



**ADOA - ASET**

Arizona Strategic Enterprise Technology

**Project Investment Justification**

**Version 01.01**

A Statewide Standard Document for Information Technology Projects

**Project Title:**

**Core Network Expansion**

<b>Agency Name:</b>	Arizona Attorney General's Office
<b>Date:</b>	April 7, 2014
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## I. Management Summary\*

As part of the new State-wide telephone system, AzNet will assume the management of the every State agency access network data switch. AzNet will charge each agency approximately \$30 per month for each device attached to the access network. The AGO will incur a new operational cost of approximately \$120,000 annually to connect its 400 network printers and wireless (wifi) access points. This project will expand the existing AGO core network so that it is capable of supporting the existing installed base of printer and wifi devices. The goal of this project is to manage the future operational costs of the associated with the AGO network print and wifi services.

## 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.	\$
Based on research done to date, provide a high-level estimate or range of development costs anticipated for the full PIJ.	\$

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\***

Arizona state government is migrating from a legacy telephone system to a modern voice over internet protocol (VOIP) system. AzNet is the State entity that is responsible for planning, managing and implementing the State's new VOIP system. Most Arizona state agencies have existing data networks that were installed to support their own local computing needs. AzNet has defined the agency switches that makeup those networks as either "access" or "core". As part of the State's VOIP project, AzNet will be replacing all of the State's access network data switches. As AzNet replaces the access switches, they will take administrative control of them and begin billing the agencies a per port cost to utilize the new network. The Arizona Attorney General's Office (AGO) currently pays a per device price for telephone service, but does not incur any cost per device for computer and computer peripheral network connections. Based upon the current AzNet pricing model, the new operational cost for combined telephone and data networking services at the AGO is going to increase by a minimum of \$100K per annum.

### B. **Proposed Business Solution\***

The AGO proposes to expand its current core network infrastructure to support all AGO network printers and wireless access points in the Phoenix Law Building, Phoenix Capital Center Building, and Tucson Main Building. The AGO intends to deploy the expanded core network infrastructure in tandem with the deployment of the AzNet VOIP system.

**C. Quantified Benefits\***

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

Explain:

**Cost Reduction**

The AGO currently has 350 network printers and 40 wireless access points disbursed within the Law, Capital Center, and Tucson Main locations. Based upon the current AzNet contract price of \$30 per access connection per month, the AGO estimates that it will save approximately \$140K per year in network operating costs.

**IV. Technology Approach**

**A. Proposed Technology Solution\***

The AGO intends to install a core network fabric in the Law, Capital Center, and Tucson Main buildings. A Cisco small business 50 port rack-mount switch will be installed in each of the IDFs located in the Law, Capital Center, and Tucson Main buildings. There are a total of 17 IDFs. Each IDF switch will provide network service to all network attached printers and access points served by the IDF. A single 8 port fiber optic concentrator switch will be installed in the MDF of each building. Each building has one MDF. The multiple IDFs in each building will be connected by existing multimode fiber to the single MDF in each building. This planned expansion of the core network will not provide any connectivity for PC or IP phone devices. The AGO will store a replacement inventory of three 50 port switches and two 8 port concentrator switches in case of equipment failure.

**B. Technology Environment**

The AGO successfully completed a project to replace its two primary core network switches in the Law and Capital Center buildings in January 2013. The majority of the AGO access network switches being replaced by AzNet are over 10 years old. The AGO had prior plans to replace its aging access switch infrastructure, but those plans were scrapped in light of the AzNet VOIP project. The AGO server infrastructure is comprised of a combination of 30+ physical and virtual servers that utilize the recently refreshed core network infrastructure. This project proposes to expand that core network infrastructure to support network printers and wifi access points.

**C. Selection Process**

The Cisco small business line of switches were chosen for a number of reasons including: 1) Cisco is a trusted brand name in network products; 2) the AGO technical staff have technical experience using Cisco brand network products; 3) the small business line of Cisco switches are inexpensive, but are more than capable of handling network printer

and wireless access point traffic; and 4) the product is available on an existing Arizona State contract.

**V. Project Approach**

**A. Project Schedule\***

**Project Start Date:** 5/5/2014    **Project End Date:** 6/26/2015

**B. Project Milestones**

Major Milestones	Start Date	Finish Date
Order and deliver product	05/05/2014	06/30/2014
Rack IDF switches	08/04/2014	09/26/2014
Rack concentrator switches	09/02/2014	09/26/2014
Interconnect IDF & concentrator switches	09/29/2014	02/06/2015
Migrate printer & access point connections to core network	10/06/2014	06/26/2015

**VI. Roles and Responsibilities**

**A. Project Roles and Responsibilities**

**ISS Director** – Manage project including task oversight, product order approval, and ASET reporting.

**Systems Engineer** – Identify specific product hardware. Setup and configure network switch equipment. Patch wireless access points to core network.

**PC Technicians** – Patch printer hardware over to core network.

**Administrative Assistant** – Create and track project orders.

**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**

<b>Total Full-Time Employee Hours</b>	500
<b>Total Full-Time Employee Cost</b>	\$26,000.00

**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?	Y	
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 <a href="http://aset.azdoa.gov/security/policies-standards-and-procedures">http://aset.azdoa.gov/security/policies-standards-and-procedures</a> , 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	\$0
Total Development Cost	VII. PIJ Financials tab	\$33,973.35
Total Project Cost	VII. PIJ Financials tab	\$33,973.35
FTE Hours	VI. Roles and Responsibilities	500

### C. Agency Approvals\*

Contact	Printed Name	Signature	Email and Phone
Project Manager:	John Abretske		
Agency Information Security Officer :	John Abretske		
Agency CIO:	John Abretske		
Project Sponsor:	Margaret Dugan		
Agency Director:		Not Required	

## IX. Optional Attachments

### A. *Vendor Quotes*

## X. Additional Information

The Attorney General's Office is the largest law office in the State, with approximately 400 attorneys and 1,100 employees. The AGO provides legal advice to most State agencies. The AGO also investigates and prosecutes consumer fraud, white-collar crime, organized crime, public corruption, drug, environmental violations, and deprivation of civil rights. As such, the AGO information system processes a wide variety of PII, HIPPA, client attorney privilege, criminal investigative, and confidential data. Quite frequently, portions of the sensitive and confidential information must be printed.