



ADOA-ASET

Project Investment Justification

Version 01.01

A Statewide Standard Document for Information Technology Projects

Project Title:

Communications Asset Management

Agency Name:	Arizona Department of Public Safety
Date:	03/19/2015
Agency Contact Name:	Adam Follrath
Agency Contact Phone:	
Agency Contact Email:	

[Hover for Instructions](#)

I. Management Summary*

The Wireless Systems Bureau (WSB) of the Arizona Department of Public Safety (AZDPS) is responsible for procuring, maintaining, tracking, and sending to surplus the department's telecommunications equipment. They are responsible for the thousands of portable and mobile radios used by officers in the field, RADARS, VASCARS, the statewide microwave systems, mountaintop repeaters, dispatcher consoles, test equipment, and the infrastructure components that support those systems. They currently manage 9,430 capital inventory items with a purchase price of over \$39 million. In addition, the bureau manages many other inventory items which are not on the capital inventory system. Each of these items is assigned and maintained according to complex maintenance schedules. The current asset system is antiquated and does not offer support for maintenance or trouble tickets. The system is only

functional for assignment of items to individuals or work units. The bureau also works with a paper based trouble ticket system.

The bureau wishes to implement a system that supports inventory functions, maintenance history tracking, automated trouble ticket management, cost of use analysis, automated assignment using RFID and barcoding, and maintenance recordkeeping with user and repair manuals and maintenance records online.

II. Project Investment Justification (PIJ) Type*

Yes No Is this document being provided for a Pre-PIJ / Assessment phase?

If Yes,

Identify any cost to be incurred during the Assessment phase.	\$0
Based on research done to date, provide a high-level estimate or range of development costs anticipated for the full PIJ.	\$0

Explain:

[Click here to enter text.](#)

Yes No Will a Request for Proposal (RFP) be issued as part of the Pre-PIJ or PIJ?

III. Business Case

A. **Business Problem***

With over \$40,000,000 worth of equipment distributed statewide in patrol vehicles, communications centers, data centers, and mountaintops statewide, the Wireless Systems Bureau (WSB) faces the overwhelming challenge of tracking, maintaining, and repairing over 9,400 items of communications technology. Currently the inventory is accomplished by completing transfer forms and forwarding them to a central location for entry into a legacy mainframe inventory application. Maintenance is accomplished by accepting email or telephone requests for service and then a paper-based resolution tracking. Maintenance records on costly items are tracked by paper files or Excel spreadsheets. Most items do not have maintenance records. After personnel services costs, the acquisition of capital assets is the department's greatest expense. A complete and accurate inventory of those assets is the foundation for good asset planning. The WSB must make projections for the acquisition of replacement equipment. Today's automation systems do not support preventative maintenance support, consumable inventory management, warranty tracking, trouble ticket workflow, mobile access, or state of the art inventory technology such as RFID or barcoding.

B. **Proposed Business Solution***

The department has examined several options that would fulfill the requirements articulated in Section A (above). There are a number of off-the-shelf products that provide a generic inventory solution for an agency. Many had some of the features that WSB requires such as RFID, barcoding, warranties, and preventive maintenance. None were within our budget for this project and none had the features that dedicated

communications equipment applications have. These general purpose asset management systems did not have the capability of tracking communications specific data such as firmware and software versions, configuration information, IP addresses, etc. WSB conducted a thorough review of both generic asset management applications and the two leading off-the-shelf communications asset management software packages. After consultation with both companies and with several of their customers, WSB selected an off-the-shelf dedicated asset management application specifically written for the telecommunications industry.

C. Quantified Benefits*

<input checked="" type="checkbox"/>	Service enhancement
<input type="checkbox"/>	Increased revenue
<input checked="" type="checkbox"/>	Cost reduction
<input checked="" type="checkbox"/>	Problem avoidance
<input checked="" type="checkbox"/>	Risk avoidance

Explain:

WSB currently uses a combination of a generic capital inventory system, hand records, and spreadsheets to track inventory, maintenance requirements, configurations, service history, and trouble tickets. WSB currently does not have the capability to track lifecycle costs, location history, repair part availability, or other critical metrics essential to operating an optimally efficient communications infrastructure. The proposed solution will address these requirements and allow WSB to dramatically improve service to customers by having a software tool that will prompt technicians for preventative maintenance events, route trouble tickets, append parts needs and availability to trouble tickets, and permit mobile access from worksite locations to data. This capability will achieve all of the checked benefits in Section C. Specific metrics are impossible to provide because the current systems do not capture or report any base lines. For example there is currently no way to capture the average number of hours needed to replace a radio in a patrol car or on a mountain top. The current system certainly cannot provide metrics on cost avoidance, however it will reduce labor hours by replacing hand written documentation (carbon copy work orders), hand searching file cabinets for documentation, and will reduce invoicing labor hours. In addition, consolidated consumable materials inventory will save unnecessary purchases of maintenance and project parts (nuts, bolts, etc.) throughout the State's eight service locations and allow for re-order cycle and shop transfer processes to be developed.

IV. Technology Approach

A. Proposed Technology Solution*

WSB proposes purchasing the COMMSHOP 360 application available from MCM Technology through state contract with SHI. This application was specifically written to address the maintenance, inventory, asset management, and trouble ticket management needs of a telecommunications organization. WSB will acquire the browser based application that may be accessed from desktop computers, mobile data computers used by the operational divisions, or from private wireless networks located

on mountaintops. Configuration costs are included in the quote. There is no license renewal and we will review the Support and Maintenance line item on an annual basis.

B. *Technology Environment*

WSB's eight service locations are on the AZDPS wide area network. This is a Criminal Justice Information System compliant TCP/IP network. The environment consists of a client/server environment using primarily clients utilizing Microsoft Windows version 7 clients and a combination of Microsoft and Unix servers and an IBM mainframe computer hosting a wide variety of applications.

The proposed solution consists of a database server operating on Windows Server 2008 R2 and a database platform of Microsoft SQL 2008 R2. The server requirement for this project is a Xeon Processor, 4 GB RAM, 4 each SCSI Drives RAID 10. The network connecting clients and the server operates at 100 Mbps. AZDPS has determined that due to the minimal server size and small storage footprint there will be no need for additional server/storage space. The database, application, operating system and hardware platform are all technologies that DPS ITB personnel have skill in managing and fits well with our current technology environment.

C. *Selection Process*

WSB conducted a two phase selection process. Only vendors on the state contract were considered. WSB conducted an extensive search for vendors offering products meeting the department's requirements. WSB made a specific effort to attend BREAZ project meetings, as well as presenting requested features to the BREAZ project team, and Maximo product representatives, however both applications were missing key components specific to telecommunications asset management. In addition, a national network of public safety practitioners was consulted which identified Motorola Radio Asset Management as another possible vendor. The life cycle cost of the Motorola software, software upgrades and maintenance was substantially higher and required a continuous annual funding allocation. The CommShop360 will interface with any of the mainstream asset management systems and data output formats. Phase II consisted of a close examination of both products. Current users of both products were identified and interviewed. In some cases questionnaires were used to evaluate both products. The study was conducted within a formal leadership training class as a class project. The proposed solution was selected.

V. Project Approach

A. **Project Schedule***

Project Start Date: 3/30/2015 Project End Date: 6/26/2015

B. **Project Milestones**

Major Milestones	Start Date	Finish Date
Purchase and Installation (Database and Application)	3/23/2015	4/3/2015
Business Process Review	4/6/2015	4/17/2015
Data Conversion	4/13/2015	5/1/2015
Data Conversion Audit	5/4/2015	5/8/2015
On-site training and Go-Live	6/22/2015	6/26/2015

VI. Roles and Responsibilities

A. **Project Roles and Responsibilities**

- AZDPS Project Management/Over site
- Installation and configuration provided by vendor.
- AZDPS IT support to extract relevant data from the mainframe inventory system.
- AZ DPS Subject matter expert (SME) availability during the Business Process Review.
- AZDPS SME availability during the Data Conversion Audit and Review.
- AZDPS Coordination assistance during installation and training.
- Training provided by vendor.

B. **Project Manager Certification**

- Project Management Professional (PMP) Certified
- State of Arizona Certified
- Project Management Certification not required

C. **Full-Time Employee (FTE) Project Hours**

Total Full-Time Employee Hours	184
Total Full-Time Employee Cost	

VII. Risk Matrix, Areas of Impact, Itemized List, PIJ Financials

VIII. Project Approvals

A. Agency CIO Review*

Key Management Information	Yes	No
1. Is this project for a mission-critical application system?	X	
2. Is this project referenced in your agency's Strategic IT Plan?		X
3. Is this project in compliance with all agency and State standards and policies for network, security, platform, software/application, and/or data/information as defined in http://aset.azdoa.gov/security/policies-standards-and-procedures , and applicable to this project? If NO , explain in detail in the "XI. Additional Information" section below.	X	
4. Will this project transmit, store, or process sensitive, confidential or Personally Identifiable Information (PII) data? If YES , in the "XI. Additional Information" section below, describe what security controls are being put in place to protect the data.		X
5. Is this project in compliance with the Arizona Revised Statutes (A.R.S.) and GRRC rules?	X	
6. Is this project in compliance with the statewide policy regarding the accessibility to equipment and information technology for citizens with disabilities?	X	

B. Project Values*

The following table should be populated with summary information from other sections of the PIJ.

Description	Section	Number or Cost
Assessment Cost (if applicable for Pre-PIJ)	II. PIJ Type - Pre-PIJ Assessment Cost	\$
Total Development Cost	VII. PIJ Financials tab	\$215,517.11
Total Project Cost	VII. PIJ Financials tab	\$301,048.11
FTE Hours	VI. Roles and Responsibilities	184

C. Agency Approvals*

Contact	Printed Name	Signature	Email and Phone
Project Manager:	Adam G. Follrath		
Agency Information Security Officer:	Roger Baune		
Agency CIO:	Gregg Hayes		
Project Sponsor:	Jeffrey Raynor		

IX. Optional Attachments

A. Vendor Quotes

See attached

X. Glossary

XI. Additional Information

Links:

[ADOA-ASET Website](#)

[ADOA-ASET Project Investment Justification Information Templates and Contacts](#)

Email Addresses:

[Strategic Oversight](#)

ADOA-ASET_Webmaster@azdoa.gov