

# Arkansas Wireless Information Network

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Report to the

Joint Interim Committee on Advanced  
Communications and Information  
Technology

For the period ending July 31, 2007



This report contains the following sections:

**Arkansas Wireless Information Network (AWIN) Program Status** – a short description of the program, a list of the projects related to the program, and achievements of the program for the month.

**AWIN Management and Operations Report** -- additional detail on the management and operational issues of the 24/7 AWIN system.

**Three County Pilot Project Status** -- additional detail on the pilot effort implemented in Miller, Lonoke, and Craighead Counties.

**800 MHz Band Reconfiguration** -- The AWIN system is an 800 MHz system that will require some reconfiguration of the current frequencies. The Federal Communications Commission (FCC) ordered the reconfiguration of the 800 MHz band to avoid potentially life-threatening problems where public safety communications equipment may be rendered inoperable.

**AWIN Continuity of Operations Project (COOP)** – the COOP will ensure that a comprehensive emergency and recovery plan is defined and thoroughly exercised for the AWIN infrastructure.

**Smart Zone Controller 2/System Expansion** – This project implements a system expansion that will alleviate the burden currently placed on the system in the southern part of the state. Utilizing additional equipment and/or additional microwave paths to route traffic to the northeast and northwest portions of the system will remove that traffic from the southern part of the state.



## Arkansas Wireless Information Network

AWIN is a multiple site, statewide, trunked communications system based on a digital 700/800 MHz system using the Association of Public Safety Communications Officials (APCO) Project 25 (P-25) standard. APCO P-25 is the industry standard for public safety developed to allow any manufacturer's P-25 radios to operate on the system. AWIN provides statewide operations, within the coverage area of the system, for public service entities using P-25 digital 700/800 MHz radios.

This type of system offers entities the following benefits:

- The ability to coordinate communications with other agencies or jurisdictions
- The ability to purchase radios from more than one vendor
- The ability to share resources to enhance communications and control costs

Program Director:

Name: Penny Rubow

Email: penny.rubow@arkansas.gov

Updated: 06/16/07

### PROJECTS

Project Name	Percentage Complete	On Schedule / No Major Issues	Schedule Slipping / Possible Issues	Behind Schedule / Major Issues
Three County Pilot	100%			X
800 MHz Band Reconfiguration	27%	X		
Smart Zone Controller 2	45%	X		
AWIN COOP	50%		X	

Detailed information on each project's budget, schedule and scope may be found later in this report.

### Program Funding

The funding information below reflects the funding plan and expenditures for the period of December 2003 to March 2007.

Project	Funding Amount	Actual Expenditures	Unexpended Balance	Commitments	Remaining Balance
CSEPP	\$11,373,412.50	\$11,373,412.44	\$ .06	\$0.00	\$ .06
Command & Control	\$12,979,798.80	\$9,817,318.45	\$3,162,480.35	\$3,162,480.35	\$0.00
Tri-County	\$12,401,220.23	\$12,327,666.13	\$73,554.10	\$73,554.10	\$ 0.00
ASP Network Upgrade (Federal Funds)	\$8,996,179.98	\$8,996,155.35	\$24.63	\$0.00	\$24.63
ASP Network Upgrade (State)	\$30,876,891.75	\$ 26,482,861.37	\$4,394,030.38	\$0.00	\$ 4,394,030.38



Funds)					
	\$76,627,503.26	\$68,997,413.74	\$7,630,089.52	\$3,236,034.52	\$4,394,055.00

**Comments:**

**Funding for 800MHz Rebanding:** All expenses for this effort will be negotiated with Nextel, and paid directly by Nextel. The State should not incur any expenses for this effort.

**Smart Zone Controller/System Expansion:** The funding amounts for the Smart Zone Controller and System Expansion projects have been reported in two categories in previous reports. This is being corrected and in coming reports these two projects will be reported as separate line items.

**AWIN COOP:** This is an administrative project and the cost is reported as part of the ASP Network Upgrade (State Funds) described above.

Program Update

**Statewide Purchasing Agreement.** The AWIN Management team has finalized the specifications for a multi-vendor agreement that could be used by local governments and state agencies to purchase radios and accessory equipment. The specification has been sent to Office of State Procurement for release through the state’s purchasing process.

**Maintenance.** The contract for maintenance on the infrastructure, as well as a contract for emergency tower repair work was delivered to Office of State Procurement in May. The maintenance contract was reviewed and is expected to be executed during the month of June. The emergency tower repair procurement will be handled through a Request for Qualifications and is anticipated in the late June, early July timeframe.

**Statewide Interoperable Communications Planning.** The Department of Homeland Security has directed the States to develop a Statewide Interoperable Communications Plan that provides the strategic direction for interoperable communications in the state. The AWIN Management team will be facilitating this process.



## AWIN Management and Operations

The system operation is the management of the 24/7 AWIN system. Issues are reported via the DIS Helpdesk Expert Automation Tool (HEAT) system where the progress is tracked until a resolution has been reached. Extended operational efforts are reviewed and tracked in an effort to maintain system and user impact.

### System Manager:

Name: Bruce Lantz

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Updated: 08/29/07

### MONTHLY HEAT TICKET SUMMARY

Top Call Types	Ticket Count	Comments
Tower Site Maintenance	54	Includes scheduled maintenance, site upgrades and problem reports.
System Infrastructure Issues	62	Includes microwave connections. This number reflects microwave work that is related to the inter-loop expansion.
Console Malfunction	17	Dispatch Units.
User Support	12	Includes user calls for assistance with radio equipment
Power Failure or Surge	14	
Month Total	237	

**Comments:** System usage for the month was an average of 24,323 calls (communication between users) per day on the AWIN system. Issues are reported via the DIS Helpdesk Expert Automation Tool (HEAT) system where the progress is tracked until a resolution has been reached. Issue reports generate from system users, technicians and contractors.

### EXTENDED OPERATIONAL EFFORTS

Activity	Start Date	Completion	% Complete	Status
System Upgrade to 7.2	08/20/2007	08/31/2007	60%	
Site Acceptance Punch List	02/05/2007	06/30/2008	80%	
System Management Transfer	06/01/2007	11/15/2007	75%	
Flash Upgrade for 2 <sup>nd</sup> Zone	05/29/2007	07/15/2007	100%	Effort Complete

**Comments:**



## MONITORED SYSTEM ISSUES

Issue	System Impact	User Impact	Status
Site Generators	Site back-up power not available	Loss of site use	Generators are being monitored. Corrections are being made if problems arise
Jefferson County site optimization	Dropped Calls	Intermittent Audio Problems	Site technicians have identified and corrected several issues. They continue to monitor these problems.

**Comments:**



## Three County Pilot

The Arkansas Wireless Information Network (AWIN) Three County Pilot Project will provide the initial efforts to bring the interoperable network to the county and city emergency responders. The scope of the project is to work with Craighead, Lonoke, and Miller counties in building a fully interoperable radio system, based on Project 25 standards, for all public safety agencies in these counties. This project will provide additional infrastructure needed at the county level, upgraded dispatch units and integration into AWIN. Each county system will be considered part of the overall AWIN system. Further, a repeatable process will be identified that can be used as other counties integrate their infrastructure into AWIN.

### Project Manager:

Name: David Baker

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Updated: 08/29/07

### SUMMARY

Area	On Schedule / No Major Issues	Schedule Slipping / Possible Issues	Behind Schedule / Major Issues	Reason for Deviation
<b>Schedule</b>	-	-	X	Schedule conflict generated delay
<b>Budget</b>	X	-	-	
<b>Scope</b>	X	-	-	

### SCHEDULE

Of the identified tasks, 100% have been completed. (See comments below)

There are 0 days remaining until project completion. (Estimated)

Phase/Activity	Start Date	End Date	% Complete	Status
<b>Project Initiation and Planning</b>	07/15/04	7/31/05	100%	Complete
<b>Lonoke County System Design</b>	08/28/04	6-13-05	100%	Complete
<b>Craighead County System Design</b>	08/28/04	7-24-05	100%	Complete
<b>Miller County System Design</b>	08/28/04	6-27-05	100%	Complete
<b>Final Approval of Design</b>	7-15-04	8-04-05	100%	Complete
<b>Project Execution Lonoke</b>	06-27-05	09-27-06	100%	Complete
<b>Project Execution Craighead</b>	06-27-05	11-30-06	100%	Complete
<b>Project Execution Miller</b>				



• Identify Frequencies	6-27-05	11-15-05	100%	Complete
• Fleet Mapping	9-01-05	5-21-06	100%	Complete
• Civil Work / FNE Installation	3-20-06	12-18-06	100%	Complete
• Optimize System	11-29-06	11-29-06	100%	Complete
• Acceptance Test Plan	11-30-06	12-11-06	100%	Complete
• CATP Miller	11-30-06	12-13-06	100%	Complete
• Subscriber Program and Install	5-01-06	12-5-06	100%	Complete
• Training	11-10-06	12-5-06	100%	Complete
• Cutover	11-29-06	12-5-06	100%	Complete
• Finalize	12-18-06	12-18-06	100%	Complete

**Comments:**

**Lonoke County and Craighead County**

Both counties are completely cutover and operating on a day to day basis using the AWIN system.

**Miller County**

The county users are cutover and operating on a full-time basis using the AWIN system. Training for the Texarkana City Dispatch and console icons were completed in July.

Project work for all counties has been completed with the exception of some administrative tasks to close out the project. This project will be removed from the report with the next report.

**BUDGET**

Total Available Funds	Expenditures to Date	% of Budget Expended	Status
\$12,401,220.23	\$12,327,666.13	99%	On Track

**Comments:** The above budget numbers are based on invoices processed as of February 28 2007.

**SCOPE**

Change Request	Schedule Impact	Budget Impact	Status

**Comments:** No Change Orders for this reporting period.



## 800 MHz Band Reconfiguration

The AWIN system is an 800 MHz system that will require some reconfiguration of the current frequencies.

The FCC ordered the reconfiguration of the 800 MHz band to avoid potentially life-threatening problems where public safety communications equipment may be rendered inoperable or interference may be disruptive to their communications.

### Project Manager:

Name: David Baker

Email: [david.baker@arkansas.gov](mailto:david.baker@arkansas.gov)

Updated: 08/29/07

### SUMMARY

Area	On Schedule / No Major Issues	Schedule Slipping / Possible Issues	Behind Schedule / Major Issues	Reason for Deviation
<b>Schedule</b>	X	-	-	
<b>Budget</b>	X	-	-	-
<b>Scope</b>	X	-	-	-

### SCHEDULE

Of the identified tasks, 27% have been completed. (See comments below)

Phase/Activity	Start Date	End Date	Revised Complete	% Complete	Status
Complete Point-of-Contact Form	08/01/05	08/03/05		100%	Complete
Submit Request for Planning Funding	05/14/06	08/01/06		100%	Complete
Planning Kick-Off	06/19/07	07/05/07		100%	Complete
Frequency Inventory & Study	06/19/07	10/01/07		60%	
Fixed Network Equipment Survey and Inventory	06/20/07	09/24/07		30%	



Subscriber Survey and Inventory	06/20/07	09/10/07		75%	
Suitability Assessment	09/11/07	11/05/07			
Interoperability Planning	07/30/07	10/01/07			
Rebanding Planning	10/02/07	03/06/08			
Proposal Development	03/07/08	05/16/08			
Proposal Acceptance	05/16/08	06/16/08			

**Comments:**

**Schedule:** Initial subscriber inventory has been conducted, verification and cleanup for figures remains. Proposed frequencies are being analyzed. Tower site visits are scheduled to start 09/05/2007

**August Outlook:**

Start Frequency Analysis  
Continue inventory identification

**BUDGET**

Total Funded	Expenditures to Date	% of Funding Expended	Status
\$615,242.35	\$279,016.74	45%	On Track

**Comments:** All expenditures for this project should be funded by Nextel. The percent expended does not reflect work completed, it is based on a distribution schedule identified in the Sprint/Nextel agreement.

**SCOPE**

Change Request	Schedule Impact	Budget Impact	Status

**Comments:** No Change Orders for this reporting period.



## Smart Zone Controller 2/System Expansion

The scope of the Smart Zone Controller 2 (SZC2) Project is to install a second system controller on the existing AWIN system. This effort will include the engineering and design for adding the additional Master Site, including a Smart Zone Controller, preparing the site for housing the equipment, the implementation and optimization of any new hardware and software, the integration of any new hardware and software with the existing system, and testing of the system after the integration is complete.

AWIN is developed on a system of microwave rings, and from a very broad view is self healing, i.e., if a tower or towers are destroyed radio traffic is re-routed around the ring. The System Expansion portion of this effort is the implementation of additional equipment and microwave paths that will form a third ring on the system.

These two efforts will ensure the survivability of the system in the event that one controller is lost, all traffic can be moved to the remaining unit. Further, in the event of a widespread disaster that damages or destroys towers, traffic can be re-routed and users outside of the directly affected area will continue to have beneficial use of the system.

### Project Manager:

Name: Penny Rubow

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Updated: 08/29/07

### SUMMARY

Area	On Schedule / No Major Issues	Schedule Slipping / Possible Issues	Behind Schedule / Major Issues	Reason for Deviation
<b>Schedule</b>	X			
<b>Budget</b>	X			
<b>Scope</b>	X			

### SCHEDULE

Of the identified tasks, 85% have been completed. (See comments below)

There are approximately 31 days remaining until project completion.

Phase/Activity	Start Date	End Date	Revised End Date	% Complete	Status
Initiation/Planning	10/15/05	12/31/05		100%	Completed



<b>Zone Controller Installation</b>				<b>100%</b>	<b>Completed</b>
Building Prep	11/15/05	02/28/06	08/31/06	100%	
Equipment Manufacture & Installation	12/15/05	06/15/06	01/26/07	100%	
<b>Software Upgrade/ Optimization of the System</b>	<b>01/29/07</b>	<b>02/28/07</b>		<b>80%</b>	<b>On-Track</b>
7.0 to 7.1 North Zone Upgrade	01/04/07	02/16/07		100%	Completed
Upgrade Elite Console (7.1)	01/04/07	02/27/07		100%	Completed
Upgrade Troop Consoles	02/19/07	04/02/07		100%	Completed
Move Troops to North Zone	01/04/07	04/19/07	05/17/07	100%	Completed
6.5 to 7.1 South Zone Update	04/13/07	06/06/07	07/04/07	100%	Completed
Upgrade from 7.1 to 7.2 PUSH	07/05/07	07/18/07	08/29/07	25%	On-Track
<b>Project Close Out</b>	<b>04/20/07</b>	<b>05/31/07</b>	<b>08/31/07</b>		<b>Not Started</b>

**Comments:**

**BUDGET**

Total Available Funds	Expenditures to Date	% of Funds Expended	Status

**Comments:** The funding amounts for the Smart Zone Controller have been reported as part of the ASP Upgrade costs in previous reports.

**SCOPE**

Change Request	Schedule Impact	Budget Impact	Status

**Comments:** No Change Orders for this reporting period.



## AWIN Continuity of Operations

The AWIN COOP Project will ensure that a comprehensive emergency and recovery plan has been defined and thoroughly exercised for the AWIN Infrastructure. This effort will encompass planning for emergency communications and the recovery and restoration of the AWIN System. A Continuity of Operations Plan is critical for systems such as AWIN due to the reliance on the system by first responders throughout the state.

### Project Manager:

Name: Penny Rubow

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Updated: 08/29/07

### SUMMARY

Of the identified tasks, 50% have been completed. (See comments below)

There are 59 days remaining until project completion. (Estimated)

Area	On Schedule / No Major Issues	Schedule Slipping / Possible Issues	Behind Schedule / Major Issues	Reason for Deviation
<b>Schedule</b>	X			
<b>Budget</b>	X			
<b>Scope</b>	X			

### SCHEDULE

Activity	Start Date	Finish Completion	Revised Completion	Percentage Complete	Status
Initiating the COOP Project	10/6/05	10/31/05		100%	Complete
Project Organization	10/6/05	4/21/06	10/31/06	100%	Complete
Risk Assessment	3/10/06	5/23/06		100%	Complete
Mitigation Identification	3/20/06	5/24/06	03/31/07	100%	Complete
Equipment Acquisition	TBD				
Training	TBD				
Testing	TBD				
Project Close Out	TBD				



**Comments:**

BUDGET

Total Available Funds	Expenditures to Date	% of Funds Expended	Status

**Comments:** This is an administrative project and the cost is reported as part of the ASP Network Upgrade (State Funds) described in the Program Overview.

SCOPE

Change Request	Schedule Impact	Budget Impact	Status

**Comments:** No Change Orders for this reporting period.