

Arkansas Wireless Information Network



Report to the

Joint Interim Committee on Advanced
Communications and Information
Technology

For the period ending October 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. This includes actions taken by the AWIN Steering Committee.

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. This project is complete and will be removed from future reports.



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: 11/06/07

PROJECTS

Project Name	Percentage Complete	On Schedule / No Major Issues	Schedule Slipping / Possible Issues	Behind Schedule / Major Issues
800 MHz Band Reconfiguration	55%		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)	\$31,736,739.01	\$ 30,528,606.01	\$1,208,133.00	\$0.00	\$ 1,208,133.00
	\$77,487,350.52	\$73,407,949.72	\$4,079,400.80	\$2,871,243.11	\$1,208,157.69



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 Radio Purchasing Agreement. Responses to the Invitation for Bid (IFB) were opened by Office of State Procurement. It was determined that the information received was not of sufficient quality to provide an adequate analysis of the bids and all bids were administratively withdrawn. The IFB is being reworked and will be re-released.

Statewide Interoperable Communications Planning. The Arkansas Statewide Interoperable Communications plan was submitted on September 27th and has been reviewed by the Department of Homeland Security. Reviewers' comments on the plan were returned October 30th. 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 Steering Committee

Statewide Interoperable Communications Planning. The AWIN Steering Committee reviewed and approved the draft of the Arkansas plan prior to submission to the Department of Homeland Security.

System Requests. The following requests were approved on by the AWIN Steering Committee:

- Arkansas Insurance Department -- Request to place 21 radios and 2 consolettes in service on the AWIN System. For daily use.
- Arkansas Forestry Commission -- Request to place 53 (additional) portables in service on the AWIN System. For interoperability purposes only.
- Department of Health/ Arkansas Hospital Association -- Develop a talkgroup for each Arkansas Hospital Association region specifically for the health department and hospitals communications. For interoperability purposes only
- University of Central Arkansas Police Department -- Request to deploy 13 radios, 1 dispatch console and 1 consolette, create 1 talkgroup for their use, and access to MAC channels. For interoperability purposes only.
- Arkansas Nuclear One – Request to place 1 radio in service on AWIN to establish a back-up method of contacting ADEM in the event that their primary method is not available.



- Arkansas National Guard – Request to add 8 for Fort Chaffee and 2 for Camp Robinson to be used on a daily basis for law enforcement. ANG requests 5 additional talkgroups , two for daily operations at Fort Chaffee and Camp Robinson; three for interoperability purposes during real-world and simulated disaster response missions
- Department of Justice/Drug Enforcement Administration – Use of Arkansas State Police talkgroups.
- Transportation Security Administration – Use of AWIN by 21 TSA officers and the use of Arkansas State Police talkgroups.

New Projects. The Steering Committee approved two new projects, one for additional channels and one for sites on wheels. These projects will be added to this report in the coming months.



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

Email: Bruce.L.Lantz@arkansas.gov

Updated: 11/06/07

MONTHLY HEAT TICKET SUMMARY

Top Call Types	Ticket Count	Comments
Tower Site Maintenance	56	Includes scheduled maintenance, site upgrades and problem reports.
System Infrastructure Issues	44	Includes microwave connections. This number reflects microwave work that is related to the inter-loop expansion.
Console Malfunction	13	Dispatch Units.
User Support	5	Includes user calls for assistance with radio equipment
Power Failure or Surge	6	
Month Total	192	

Comments: System usage for the month was an average of 24,043 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
Site Acceptance Punch List	02/05/2007	06/30/2008	100%	Complete
System Management Transfer	06/01/2007	11/15/2007	90%	

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

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

Email: david.baker@arkansas.gov

Updated: 11/06/07

SUMMARY

Area	On Schedule / No Major Issues	Schedule Slipping / Possible Issues	Behind Schedule / Major Issues	Reason for Deviation
Schedule	-	X	-	Resolving issues with Frequencies
Budget	X	-	-	-
Scope	X	-	-	-

SCHEDULE

Of the identified tasks, 55% 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		80%	Behind
Fixed Network Equipment Survey and Inventory	06/20/07	09/24/07		100%	Complete



Subscriber Survey and Inventory	06/20/07	09/10/07		100%	Complete
Suitability Assessment	09/11/07	11/05/07		80%	Behind
Interoperability Planning	07/30/07	10/01/07		100%	Complete
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: Proposed frequencies are being analyzed. Working with Sprint/Nextel to clear up any issues with proposed frequencies. Interoperability Planning has been completed.

November Outlook:

Complete frequency work
Submit request for schedule extension with FCC

BUDGET

Total Funded	Expenditures to Date	% of Funding Expended	Status
\$615,242.35	\$241,563.79	39%	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.

This project is complete and will be removed from future reports.

Project Manager:

Name: Penny Rubow

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Updated: 11/05/07

SUMMARY

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

SCHEDULE

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

There are approximately 0 days remaining until project completion.

Phase/Activity	Start Date	End Date	Revised	%	Status
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			End Date	Complete	
Initiation/Planning	10/15/05	12/31/05		100%	Completed
Zone Controller Installation				100%	Completed
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%	
Software Upgrade/Optimization of the System	01/29/07	02/28/07		80%	On-Track
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%	Completed
Project Close Out	04/20/07	05/31/07	08/31/07	100%	Completed

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: 11/05/07

SUMMARY

Of the identified tasks, 28% have been completed. (See comments below)

There are 181 days remaining until project completion. (Estimated)

Area	On Schedule / No Major Issues	Schedule Slipping / Possible Issues	Behind Schedule / Major Issues	Reason for Deviation
Schedule	X			
Budget	X			
Scope	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	10/01/07	03/31/08		10%	On-Track
Training	12/15/07	03/31/08			Not started
Testing	12/15/07	03/31/08			Not started
Project Close Out	04/01/07	04/30/07			Not started



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.