Chairman John Thune Written Questions for the Record to The Honorable Bruce Andrews "Three Years Later: Are We Any Closer to a Nationwide Public Safety Wireless Broadband Network?"

Question 1: Stakeholders have raised concerns that, while FirstNet is an "independent authority" within NTIA, it is not sufficiently independent in its operations and is saddled with federal rules that are setting FirstNet up for failure. Do you agree with these concerns? What has the Commerce Department done to eliminate unnecessary red tape for FirstNet?

Answer: In enacting the Middle Class Tax Relief and Job Creation Act of 2012, Congress created the First Responder Network Authority (FirstNet) as an independent authority within NTIA, which is part of the Department of Commerce. Thus, FirstNet is both part of NTIA and independent of it, particularly with respect to program-related decisions not expressly assigned to NTIA under the Act.

The Act's placement of FirstNet within NTIA makes FirstNet a unique federal entity. It is essentially a start-up organization charged with ensuring the building, deployment, and operation of a nationwide public safety broadband network within the applicable rules and regulations of the federal government. I agree that this framework poses challenges in balancing the goal of speedy deployment of this vital network with the need to adhere to federal government hiring and procurement requirements.

The Department actively supports FirstNet by providing certain legal, procurement, human resources, and administrative assistance where FirstNet does not otherwise have its own resources or direct authority. In doing so, the Department seeks to streamline and expedite federal processes. For example, FirstNet is now using the Commerce Alternative Personnel System, which should assist in speeding up the hiring process. Additionally, the Department has supported FirstNet's request to the Office of Personnel Management (OPM) for Direct Hiring Authority, which would give it greater control over its human resources functions.

The Department also worked closely with FirstNet to enable an interagency agreement between FirstNet and the U.S. Department of Interior for assisted acquisition support. This agreement gives FirstNet dedicated acquisition resources to assist in its Request for Proposal (RFP) process for the nationwide public safety broadband network. Additionally, the Department is working on the long-term solution to provide delegated authority to FirstNet to run its own acquisition office.

The Department continues to work closely with FirstNet to ensure that it can execute contracts and hire staff as expeditiously as possible. While the federal government may not be able to move as quickly as a private company, we are pleased with the progress FirstNet has made to date.

Senator Roger Wicker Written Questions for the Record to The Honorable Bruce Andrews "Three Years Later: Are We Any Closer to a Nationwide Public Safety Wireless Broadband Network?"

In your testimony to the Committee, you indicated that the State of Mississippi and NTIA couldn't agree on terms because the State's plan "didn't provide the necessary level of detail we needed to meet the statutory requirements of the Act." Further, you maintained, "The Mississippi plan that came forward wasn't a viable alternative that met the statutory requirements."

In fact, if Mississippi had not met the requirements of the Broadband Technology Opportunities Program (BTOP) grant program and had not been able to demonstrate sustainability, the State would never have received a BTOP grant award. As you know, the federal laws governing access to the broadband spectrum needed to operate the Mississippi system were changed in February 2012. As such, NTIA chose to suspend portions of the State's grant citing interoperability concerns. The State had already deployed a significant portion of its broadband network and was ready to go live within weeks of the NTIA suspension. The State has honored the terms of the BTOP grant award and has not deviated from these commitments.

Question 1: My understanding is that during the build-out of the LTE network, there was never a moment where the State was out of compliance with any grant rules or regulations. The project was on schedule and on budget. Considering Mississippi's original BTOP grant proposal was approved by NTIA, please tell me exactly what details were missing and which statutory requirements were not met?

Answer: When Congress enacted the Middle Class Tax Relief and Job Creation Act of 2012 (Act), it dramatically changed the landscape for public safety broadband. NTIA approved the State of Mississippi's (Mississippi) project in 2010, prior to the Act, when the concept of public safety broadband was a "network-of-networks" model, in which individual communities, states or regions would build networks that would interoperate with each other. The Act mandated a new approach to build, operate, and maintain a nationwide public safety broadband network based on a single, national network architecture. With this new vision in mind, the Act required the Federal Communications Commission (FCC) to grant to FirstNet the 700 MHz spectrum that was being used by the seven public safety Broadband Technology Opportunities Program (BTOP) grant recipients, including Mississippi, as well as additional reallocated spectrum.

NTIA partially suspended the LTE-specific portions of the seven public safety BTOP awards in May 2012, because of uncertainty created by the new legislation and reallocation of spectrum to FirstNet. At the time NTIA partially suspended Mississippi's project, the state had drawn down \$22.2 million of the \$70 million in federal funds. Mississippi BTOP reported that all of the LTE equipment ordered was delivered for the project; Mississippi BTOP had installed approximately 40 antennas, the Evolved Packet Core (EPC), and a few of the 143 eNodeBs. This limited deployment provided coverage far short of what was needed to operate the network. Additionally, the project plan Mississippi provided to NTIA during an April 2012 site visit indicated that it planned to install the remaining antennas during the summer and fall of 2012.

When NTIA partially suspended the project, the state had not released the request for proposal (RFP) needed to procure the end user devices and MEDCOM equipment – the devices and equipment necessary to use the LTE broadband system. Mississippi's grant documents showed that the LTE system would not have been deployed and running by mid-May 2012, as many of the elements were not in place to have a viable network. Mississippi's project schedule showed that its LTE system would not be fully deployed until at least June 2013.

In September 2012, Mississippi's lease to operate in the 700 MHz spectrum expired. Without access to the spectrum, Mississippi was out of compliance with its BTOP award and did not have authority to operate its BTOP-funded LTE system. In order to get the LTE project back on track, Mississippi needed to enter into an agreement, consistent with FirstNet's mission, to gain access to FirstNet's spectrum so it could operate its network. Unfortunately, Mississippi could not agree on lease terms with FirstNet. Mississippi sought assurances that either FirstNet or NTIA would cover its ongoing operating costs while it built out its network given a state budget shortfall that reduced the available funds that the Mississippi Wireless Commission had allocated to operate the network. FirstNet was unable to commit to taking on this financial responsibility in advance of the state opt-in decision, and BTOP programmatic requirements precluded NTIA from allowing BTOP funds to pay for operating expenses. In the absence of a lease agreement with FirstNet, the LTE portion of the project was not able to move forward.

After it was determined that no agreement could be reached between FirstNet and Mississippi, NTIA worked closely with Mississippi to determine if there were any other options to reprogram the funding for other public safety broadband infrastructure purposes. NTIA and Mississippi committed considerable time to evaluating several alternative plans that the state created to keep the funding to benefit the first responders in Mississippi. Unfortunately, the final plan submitted by Mississippi on December 16, 2013, did not meet the minimum requirements of the BTOP Middle Mile Infrastructure program and was missing the level of detail that was necessary for NTIA to approve it. For example, the state's final plan focused on the new telemedicine equipment that would be purchased (e.g., vehicular modems, routers, handheld devices, computers, tablets, GPS tracking capability) and outlined some new broadband research initiatives and outreach efforts. Some of the items in the final plan, however, such as nonconstruction related vehicles, were unallowable costs within the BTOP program. In addition, the final plan did not address how this equipment would be connected to broadband infrastructure. The final plan requested additional time to work with FirstNet to achieve a successful business model. But, after 18 months, the state had been unable to reach agreement with FirstNet, and there was no indication that an agreement could have been reached if given additional time. Also the state was unable to identify a viable commercial partner that was willing to participate with the state and the grant program to expand broadband infrastructure within Mississippi. Given the uncertainty regarding the broadband infrastructure and how the equipment would be connected to a broadband system, NTIA could not approve the final plan. As such, Mississippi's grant expired and is now in close out.

Also in your testimony, you indicated that that "the Mississippi program didn't provide broadband coverage."

Question 2: Isn't it a fact that Mississippi's network provided broadband coverage to over 70 percent of the state? Are you aware that MED-COM released a Request for Proposal for an application that required broadband speeds for telemedicine and the statewide BTOP broadband network was to be utilized?

Answer: In its original BTOP application, the State of Mississippi outlined a compelling case that the State ranked last in the nation in broadband connectivity and noted that "commercial providers face significant economic challenges in serving the rural areas of the State." In its application, Mississippi proposed a 134-site system "geographically covering 97% of the state and touching all 82 counties..." Unfortunately, the LTE system did not meet the proposed coverage outlined in the application.

The system was designed using Mississippi's existing Land Mobile Radio (LMR) infrastructure, which provides about 70% statewide coverage with very spotty wireless service for public safety personnel. Mississippi recognized the coverage issue and, in June 2012, the state began discussions with NTIA regarding the need to expand the project by an additional 130 sites to cover approximately 90% of the state. Unfortunately, Mississippi was unable to fund an expanded project.

NTIA was aware of the MED-COM Request for Proposal (RFP) to purchase and deploy the telemedicine equipment in 342 ambulances and 90 hospitals across Mississippi. This portion of the BTOP project was contingent on a functioning LTE broadband system to transmit the data. As Mississippi acknowledged in its application and during negotiations with FirstNet, the state did not have viable, wireless commercial options for public safety in rural areas. Without the LTE infrastructure, MED-COM had no viable option to connect its ambulances and hospital equipment to broadband. NTIA understands the importance of the telemedicine equipment and is allowing Mississippi to keep the radios it already purchased that are connected to the existing Land Mobile Radio system.

Question 3: Did NTIA block FirstNet from finalizing an agreement with Mississippi? Is it accurate to say that NTIA's counsel objected to an emerging agreement between FirstNet and Mississippi because NTIA maintained that, despite what FirstNet agreed to in discussions with Mississippi, FirstNet did not have the authority to inject short terms funds to help Mississippi offset operational costs until the nationwide system reached Mississippi?

Answer: NTIA did not block FirstNet from finalizing an agreement with Mississippi. Both FirstNet and Mississippi acknowledge that they were unable to reach an agreement on an acceptable spectrum lease agreement. Under the Middle Class Tax Relief and Job Creation Act of 2012, FirstNet does not have the authority to inject short term funds to states in advance of FirstNet's compliance with the Act's requirements relating to the state opt-in/opt-out decision-making process. During negotiations for a spectrum agreement, Mississippi revealed that it had

an operating funding shortfall of \$6.6 million in the first two years of operation. Mississippi expressed to the federal government that it wanted NTIA or FirstNet to cover these operating expenses. However, neither the grant program nor FirstNet are allowed to cover such expenses. Under the rules of the BTOP grant program, BTOP funds are limited to network construction, and therefore cannot be used for operating expenses.

NTIA justified the original suspension of Mississippi's grant in 2010 as saving taxpayer money by avoiding "investments that might have to be replaced if they are incompatible with the ultimate nationwide architecture of the new public safety broadband network." However, one of the fundamental conditions imposed on all 700 MHz public safety broadband waivers is the commitment of the waiver recipients to design, develop, and deploy a network that is fully interoperable with the ultimate nationwide deployment standards. Furthermore, Mississippi's contract with its vendors required complete compliance with "all rules, specifications and functionalities" that may change per the FCC or NTIA during the build-out of the nationwide network.

Question 4: Given these assurances by the State and the vendors, how exactly is NTIA saving taxpayer money, especially when in fact the Agency is now telling Mississippi to spend \$1 million to tear down its LTE equipment already deployed?

Answer: As described above, when Congress passed the Middle Class Tax Relief and Job Creation Act in 2012, it dramatically changed the landscape for public safety communications by adopting a nationwide network approach. As a result, NTIA suspended its seven 700 MHz BTOP public safety projects to give FirstNet the opportunity to negotiate spectrum lease agreements with each recipient. Unfortunately, Mississippi was unable to reach agreement with FirstNet. Without a lease agreement or a plan to responsibly utilize remaining grant funds consistent with statutory and programmatic requirements, NTIA could not justify expenditure of additional taxpayer dollars. As described above, Mississippi's final proposal included operating expenses, which BTOP cannot fund, and would not have been used to deploy broadband infrastructure. Further, the LTE equipment deployed cannot be utilized in the future by FirstNet without substantial upgrades at significant additional cost.

Mississippi purchased the equipment almost three and a half years ago. At the time, the equipment was 4G LTE Release 8/9 and programmed for use on 5x5 MHz spectrum bandwidth. When FirstNet deploys the nationwide network, it will be leveraging spectrum frequencies for use on 10x10 MHz bandwidth and a higher LTE Release, with critical FirstNet features not defined in Release 8/9, such as priority and preemption and quality of service. This will make the current equipment obsolete.

Mississippi provided NTIA with the estimate from its vendor that it would cost approximately \$1 million to remove the equipment from the tower sites and dispose of it

properly. All recipients of BTOP funds, including Mississippi, are obligated under federal regulations to decommission and dispose of federally funded grant property in compliance with its award terms and conditions. The costs associated with decommissioning and disposing of federally funded assets is an allowable grant expense.

I understand NTIA is pushing for the deployed LTE BTOP project equipment to be removed at taxpayer expense, and then sold to developing countries for use in their own broadband networks.

Question 5: Can you confirm this information and is there an estimate of the cost for the removal of this equipment as well as the estimated revenue from the sale of this equipment? Wouldn't taxpayer money been better spent on preserving this deployed equipment for the benefit of public safety, the people of Mississippi, and the people of the United States?

Answer: Please see the response to question 4 above. As described above, the LTE equipment deployed by Mississippi cannot be used by FirstNet without substantial and costly upgrades. NTIA will work with BTOP recipients, including Mississippi, to explore options for disposing of federally funded assets consistent with Department of Commerce regulations. NTIA is not requiring Mississippi to sell the LTE equipment to developing countries for use in their own broadband networks.

In his May 2012 letter to Governor's office suspending the BTOP grant, Assistant Secretary Strickling stated that NTIA would, "want to keep the grant money in the communities that received the grants." Yet here we are in 2015 and NTIA has yet to make any final determinations with regard to the existing MED-COM project that received essential equipment under the BTOP grant to support emergency medical response agencies, hospitals, and first responders throughout Mississippi. This equipment allows first responders to transmit life-saving data to provider hospitals which support vital medical services in rural Mississippi and greatly enhance the quality of health care for Mississippi citizens.

In addition, NTIA has yet to make a final determination in regard to the upgrade of the State's microwave backbone network to a greater bandwidth to accommodate the broadband network in addition to the State's existing two-way radio system. The upgrade to the microwave backbone network is complete and is currently in use by over 20,000 first responders across the State. These first responders rely on the microwave backbone network for day-to-day radio operations and additional emergency communication needs including dispatch services, global positioning services, and automatic vehicle location. If any of these assets are removed from the State, it would cause a significant impact on emergency response operations and send a ripple effect across Mississippi.

Question 6: When will NTIA provide written assurances to the State that it can retain the MED-COM equipment and microwave backbone equipment purchased with BTOP funds as approved by NTIA?

Answer: NTIA has had numerous communications with Mississippi regarding the microwave backbone equipment and MED-COM radios that were previously installed under the BTOP grant funds. This equipment was the non-LTE portion of the BTOP project and was not part of the partial suspension. NTIA has informed Mississippi that the microwave and radio equipment can remain in use by the project, provided that Mississippi continues to use such equipment for the original purposes outlined in the grant, as required by federal grants regulations. NTIA will work to provide whatever additional written assurances and instructions Mississippi requires regarding the equipment that needs to be disposed of (LTE-specific equipment) and the equipment that Mississippi can retain.