

QUARTERLY PERFORMANCE PROGRESS REPORT FOR BROADBAND INFRASTRUCTURE PROJECTS

General Information

1. Federal Agency and Organizational Element to Which Report is Submitted Department of Commerce, National Telecommunications and Information Administration	2. Award Identification Number NT10BIX5570094	3. DUNS Number 019202949
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4. Recipient Organization Executive Office of the State of Mississippi 550 High Street Stillers Building Suite 1900, Jackson, MS 39201-1113

5. Current Reporting Period End Date (MM/DD/YYYY) 03-31-2012	6. Is this the last Report of the Award Period? <input type="radio"/> Yes <input checked="" type="radio"/> No
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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.

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

7b. Signature of Certifying Official Submitted Electronically	7e. Date Report Submitted (MM/DD/YYYY): 04-30-2012
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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 Communications Commission (WCC) and the University of Mississippi Medical Center/Mississippi MEDCOM to prepare for the Long Term Evolution (LTE) Mississippi Wireless Information Network's (MSWINs) vendor contract and initial purchases.

WCC - During Q1 2012, the Detailed Design Review for the LTE system was approved by the WCC. 24 sets of LTE antenna arrays were installed on MSWIN sites during the quarter. The eNodeB equipment for 61 sites was delivered to the warehouse in Mississippi with eNodeB equipment being delivered directly to 48 sites. The eNodeB equipment for 31 sites was delivered to the shelter manufacturer in Georgia. They will arrive within the shelter upon a respective Phase 3 site being ready for receipt. The equipment for the LTE core was initially staged and tested in Motorola's Schaumburg, IL facility and was delivered to the ITS data center at the end of March. The State is currently in the process of installing the Core. The State's vendor began the construction of seven tower sites in North Mississippi that will be paid for by state bond funds and used as match.

MEDCOM - MEDCOM finalized and published the RFP for the Medical LTE data system per ITS guidelines. A mandatory vendor conference was held on March 26, 2012. Construction began for the installation of the PSAP equipment and additional consoles and other equipment.

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	36	Baseline for Q7 is 78%. The Detailed Design Review for the LTE system was approved by the WCC. 24 sets of LTE antenna arrays were installed on MSWIN sites during the quarter. The eNodeB equipment for 61 sites was delivered to the warehouse in Mississippi with eNodeB equipment being delivered directly to 48 sites. The eNodeB equipment for 31 sites was delivered to the shelter manufacturer in Georgia. They will arrive within the shelter upon a respective Phase 3 site being ready for receipt. The equipment for the LTE core was initially staged and tested in Motorola's Schaumburg, IL facility and was delivered to the ITS data center at the end of March. The State is currently in the process of installing the Core. The State's vendor began the construction of seven tower sites in North Mississippi that will be paid for by state bond funds and used as match. MEDCOM finalized and published the RFP for the Medical LTE data system per ITS guidelines. A mandatory vendor conference was held on March 26, 2012. Construction began for the installation of the PSAP equipment and additional consoles and other equipment. The State anticipated more MSWIN LMR sites being available for MW and LTE installations than actually became available. The current timeline for completion of statewide build-out of LMR tower sites is expected by 4th QTR, 2012.
2b.	Environmental Assessment	0	N/A
2c.	Network Design	24	Baseline for Q7 is 66%. System integration for the eNodeB equipment at the tower sites was completed. Microwave path engineering for new tower sites in Phase 3 was completed. The State had anticipated more MSWIN LMR sites being available for MW and LTE installations than actually became available. The current timeline for completion of statewide build-out of LMR tower sites is expected by 4th QTR, 2012.
2d.	Rights of Way	0	N/A
2e.	Construction Permits and Other Approvals	0	N/A

	Milestone	Percent Complete	Narrative (describe reasons for any variance from baseline plan or subsequent written updates provided to your program officer)
2f.	Site Preparation	0	Baseline for Q7 is 100%. Site Preparation construction started in March 2012. With space being limited in the adjacent area(s) of Med-Com, employees and staff from a neighboring department were relocated and additional space was allocated for site preparation construction. This work included expansion and redundancy upgrades to electrical and network utilities as well as physical renovation of the Med-Com center. The project entailed expansion of the operations center, repurposing of the conference room, addition of a second network room and revision of technical support space. Site preparation is expected to be complete in Q3 2012.
2g.	Equipment Procurement	32	Baseline for Q7 is 83%. The LTE Core was delivered to the ITS State Data Center and is in the process of being installed. 24 sets of LTE antenna arrays were installed on MSWIN sites. EnodeB equipment delivered directly to 48 tower sites. The State had anticipated more MSWIN LMR sites being available for MW and LTE installations than actually became available. The current timeline for completion of statewide build-out of LMR tower sites is expected by 4th QTR, 2012.
2h.	Network Build (all components - owned, leased, IRU, etc)	57	Baseline for Q7 is 86%. The LTE Core was delivered to the ITS State Data Center and is in the process of being installed. 24 sets of LTE antenna arrays were installed on MSWIN sites. EnodeB equipment delivered directly to 48 tower sites. The State had anticipated more MSWIN LMR sites being available for MW and LTE installations than actually became available. The current timeline for completion of statewide build-out of tower sites is expected by 4th QTR, 2012. The State's vendor began construction of seven tower sites in North Mississippi that will be used as Match.
2i.	Equipment Deployment	29	Baseline for Q7 is 46%. The LTE Core was delivered to the ITS State Data Center and is in the process of being installed. 24 sets of LTE antenna arrays were installed on MSWIN sites. EnodeB equipment delivered directly to 48 tower sites. The State had anticipated more MSWIN LMR sites being available for MW and LTE installations than actually became available. The current timeline for completion of statewide build-out of tower sites is expected by 4th QTR, 2012.
2j.	Network Testing	0	Baseline for Q7 is 38%. The LTE Core was delivered to the ITS State Data Center and is in the process of being installed. 24 sets of LTE antenna arrays were installed on MSWIN sites. EnodeB equipment delivered directly to 48 tower sites. The State had anticipated more MSWIN LMR sites being available for MW and LTE installations than actually became available. The current timeline for completion of statewide build-out of tower sites is expected by 4th QTR, 2012.
2k.	Other (please specify):	38	Baseline for Q7 is 60%. Specific items in the initial baseline were reclassified and removed from the category. Engineering services for training have been completed or invoiced. QA/QC Services paid with 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. The analysis and lease renegotiation has occurred and the State is in the process of updating the timeline. State is also seeking to add 60 additional sites to the LTE network which will increase the coverage area of the LTE system.

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 in QTR 4, 2011. The contractor has 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 fourth 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
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 in QTR 4, 2011. The contractor has 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 fourth quarter 2012 at which 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 included 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 Project Director for Motorola is Jesse Brenton, Jesse.Brenton@motorolasolutions.com, 901-569-5899.

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
	Providers with signed agreements receiving access to dark fiber	0	N/A
Community Anchor Institutions (including Government institutions)	Please identify the speed tiers that are available and the number of subscribers for each	0	N/A
	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 QTR 2, 2012 with Acceptance Testing to be completed by QTR 3, 2012, The Core was initially installed in November 2011 at the Motorola Schaumburg, IL facility. After testing at the Motorola facility, the Core was moved to the permanent Core location in the State Data Center in March 2012. Subscriber loading will begin in QTR 4, 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 QTR 2, 2012 with Acceptance Testing to be completed by QTR 3, 2012, The Core was initially installed in November 2011 at the Motorola Schaumburg, IL facility. After testing at the Motorola facility, the Core was moved to the permanent Core location in the State Data Center in March 2012. Subscriber loading will begin in QTR 4, 2012.
Residential / Households	Subscribers receiving improved access	0	N/A
	Please identify the speed tiers that are available and the number or subscribers for each	0	N/A
	Entities passed	0	N/A
	Total subscribers served	0	N/A
	Subscribers receiving new access	0	N/A
Businesses	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
	Entities passed	0	N/A
	Total subscribers served	0	N/A
	Subscribers receiving new 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)
	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).

WCC - The LTE Core will be installed at the State Data Center and the core is expected to be tested and fully operational during this quarter. The remainder of the 135 eNodeB's will be delivered to the warehouse in Mississippi and delivered directly to the LMR tower sites. 25 eNodeBs will be installed at tower sites in the central part of the State. 50 sets of LTE antenna arrays will be installed on MSWIN sites during the quarter. The construction of the Tower Sites in North Mississippi being used by match by the State will be complete. The microwave backhaul equipment will be installed for 40 MSWIN LTE network links.

MEDCOM - As the site preparation construction nears completion, MEDCOM will move to the next phase of the project. This phase includes the installation of various components of the new infrastructure equipment (console furniture, PSAP system, PTP MSWIN connection). As installation is completed, the next phase will be testing and acceptance of the new hardware and software. Employee training has been scheduled following anticipated equipment acceptance.

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)
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	Milestone	Planned Percent Complete	Narrative (describe reasons for any variance from baseline plan or any other relevant information)
2a.	Overall Project	46	The LTE Core will be installed at the State Data Center and the core is expected to be tested and fully operational during this quarter. The remainder of the 135 eNodeB's will be delivered to the warehouse in Mississippi and delivered directly to the LMR tower sites. 25 eNodeBs will be installed at tower sites in the central part of the State. 50 sets of LTE antenna arrays will be installed on MSWIN sites during the quarter. The construction of the Tower Sites in North Mississippi being used by match by the State will be complete. The microwave backhaul equipment will be installed for 40 MSWIN LTE network links. 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. 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	32	Significant payment milestones for the LTE microwave backhaul network engineering design services will be achieved during the next quarter. The system integration for the eNodeBs will continue during the next quarter.
2d.	Rights of Way	0	N/A
2e.	Construction Permits and Other Approvals	0	N/A
2f.	Site Preparation	0	As the site preparation construction is completed, the next phase includes the installation of various components of the new infrastructure equipment (console furniture, PSAP system, PTP MSWIN connection). As installation is completed, the next phase will be testing and acceptance of the new hardware and software. Employee training has been scheduled following anticipated equipment acceptance.
2g.	Equipment Procurement	42	The LTE Core will be installed at the State Data Center and the core is expected to be tested and fully operational during this quarter. The remainder of the 135 eNodeB's will be delivered to the warehouse in Mississippi and delivered directly to the LMR tower sites. 25 eNodeBs will be installed at tower sites in the central part of the State. 50 sets of LTE antenna arrays will be installed on MSWIN sites during the quarter. The microwave backhaul equipment will be installed for 40 MSWIN LTE network links.
2h.	Network Build (all components - owned, leased, IRU, etc.)	69	Payment milestones will be met on all of the MSWIN tower sites that are being used as BTOP match. Tower lease payments (cash match) will continue on leased tower sites. The microwave backhaul equipment will be installed for 40 MSWIN LTE network links.
2i.	Equipment Deployment	45	The LTE Core will be installed at the State Data Center and the core is expected to be tested and fully operational during this quarter. The remainder of the 135 eNodeB's will be delivered to the warehouse in Mississippi and delivered directly to the LMR tower sites. 25 eNodeBs will be installed at tower sites in the central part of the State. 50 sets of LTE antenna arrays will be installed on MSWIN sites during the quarter.
2j.	Network Testing	0	Network testing will begin once the core is delivered to ITS and some of the LTE sites are brought up. This testing is projected to begin in QTR 3, 2012.
2k.	Other (please specify):	51	Microwave backhaul project management components of payment milestones will occur during the quarter. Engineering services for training of state staff will be performed.

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 State is seeking to add 60 additional sites to the LTE network to increase the coverage area and MEDCOM is seeking a redistribution of funds from the "Ambulance Data Transmission" category to the "Medical Data Coordination System" category. These revisions 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 NTIA 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	\$7,832,817	\$7,832,817	\$0	\$8,939,585	\$8,939,585	\$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	\$1,219,345	\$106,165	\$1,113,180	\$1,581,564	\$106,165	\$1,475,399
e. Other architectural and engineering fees	\$1,686,378	\$0	\$1,686,378	\$5,187	\$0	\$5,187	\$5,187	\$0	\$5,187
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	\$2,547,265	\$0	\$2,547,265	\$4,064,832	\$0	\$4,064,832
j. Equipment	\$51,128,296	\$1,978,134	\$49,150,162	\$18,568,009	\$1,903,814	\$16,664,195	\$24,394,867	\$1,903,814	\$22,491,053
k. Miscellaneous	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
l. SUBTOTAL (add a through k)	\$83,987,788	\$13,932,788	\$70,055,000	\$30,172,623	\$9,842,796	\$20,329,827	\$38,986,035	\$10,949,564	\$28,036,471
m. Contingencies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
n. TOTALS (sum of l and m)	\$83,987,788	\$13,932,788	\$70,055,000	\$30,172,623	\$9,842,796	\$20,329,827	\$38,986,035	\$10,949,564	\$28,036,471

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
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