

**QUARTERLY PERFORMANCE PROGRESS REPORT FOR BROADBAND INFRASTRUCTURE PROJECTS**

**General Information**

<b>1. Federal Agency and Organizational Element to Which Report is Submitted</b>  Department of Commerce, National Telecommunications and Information Administration	<b>2. Award Identification Number</b>  NT10BIX5570094	<b>3. DUNS Number</b>  019202949
--	---	--

**4. Recipient Organization**  
 Executive Office of the State of Mississippi 550 High Street  
 Stillers Building  
 Suite 1900, Jackson, MS 39201-1113

<b>5. Current Reporting Period End Date (MM/DD/YYYY)</b>  12-31-2011	<b>6. Is this the last Report of the Award Period?</b>  <input type="radio"/> Yes <input checked="" type="radio"/> No
--	---

**7. Certification:** I certify to the best of my knowledge and belief that this report is correct and complete for performance of activities for the purposes set forth in the award documents.

<b>7a. Typed or Printed Name and Title of Certifying Official</b>  David Johnson	<b>7c. Telephone (area code, number and extension)</b>  1601432812
	<b>7d. Email Address</b>  David.Johnson@its.ms.gov

<b>7b. Signature of Certifying Official</b>  Submitted Electronically	<b>7e. Date Report Submitted (MM/DD/YYYY):</b>  02-15-2012
---	--

**Project Indicators (This Quarter)**

**1. Please describe significant project accomplishments completed during this quarter (600 words or less).**

The Executive Office of the State of Mississippi has worked with the Wireless Communication Commission (WCC) and the University of Mississippi Medical Center/Mississippi MED-COM to prepare for the Long Term Evolution (LTE) Mississippi Wireless Information Network's (MSWIN) vendor contract and initial purchases.

WCC Quarterly Activities: During Q4 2011, the microwave backhaul equipment was installed for 24 MSWIN Phase 2 C & D links. The contractor completed factory acceptance testing for microwave backhaul equipment for all of the Phase 3 sites. The Detailed Design Review for the LTE system was conducted by Motorola on November 15, 2011, with the WCC staff and the State's QA vendor. Twelve sets of LTE antenna arrays were installed on MSWIN sites during the quarter. The equipment for the LTE Core was delivered to Motorola's Schaumburg, IL facility where it will be initially staged and tested. The State received notification from Motorola that the eNodeB equipment for 50 sites had been shipped on December 24 from Ericsson with expected delivery to occur early January 2012.

Mississippi MED-COM - Purchase requisitions submitted for:

1. Microwave link from MS MedCom to the Sillers Building
2. Network maintenance and security updates for existing equipment
3. Additional radio consoles and furniture
4. Public Safety Answering Point equipment.

Email communications have been submitted to end-users for installation of radio equipment in ambulances and hospitals in south and central Mississippi.

RFP development of Medical LTE data system application underway with ITS.

**2. Please provide the percent complete for the following key milestones in your project. Write "0" in the Percent Complete column and "N/A" in the Narrative column if your project does not include this activity. If you provided additional milestones in your baseline plan, please insert them at the bottom of the table. Unless otherwise indicated in the instructions, figures should be reported cumulatively from award inception to the end of the most recent reporting quarter. Please provide a narrative description if the percent complete is different from the target provided in your baseline plan (300 words or less).**

	Milestone	Percent Complete	Narrative (describe reasons for any variance from baseline plan or subsequent written updates provided to your program officer)
2a.	Overall Project	24	Baseline for Q6 is 70%. Microwave backhaul equipment for Phase 2C and 2D sites was installed and tested. The contractor completed factory acceptance testing for microwave backhaul equipment for all of the Phase 3 sites. The LTE Core equipment was delivered to the Motorola facility in Schaumburg, IL for assembly, configuration and testing. Installation of LTE antenna arrays began during the quarter with completion of 12 sites. The State had anticipated more MSWIN LMR sites being available for microwave and LTE installations than actually became available. UMMC acquired ambulance data transmission equipment during the quarter.
2b.	Environmental Assessment	0	N/A
2c.	Network Design	7	Baseline for Q6 is 58%. Microwave backhaul equipment for Phase 2C and 2D sites was installed and tested. The State had anticipated more MSWIN LMR sites being available for microwave and LTE installations than actually became available.
2d.	Rights of Way	0	N/A
2e.	Construction Permits and Other Approvals	0	N/A
2f.	Site Preparation	0	Baseline for Q6 is 100%. Site preparation for equipment at UMMC has been delayed until Year 2 Q3.
2g.	Equipment Procurement	25	Baseline for Q6 is 76%. Microwave backhaul equipment for Phase 2C and 2D sites was installed and tested. The contractor completed factory acceptance testing for microwave backhaul equipment for all of the Phase 3 sites. The LTE Core equipment was delivered to the Motorola facility in Schaumburg, IL for assembly, configuration and testing. Installation of LTE antenna arrays began during the quarter with completion of 12 sites. The State had anticipated more MSWIN LMR sites being available for microwave and LTE installations than actually became available. UMMC acquired ambulance data transmission equipment during the quarter.

	Milestone	Percent Complete	Narrative (describe reasons for any variance from baseline plan or subsequent written updates provided to your program officer)
2h.	Network Build (all components - owned, leased, IRU, etc)	46	Baseline for Q6 is 81%. Microwave backhaul equipment for Phase 2C and 2D sites was installed and tested. The LTE Core equipment was delivered to the Motorola facility in Shaumburg, IL for assembly, configuration and testing. Installation of LTE antenna arrays began during the quarter with completion of 12 sites. The State had anticipated more MSWIN LMR sites being available for microwave and LTE installations than actually became available.
2i.	Equipment Deployment	0	Baseline for Q6 is 33%. The LTE Core equipment was delivered to the Motorola facility in Shaumburg, IL for assembly, configuration and testing. Installation of LTE antenna arrays began during the quarter with completion of 12 sites. The State had anticipated more MSWIN LMR sites being available for microwave and LTE installations than actually became available. Although this LTE equipment was installed during the quarter, the state has not been invoiced.
2j.	Network Testing	0	Baseline for Q6 is 25%. The LTE Core equipment was delivered to the Motorola facility in Shaumburg, IL for assembly, configuration and testing. Installation of LTE antenna arrays began during the quarter with completion of 12 sites. The State had anticipated more MSWIN LMR sites being available for microwave and LTE installations than actually became available. Although this LTE equipment was installed during the quarter, the state has not been invoiced.
2k.	Other (please specify):	24	Baseline for Q6 is 49%. Specific items in the initial baseline were reclassified and removed from this category. Engineering services for MW design and factory test have been completed or invoiced. QA/QC Services paid from State Bond funds are included here as Match.

**3. To the extent not covered above, please describe any challenges or issues faced during this past quarter in achieving planned progress against the project milestones listed above. In particular, please identify any areas or issues where technical assistance from the BTOP program may be useful (600 words or less).**

Timeline for installation of microwave dishes on MSWIN towers has been negatively impacted by the preparation and review of tower loading analysis for each tower. Each MSWIN site has excess loading capacity over what is required for the State's land mobile radio system. Microwave dish sizes increased with the Broadband design causing a review of the size, height and azimuth required at each site. MedCom's procurement processes for some components scheduled for the quarter have taken longer than anticipated.

**4. Please report the following information regarding network build progress. Write "0" in the Total column and "N/A" in the Narrative column if your project does not include this activity. Unless otherwise indicated in the instructions, figures should be reported cumulatively from award inception to the end of the most recent reporting quarter. Please provide a narrative description if the total is different from the target provided in your baseline plan (600 words or less).**

Indicator	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
New network miles deployed	428	The WCC's contractor completed installation of the microwave backhaul equipment for the MSWIN Phase 2 C & D sites. The contractor completed factory acceptance testing for microwave backhaul equipment for all of the Phase 3 sites. We expected to be further along with the construction of the Phase 3 towers which would have allowed us to begin installation of the microwave backhaul equipment. The estimated timeline for the completion of Phase 3 towers is third quarter 2012 at which we should have completed all new network miles.
New network miles leased	0	N/A
Existing network miles upgraded	0	After discussions with our Program Manager, the State determined to allocate all BTOP funds specified for microwave backhaul to build new network miles instead of upgrading existing network backhaul
Existing network miles leased	0	N/A

Indicator	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
Number of miles of new fiber (aerial or underground)	0	N/A
Number of new wireless links	24	The WCC's contractor completed installation of the microwave backhaul equipment for the MSWIN Phase 2 C & D sites. The contractor completed factory acceptance testing for microwave backhaul equipment for all of the Phase 3 sites. We expected to be further along with the construction of the Phase 3 towers which would have allowed us to begin installation of the microwave backhaul equipment. The estimated timeline for the completion of Phase 3 towers is third quarter 2012 at which time we should have completed all new wireless links.
Number of new towers	0	N/A
Number of new and/or upgraded interconnection points	0	N/A

For questions 5 and 6 please include information relating to agreements that you are negotiating or have entered into, or that your sub recipient, contractor or subcontractor is negotiating or entered into.

5a. If applicable, please provide the following information with regard to agreements with broadband wholesalers and/or last mile providers as a result of your project.

Indicators	
Number of signed agreements with broadband wholesalers or last mile providers	0
Number of agreements currently being negotiated with broadband wholesalers or last mile providers	0
Average term of signed agreements (in quarters)	0

5b. Please list the names of the wholesale and last mile providers with whom you have signed agreements (100 words or less). Providers: N/A

5c. What wholesale services are being provided by this project? Please describe below. As an attachment to this report, please provide pricing plans (in \$ per month) associated with each wholesale service provided by your product (100 words or less). Wholesale services description:

N/A

5d. If you have designated a third party to operate all or a portion of your network, please provide the name and contact information for this third party, indicate if this entity is a sub recipient, contractor, and/or subcontractor, and describe with specificity the portion of your network this this third party operates (600 words or less).

The State awarded a contract for the LTE equipment to Motorola Solutions, Inc. on June 23, 2011. The State will own the Core and eNodeBs. Contract negotiations will include that Motorola provide a comprehensive operations program to manage and operate the Core and RAN network as well as provide network monitoring, maintenance and support and end user help desk services. The Motorola Project Director will be Bob Busch, (601) 420-4528. 10 Canebrake Boulevard, Suite 350, Flowood, MS 39232.

6. Please provide the data according to the type of subscriber. Write "0" in the Total column and "N/A" in the Narrative column if your project does not pass or serve a particular subscriber type. Unless otherwise indicated in the instructions, figures should be reported cumulatively from award inception to the end of the most recent reporting quarter. Please provide a narrative description if the total is different from the target provided in your baseline plan (300 words or less).

Subscriber Type	Access Type	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
Broadband Wholesalers or Last Mile Providers	Providers with signed agreements receiving new access	0	N/A
	Providers with signed agreements receiving improved access	0	N/A

Subscriber Type	Access Type	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
	Providers with signed agreements receiving access to dark fiber	0	N/A
	Please identify the speed tiers that are available and the number of subscribers for each	0	N/A
Community Anchor Institutions (including Government institutions)	Total subscribers served	0	The State awarded the contract for the LTE equipment to Motorola Solutions, Inc. on June 23, 2011. The eNodeB equipment for MSWIN sites in Phase 1 and Phase 2 is scheduled for installation beginning January 3, 2012 with Acceptance Testing to be completed by June 30, 2012, The Core will initially be installed in November 2011 at the Motorola Schaumburg, IL facility. After testing at the Motorola facility, the Core will be moved to the permanent Core location in Jackson by April 23, 2012. Subscriber loading will begin in second calendar quarter 2012.
	Subscribers receiving new access	0	The State awarded the contract for the LTE equipment to Motorola Solutions, Inc. on June 23, 2011. The eNodeB equipment for MSWIN sites in Phase 1 and Phase 2 is scheduled for installation beginning January 3, 2012 with Acceptance Testing to be completed by June 30, 2012, The Core will initially be installed in November 2011 at the Motorola Schaumburg, IL facility. After testing at the Motorola facility, the Core will be moved to the permanent Core location in Jackson by April 23, 2012. Subscriber loading will begin in second calendar quarter 2012.
	Subscribers receiving improved access	0	N/A
	Please identify the speed tiers that are available and the number of subscribers for each	0	N/A
Residential / Households	Entities passed	0	N/A
	Total subscribers served	0	N/A
	Subscribers receiving new access	0	N/A
	Subscribers receiving improved access	0	N/A
	Please identify the speed tiers that are available and the number of subscribers for each	0	N/A
Businesses	Entities passed	0	N/A
	Total subscribers served	0	N/A
	Subscribers receiving new access	0	N/A
	Subscribers receiving improved access	0	N/A
	Please identify the speed tiers that are available and the number of subscribers for each	0	N/A

7. Please describe any special offerings you may provide (600 words or less).

No special offerings are anticipated at this time.

8a. Have your network management practices changed over the last quarter?  Yes  No

**8b. If so, please describe the changes (300 words or less).**

N/A

**9. Community Anchor Institutions:**

Using the table below, please provide a list by service area of the community anchor institutions (including Government institutions) connected to your network as a result of BTOP funds. Figures should be reported for the most recent reporting quarter only (NOT cumulatively). Also indicate whether your organization is currently providing broadband service to the anchor institution. Finally, provide a short narrative description with examples of how institutions are using BTOP-funded infrastructure (300 words or less).

Institution Name	Service Area (town or county)	Type of Anchor Institution (as defined in your baseline)	Are you also the broadband service provider for this institution? (Yes / No)	Narrative description of how anchor institutions are using BTOP-funded infrastructure
N/A	N/A	N/A	N/A	N/A

**Project Indicators (Next Quarter)**

**1. Please describe significant project accomplishments planned for completion during the next quarter (600 words or less).**

The eNodeB equipment for 50 sites will be delivered in January 2012 with an additional 35 eNodeB's to be delivered in March 2012. The equipment for the LTE core will be initially staged and tested in Motorola's Schaumburg, IL facility and will be available for delivery to the ITS data center in mid-March.

**2. Please provide the percent complete for the following key milestones in your project. Write "0" in the Planned Percent Complete column and "N/A" in the Narrative column if your project does not include this activity. If you provided additional milestones in your baseline plan, please insert them at the bottom of the table. Unless otherwise indicated in the instructions, figures should be reported cumulatively from award inception to the end of the next reporting quarter. Please provide a narrative description if the percent complete is different from the target provided in your baseline plan (300 words or less).**

	Milestone	Planned Percent Complete	Narrative (describe reasons for any variance from baseline plan or any other relevant information)
2a.	Overall Project	37	The State anticipated procurement activities and manufacturing for microwave links and MS MEDCOM access equipment to take less time than it has. The revised budget reflects primarily "Match" payments of tower leases, engineering services, tower builds, "BTOP Grant" payments for microwave link design, initial LTE engineering design and certain MEDCOM equipment during the next quarter. Projected payments for microwave equipment are now based on a negotiated project schedule and payment milestones in the contract Change Order with the State's MSWIN vendor. Planned percentages are based on the negotiated project schedule and payment milestones in the LTE Broadband contract executed on August 11, 2011 with Motorola Solutions, Inc.
2b.	Environmental Assessment	0	N/A
2c.	Network Design	7	Significant payment milestones for the LTE microwave backhaul network engineering design services will be achieved during the next quarter. The first contractual payment milestone for the design and provisioning of eNodeBs will occur in the first quarter 2012.
2d.	Rights of Way	0	N/A
2e.	Construction Permits and Other Approvals	0	N/A
2f.	Site Preparation	0	The site preparation has been delayed for two reasons. First, Mississippi MED-COM is housed in the State of Mississippi's only Level I Trauma center and there are three large construction projects going on in and around MED-COM's physical location. Our construction is a component of the three other larger programs in terms of allocation of resources, generator emergency power allocation and to ensure that our current MED-COM operations will not be hampered by loss of electrical, HVAC or other utilities during the three construction projects. The expansion of the equipment room is into physical space currently used by our Cardiovascular Services- a mission critical component of the medical center. We have been waiting re-location of that service for a smaller than originally planned portion of that area. Second- we have been awaiting the final electrical specifications of the PSAP component of the grant- in order to have completed the electrical planning and quotation.

	Milestone	Planned Percent Complete	Narrative (describe reasons for any variance from baseline plan or any other relevant information)
			Those have been obtained. The purchase order for the first component (~50k of the 75K budget) will be spent in Q1 2012- as construction will start in during the February 27th week. The remainder will be spent likely in Q2 or Q3 2012 depending on when we get the electrical specifications on the other components of the system (which are being finalized now) and when other areas are available to move into based on the other construction projects for patient care missions of the hospital.
2g.	Equipment Procurement	34	The detailed design plan approval milestone for the Core will be achieved during next quarter. Microwave backhaul installation, integration and acceptance testing milestones will be achieved for the sites in MSWIN Phase 2 C& D. 33 sets of antenna arrays will be installed on MSWIN sites. The eNodeB equipment will be delivered to 45 MSWIN sites.
2h.	Network Build (all components - owned, leased, IRU, etc.)	46	Payment milestones will be met on the design for 5 new MSWIN towers that will be used as BTOP match. Tower lease payments (Cash Match) will continue on leased tower sites.
2i.	Equipment Deployment	49	The detailed design plan approval milestone for the RAN equipment will be achieved during the next quarter.
2j.	Network Testing	0	Baseline for year 2 quarter 3 is 37.5%. Network testing will begin once the core is delivered to ITS and some of the LTE sites are brought up. This is projected to begin in second quarter 2012.
2k.	Other (please specify):	54	Microwave backhaul project management components of payment milestones will occur during the quarter.

**3. Please describe any challenges or issues anticipated during the next quarter that may impact planned progress against the project milestones listed above. In particular, please identify any areas or issues where technical assistance from the BTOP program may be useful (600 words or less).**

The percentages in the table above are based upon the Contract project implementation schedule. The CCI payment milestones have been revised and will be reflected in a BTOP budget modification. During the course of implementation, achievement of payment milestones could be impacted by actions of the FCC and/or ERIC Committees regarding specifications, standards or testing requirements.

**Infrastructure Budget Execution Details**

**Activity Based Expenditures (Infrastructure)**

1. Please provide details below on your total budget, cumulative actual expenditures (for the period ending the current quarter), and cumulative anticipated expenditures (for the period ending next quarter) for each line item, including detailed disbursements of both matching funds and federal funds from project inception through end of this quarter (actual) or next quarter (anticipated). Actual and anticipated figures should be reported cumulatively from award inception to the end of the applicable reporting quarter.

Budget for Entire Project				Actuals from Project Inception through End of Current Reporting Period			Anticipated Actuals from Project Inception through End of Next Reporting Period		
Cost Classification	Total Cost (plan)	Matching Funds (plan)	Federal Funds (plan)	Total Cost	Matching Funds	Federal Funds	Total Costs	Matching Funds	Federal Funds
a. Administrative and legal expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
b. Land, structures, right-of-ways, appraisals, etc.	\$11,846,954	\$11,846,954	\$0	\$6,518,553	\$6,518,553	\$0	\$6,518,553	\$6,518,553	\$0
c. Relocation expenses and payments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
d. Architectural and engineering fees	\$7,512,236	\$107,700	\$7,404,536	\$510,940	\$106,165	\$404,775	\$1,914,914	\$106,165	\$1,808,749
e. Other architectural and engineering fees	\$1,686,378	\$0	\$1,686,378	\$0	\$0	\$0	\$0	\$0	\$0
f. Project inspection fees	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
g. Site work	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
h. Demolition and removal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
i. Construction	\$11,813,924	\$0	\$11,813,924	\$1,041,210	\$0	\$1,041,210	\$5,622,511	\$0	\$5,622,511
j. Equipment	\$51,128,296	\$1,978,134	\$49,150,162	\$12,356,624	\$2,015,789	\$10,340,835	\$16,633,513	\$2,015,789	\$14,617,724
k. Miscellaneous	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>l. SUBTOTAL (add a through k)</b>	\$83,987,788	\$13,932,788	\$70,055,000	\$20,427,327	\$8,640,507	\$11,786,820	\$30,689,491	\$8,640,507	\$22,048,984
m. Contingencies									
<b>n. TOTALS (sum of l and m)</b>	\$83,987,788	\$13,932,788	\$70,055,000	\$20,427,327	\$8,640,507	\$11,786,820	\$30,689,491	\$8,640,507	\$22,048,984

2. Program Income: Please provide the program income you listed in your application budget and actuals to date through the end of the reporting period.

a. Application Budget Program Income: \$0	b. Program Income to Date: \$0
---	--------------------------------