorado

FirstNet also has a 40-member Public Safety Advisory Committee, chaired by Chief Harlin McEwen, who is also chairman of the International Association of Chiefs of Police Communications Committee. The Public Safety Advisory Committee vice chairs are Chief Bill McCammon from Alameda County, California, representing the Metropolitan Fire Chiefs Association; Paul Patrick from Salt Lake City, Utah, representing the National Association of State EMS Officials; Heather Hogsett from Washington, D.C., representing the National Governors Association; and Tom Sorley from Houston, Texas, representing the U.S. Conference of Mayors.

Prior to passage of the Middle Class Tax Relief and Job Creation Act of 2012, the NTIA made available $382.5 million in broadband stimulus funding for seven interoperable, broadband public safety networks in and around Los Angeles; the San Francisco Bay Area; Adams County, Colorado; Charlotte, North Carolina; Mississippi; northern New Jersey; and Albuquerque-Santa Fe, New Mexico. The NTIA suspended those grants in May 2012, alleging it had authority to do so because the networks might not be compatible with the ultimate network designed by FirstNet. FirstNet adopted a process at its February 2013 board meeting under which these suspensions might be lifted if the States comply with certain conditions and demonstrate how they will coordinate their networks with FirstNet.

III. EMERGENCY COMMUNICATIONS

A. The Emergency Alert System

What is now the Emergency Alert System (EAS) began as the 1950s CONELRAD System, designed to use the nation's broadcast infrastructure to deliver civil defense information. The Emergency Broadcast System, which replaced CONELRAD in 1963, expanded beyond civil defense information to provide the public information about storms and other emergencies. As the scope of the

alerts expanded, so did the number of participating outlets. Currently, EAS incorporates participation by broadcast radio, broadcast television, cable systems, satellite television providers, and satellite radio providers. EAS messages originate from the Federal Emergency Management Agency's Integrated Public Alert and Warning System (IPAWS) and are distributed by Primary Entry Point broadcast stations. Special equipment required by the FCC to be a part of each radio, television, and video programming system picks up the PEP station signal and rebroadcasts the message to subscribers.

The EAS has a national plan—coordinated by the FCC, the Federal Emergency Management System, and the National Weather Service—in addition to plans that are maintained by the States. Despite requirements that each participant test its system independently, there had never been a coordinated test of all of the EAS stations across the country. That changed on November 9, 2011, when the FCC and FEMA oversaw a nationwide test of the EAS. Unfortunately, a number of stations on the west coast suffered a technical malfunction that prevented the test message from reaching the general public. More recently, a broadcast station in Montana was apparently hacked and transmitted an alert to the public claiming that zombies had begun to attack the living.

B. Wireless Emergency Alerts

In April 2012, the nation's four largest wireless providers as well as a number of local and regional providers voluntarily adopted what is now called the Wireless Emergency Alert (WEA) system. The WEA system is designed to bring geographically targeted emergency and AMBER alerts to wireless users. Like the EAS, the alerts originate from FEMA's IPAWS. Wireless emergency alerts are then sent through participating carrier networks and targeted to wireless devices in the selected area. Geographically targeting the alerts ensures that information is presented to wireless subscribers only in affected areas, reducing the chances that consumers will ignore alerts over time as a result of receiving alerts that are not relevant to their particular area.

C. 9-1-1

The 9-1-1 system is the primary way the public reaches emergency services over voice telephony. Originally a wireline system, it was eventually expanded to wireless service. As of 2005, service became available for Internet-based voice services that provides the ability to make and receive calls with traditional phone numbers. The Middle Class Tax Relief and Job Creation Act of 2012 also provides $115 million in funding to incorporate broadband connectivity into the 9-1-1 system. As communications systems migrate from traditional telephony to Internet Protocol (IP), the 9-1-1 system will need to evolve to take advantage of the increased connectivity that IP will provide—including the possibility of including photos and video. While the 9-1-1 system provides reliable service the vast majority of the time, during several recent natural emergencies the 911 system suffered both equipment and capacity problems.