

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of:)	
)	
Public Safety and Homeland Security Bureau)	PS Docket No. 12-94
Seeks Comment on Transition Process for 700)	PS Docket No. 06-229
MHz Public Safety Broadband Waiver)	
Recipients)	

**COMMENTS OF THE
MISSISSIPPI WIRELESS COMMUNICATION COMMISSION
ON BEHALF OF THE STATE OF MISSISSIPPI**

The Mississippi Wireless Communication Commission (MWCC) on behalf of the State of Mississippi (Mississippi) as a Wavier Recipient and as a National Telecommunications and Information Administration (NTIA) Broadband Technologies Opportunities Program (BTOP) Grant Recipient submits these comments in response to the Commission’s Public Notice in the above-captioned proceeding.¹ Through these comments we encourage the Commission to take the necessary steps to provide a continued opportunity for Mississippi to continue the early build-out of an interoperable broadband network to meet the needs of public safety.

Given our experience over the last several years, the requirements in the legislation and the complexity of planning and contracting for a wide-area network, it is likely to be at least two years before FirstNet can begin deployment. Mississippi should not be forced to wait another two years to have broadband operations to support public safety. Early deployments² can help fill the gap and

¹Public Safety and Homeland Security Bureau Seeks Comment on Transition Process for 700 MHz Public Safety Broadband Waiver Recipients, DA 12-555 (April 6, 2012) (Notice).

²The MWCC also is a party to and endorses the Comments being filed in this proceeding by the Operators Advisory Committee to the Public Safety Spectrum Trust (OAC). It supports continued waiver authority for all Waiver Recipients. However, if the FCC determines that the record does not support that approach, then the MWCC urges the FCC, at a

carry minimal risk, given existing interoperability requirements and broad acceptance of standardized Long Term Evolution (LTE) technology. Furthermore, Mississippi believes early deployments can be a useful part of the nationwide network and contribute valuable information to assist FirstNet in moving forward to meet both public safety and Congressional requirements.

The State of Mississippi

Mississippi has 48,434 square miles, 82 counties, 282 police departments, 82 sheriff departments, 725 fire departments with more than 12,000 fire personal, more than 10,000 certified law enforcement personal, more than 6,000 EMS paramedics and 90 hospitals who will have access to and will benefit from our Mississippi LTE network.

The Mississippi Legislature created the MWCC in 2005 just before Hurricane Katrina. Katrina demonstrated to all the lack of survivable, secure, interoperable communication. The same lessons were taught four (4) years prior when New York City experienced 9-11. Hurricane Katrina provided the impetus to build out the Mississippi Wireless Information Network (MSWIN), a 700 MHz Land Mobile Radio (LMR) statewide voice network which now is nearly complete. The MWCC is governed by a Commission composed of representatives of both state and local interests:

- MS Department of Transportation
- MS Department of Public Safety
- MS Department of Health
- MS Department of Information Technology Services
- MS Emergency Management Association
- MS Office of Homeland Security
- MS Sheriff's Association
- MS Association of Supervisor's
- MS Municipal Association
- MS Association of Police Chiefs
- MS Association of Fire Chiefs
- MS Highway Safety Patrol

minimum, to adopt a transition process that will enable the jurisdictions that have begun deployment – the State of Mississippi, City of Charlotte, the State of Texas and Adams County, Colorado - to continue implementation.

MS Department of Corrections
MS National Guard
MS Department of Environmental Quality
MS Wildlife, Fisheries and Parks

The legislation also established an advisory board which is comprised of the Chairman and Vice-Chairman of the Senate Energy Committee, the Chairman and Vice-Chairman of the House of Representatives Public Utilities Committee, the Chairman of the Senate Appropriations Committee, the Chairman of the House of Representatives Appropriations Committee, the Chairman of the Senate Finance Committee and the Chairman of the House of Representatives Ways and Means Committee.

MWCC is the single “point of contact” for emergency communications with regulatory oversight over all state and local agencies and will be the liaison in Mississippi for FirstNet.

In 2007, the MWCC began the build-out of MSWIN - an interoperable, P25/Phase-2, 700 MHz, LMR trunked radio system which consists of 144 towers across the state. Currently, the MSWIN system provides coverage across more than 80% of the state with the completion of the MSWIN build-out expected by late fall 2012. While the communications chaos that ensued in the aftermath of Hurricane Katrina was the principal inspiration for MSWIN, the federal government’s initial contribution of approximately \$157M to this project also reflected a nationwide concern over the inability of first-responders to effectively communicate after the tragic events of 9-11. Upon completion, the MSWIN system will provide 97% mobile area coverage across the state. MSWIN has allowed state, local, and federal entities to communicate with each other which has significantly increased coordination and decreased response time to ensure effective operations between these entities.

On May 11, 2010, Mississippi was granted a waiver to operate a broadband network using

the public safety broadband spectrum.³ On July 30, 2010, the MWCC executed a lease with the Public Safety Spectrum Trust (PSST) for use of the public safety spectrum. After the execution of the PSST lease, Mississippi was granted \$70M in a BTOP stimulus grant funds for the deployment of a statewide public safety LTE network. This funding also provides for the expansion of Mississippi MED-COM which is a 24/7 medically-staffed communications center-based service located at the University of Mississippi Medical Center and supports emergency medical response agencies, hospitals and first responders throughout Mississippi. MED-COM utilizes MSWIN to enable emergency responders and hospital personnel to communicate information important for the transfer of critical patients. The LTE system will allow emergency 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. With the addition of the LTE broadband capabilities, the Mississippi system will be the most modern emergency communications response system in the nation, and the only statewide system with these advanced capabilities.

State of Mississippi Comments

Mississippi recommends the Commission make transition policy decisions that provide waiver jurisdictions (also known as Incumbents) lasting authority for early deployments, conditioned on interoperability requirements that are consistent with those that have been imposed on waiver jurisdictions throughout the process.

In its recently released Notice, the Commission references the requirements contained in the Middle Class Tax Relief and Job Creation Act of 2012 (The Act)⁴. The Act directs the Commission to reallocate the 700 MHz D block spectrum in the 758-763/788-793 MHz band for public safety. It

³ Request for Waiver of Various Petitioners to Allow the Establishment of 700 MHz Interoperable Public Safety Wireless Broadband Networks, PS Docket 06-229, 25 FCC Rcd 5145 (2010) (Waiver Order).

⁴ Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, 126 Stat. 156 §6101 (2012) (The Act).

further directs the Commission to assign a license for both the D block and the adjacent public safety broadband spectrum in the 763-769/793-799 MHz band to FirstNet to be established within the NTIA.

The Notice raises multiple questions whose answers can impact the overall fate of an Incumbent's authority to continue moving forward to contribute to deployment of broadband interoperable solutions that serve the public safety communities in their respective areas. Mississippi has dedicated significant time and resources to plan, pursue funding, issue RFP's, contract for and/or deploy broadband facilities. Should transition policy decisions have the effect of denying Incumbent jurisdictions the authority to move forward, the resources and efforts expended by the State of Mississippi will go to waste, and most of that waste will be at the taxpayer's expense. To date, Mississippi has leveraged the assets of MSWIN (\$209M in network equipment, towers, and microwave backhaul) which greatly reduces deployment cost and makes possible the construction of a statewide LTE network. Mississippi has also invested approximately \$17M in funds from State bonds and other sources for match and other expenses and has obligated or spent approximately \$50M of the \$70M BTOP grant. If Mississippi is prevented from moving forward, State taxpayers will suffer an immeasurable burden.

The experience gained through early deployments can actually assist FirstNet in developing and implementing its plan to deploy a nationwide interoperable public safety broadband network. The Act establishes requirements for FirstNet to coordinate with states on their requirements as part of the process of planning the nationwide broadband network. Early deployments by states and their local jurisdictions can provide real-world experience to help shape FirstNet's planning process.

Given the complexity of planning and deploying a broadband network nationwide, FirstNet officials should be grateful for the information that can come from early deployments. There will obviously be a significant amount of necessary "paper planning" involved for the nationwide network. However, there is no substitute for hands-on experience. This is especially true when

taking on a project as massive and complex as deploying a nationwide broadband network that must exhibit the coverage, capacity, reliability, resiliency, prioritization and quality of service required to serve public safety requirements.

Given the legislative direction to form the FirstNet Board and an associated advisory committee, receive input from the FCC's Interoperability Board, administer planning grants to states, develop a technical and business plan to deploy the network, provide states with pertinent information so they can make informed decisions whether to "opt-in" or seek to "opt-out," issue RFPs, select vendors, and finalize contracts to deploy networks, etc., Mississippi would argue that it is likely to be a minimum of two (2) years before FirstNet even can begin actual deployment of the nationwide network. Even then, there is no guarantee which jurisdictions would be the first to receive service or how long it will take to complete the various phases of deployment across the country.

Early deployments allow public safety agencies who have the capabilities and resources to move forward to experience broadband communications during that time, rather than waiting yet another two years or longer for the important communication tools broadband can support. This experience can help solidify real-world requirements for the FirstNet system, highlight interoperability use cases that move beyond the lab environment and provide a view of viable broadband business models. FirstNet's focus is on public safety communications, not on making a profit as in a commercial network. However, there must still be an assessment of business models and operational expenses required to sustain the network once deployed.

Mississippi views early deployments simply as the initial stages of the nationwide network. While some adjustments may need to be made to integrate early deployments into the nationwide network once it begins to be deployed, Mississippi views the risk of moving forward to be relatively small. The legislation requires FirstNet to deploy commercial technology. Major commercial operators at 700 MHz have committed to LTE. The public safety community, multiple vendors, and

the Commission previously endorsed LTE as the interoperability standard and Incumbent jurisdictions are required to use LTE. There is no risk for Mississippi because the State's contract with the vendor requires complete compliance with all "rules, specifications, and functionalities" that may change per FCC or NTIA during the build out of the nationwide broadband network.

The equipment being implemented in Mississippi complies with the 3GPP LTE standard and will interoperate or integrate with the nationwide network, unless FirstNet deviates from LTE standards or best practices. Accordingly, any risks associated with waiver jurisdictions that deploy prior to FirstNet decisions are nil. LTE also allows a number of upgrades through software and/or firmware. The risk of having no broadband communications until FirstNet is established, finalizes its plan, selects vendors and starts deploying, is a much greater risk to public safety and homeland security. The record before the Commission in the public safety broadband proceeding is replete with example of how a broadband network will provide public safety with communications tools to help save lives, increase homeland security and protect property.

The cost of the LTE network equipment is amortized over a period of time that represents its usable lifetime. For those jurisdictions able to do so, moving forward with early deployments now is very likely to provide at least two additional years of usable equipment life before FirstNet even starts deploying. That time could be extended further depending on the jurisdiction and FirstNet's rollout plan. Mississippi has moved forward to obtain funding, both through BTOP grants and other sources. It would be to the State's detriment if waiver transition policies resulted in the loss of these funds. Such funds serve as a useful supplement to the D block legislation funding, which is only \$2B near-term, and \$7B total over a span of time dictated by spectrum auctions in other bands yet to be scheduled.

Current waiver grantees also were required to enter into a de facto spectrum lease agreement with the PSST. The Notice indicates that the current leases expire in September 2012, shortly after the August 2012 Congressional deadline for NTIA to establish the FirstNet Board. Furthermore,

Mississippi understands that the likelihood of NTIA establishing the FirstNet Board significantly ahead of the deadline is relatively remote, given a number of administrative and security requirements that must be completed before selecting Board members. Therefore, as a practical matter, it is unlikely FirstNet would be in a position to enter into replacement leases before current leases expire.

Accordingly, Mississippi recommends the Commission issue a blanket extension of the existing leases until FirstNet is in place and actually capable of discharging the duties of a licensee and lessor comparable to those duties the Commission imposed on the PSST. Mississippi encourages the Commission to work cooperatively with the PSST to implement extensions on an expeditious and cost effective basis requiring minimal legal administration to complete the process.

The Commission has historically treated Incumbents fairly in such processes because Mississippi holds a Lease with PSST that was approved by the Commission. As a result, Mississippi is a de facto Licensed Incumbent. Mississippi argues that the Commission has a responsibility to act in good faith toward Mississippi, an Incumbent, and that same responsibility should pass to FirstNet.

Mississippi entered into this project in good faith and has met all of its commitments to both the FCC and NTIA and should be allowed the “quite enjoyment” of the lease with the PSST and the State’s Incumbent status.

The Commission should also consider the irreparable harm it will cause Mississippi if it does not seamlessly transfer the Waiver and Leases to FirstNet. If the Waiver and Lease agreements are not extended, Mississippi will be in jeopardy of losing \$70M of stimulus BTOP funding since a material condition of the grant award is the existing waiver and lease for access to the public safety spectrum.

In order to meet the timelines set forth in the BTOP grant award, Mississippi has been working diligently to deploy the LTE network:

- LTE Core has been delivered to the State Data Center and is currently being installed. The existing equipment contract requires full compliance with all future FirstNet network requirements for the LTE core functionality.
- All eNodeB equipment has been deployed in field and is currently being installed.
- All antenna and lines are currently being installed.
- Microwave backhaul equipment upgrades have been purchased and are currently being installed.
- MEDCOM has issued an RFP for a statewide Mobile Tele-Assist System (MTAS) with a timeline for award in June 2012. If allowed to proceed with the contract terms for full LTE implementation, this life saving medical application will be in use by 3rd QTR, 2013.
- MEDCOM has already begun construction of modifications to the coordination center that supports the MTAS application.
- MEDCOM has already purchased LTE radio equipment that supports MTAS.
- Additional state funds have been expended for:
 - Tower structural analyses to determine the ability of existing towers to support the additional microwave and LTE antenna systems loading
 - Tower lease costs associated with the additional antenna loading
 - Data center lease cost to support the LTE CORE
 - Fiber optic network installation and lease costs to establish connectivity between the CORE and the RAN
 - Engineering costs associated with determining the location of an additional 60 eNodeB sites to improve coverage

Further, should the construction of the LTE network stop, the State will suffer additional financial losses associated with suspending Motorola's contract. Because both the P25 and the LTE systems currently under construction are being provided by the same vendor, cost reductions were realized by avoiding a duplication of efforts.

In addition, if Mississippi is not granted an extension of the Waiver and Lease in the transition process or if the Commission issues a stay to halt current deployments, it will disrupt existing commitments and contractual obligations and seriously jeopardize the accomplishments of the entire

project. Mississippi has already executed contracts for services related to the public safety broadband network in order to meet its current deadlines. Contractors have been diligently moving the project forward and delays will disrupt the ongoing progress. In this regard, the Commission should consider the irreparable harm it will cause Mississippi if it does not seamlessly transfer the Waiver and Leases to FirstNet or if the Commission halts current deployments.

Conclusion

In summary, the Commission should take the steps necessary so that Mississippi can continue to have authority to continue the build-out, conditioned on interoperability requirements as the Commission has identified throughout the process. Mississippi's early deployments can help inform FirstNet, while providing broadband service to public safety in Mississippi at least two years before FirstNet is likely to start deployments. In addition, Mississippi's current de facto spectrum lease should be renewed until FirstNet is established and capable of assuming the duties for which the PSST has been responsible.

Respectfully submitted,

MISSISSIPPI WIRELESS COMMUNICATION
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