

# Arkansas Wireless Information Network

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Report to the

Joint Interim Committee on Advanced  
Communications and Information  
Technology

For the period ending September 30, 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.

**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

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Updated: 10/14/07

## PROJECTS

Project Name	Percentage Complete	On Schedule / No Major Issues	Schedule Slipping / Possible Issues	Behind Schedule / Major Issues
800 MHz Band Reconfiguration	36%	X		
Smart Zone Controller 2	100%	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 through July 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	\$10,166,430.39	\$2,813,368.41	\$2,813,368.41	\$0.00
Tri-County	\$12,401,220.23	\$12,343,345.53	\$57,874.70	\$57,874.70	\$ 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 Funds)	\$31,736,688.12	\$ 30,528,606.01	\$1,208,082.11	\$0.00	\$ 1,208,082.01



	\$77,487,299.63	\$73,407,949.72	\$4,079,349.91	\$2,871,243.11	\$1,208,106.80
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**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 Arkansas Statewide Interoperable Communications plan was submitted on September 27<sup>th</sup> to the Department of Homeland Security. The plan is being reviewed and comments on the plan are expected by the end of October. The comments will be addressed and the final version of the plan will be developed in November. Final submission to DHS will be December 03, 2007.



## 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: 10/07/07

### MONTHLY HEAT TICKET SUMMARY

Top Call Types	Ticket Count	Comments
Tower Site Maintenance	84	Includes scheduled maintenance, site upgrades and problem reports.
System Infrastructure Issues	52	Includes microwave connections. This number reflects microwave work that is related to the inter-loop expansion.
Console Malfunction	8	Dispatch Units.
User Support	17	Includes user calls for assistance with radio equipment
Power Failure or Surge	2	
Month Total	218	

**Comments:** System usage for the month was an average of 25,000 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	100%	Complete
Site Acceptance Punch List	02/05/2007	06/30/2008	80%	
System Management Transfer	06/01/2007	11/15/2007	75%	

**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. Most issues have been resolved
Jefferson County site optimization	Dropped Calls	Intermittent Audio Problems	They continue to monitor these problems. All issues appear to have been resolved

**Comments:**



## 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

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Updated: 10/06/07

### 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, 36% 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		70%	
Fixed Network Equipment Survey and Inventory	06/20/07	09/24/07		100%	Complete



Subscriber Survey and Inventory	06/20/07	09/10/07		90%	
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 have been completed.

**September Outlook:**

Interoperability Planning  
Continue inventory identification

**BUDGET**

Total Funded	Expenditures to Date	% of Funding Expended	Status
\$615,242.35	\$230,716.79	37%	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: 10/14/07

### 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, 95% 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>100%</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	100%	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:

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Updated: 10/18/07

### SUMMARY

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

There are 39 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.