



ADOA-ASET

Arizona Strategic Enterprise Technology

**Project Investment Justification
(PIJ)**

“LITE”

*A Statewide Standard
Document for Information Technology Projects*

For: Low Risk Projects Only

Project Title: AZNET Refresh: Phx, Flag, Tucson

Agency Name: Arizona Department of Education

Date: July 2, 2013

Prepared By: Joe Frost

Revised PIJ Version – January 2013

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PROJECT INVESTMENT JUSTIFICATION (PIJ) TEMPLATE DECISION MATRIX

Before completing this document, first confirm that this would be classified as a **Low Risk project**. To determine that unless otherwise aware/advised, complete the matrix in section IX. Project Classification & Risk Assessment. After confirming the project would be categorized as Low Risk, complete the sections of the PIJ Lite document as indicated below.

ASET may request additional information, or require completion of additional sections or the full PIJ document, if the project is deemed critical or otherwise not Low Risk in nature. All projects with \$25,000 or more in development expense require that a PIJ or PIJ Lite be approved by ASET. Projects with \$1,000,000 or more in development expense and Pre-PIJ assessments cannot utilize the PIJ Lite document.

Category	PIJ Lite	Pre PIJ *	PIJ	ITAC Review
Low Risk projects: Including Operational Infrastructure Upgrades (i.e. PC Replacement/Refresh, Network Upgrades)	●			
Medium Risk projects		Optional	●	
High Risk projects		Optional	●	
Very High Risk projects		Optional	●	
\$1.0M and Above projects		Optional	●	●

Section	Category	PIJ Lite	Pre PIJ *	PIJ	Add for ITAC \$1.0M+
I.	General Information				
I.A	General Information	●	●	●	
I.B	Special Funding Considerations	●	●	●	
II.	Project Overview				
II.A	Management Summary	●	●	●	
II.B	Existing Situation & Problem, "As Is"	●	●	●	
II.C	Proposed Changes & Objectives, "To Be"	●	●	●	
II.D	Proposed Technology Approach		●		
III.	Project Approach				
III.A	Proposed Technology	●		●	
III.B	Other Alternatives Considered			●	
III.C	Major Deliverables & Outcomes	●		●	
IV.	Policies, Standards & Procedures				
IV.A	Enterprise Architecture	●		●	
IV.B	Service Oriented Architecture Planning & Implementation			●	
IV.C	Disaster Recovery Plan & Business Continuity Plan			●	
IV.D	Project Operations			●	
IV.E	Web Development Initiative			●	
IV.F	IT State Goals			●	
V.	Roles and Responsibilities				
V.A	Roles and Responsibilities	●		●	
VI.	Project Benefits				
VI.A	Value to the Public			●	
VI.B	Benefits to the State			●	
VII.	Project Timeline				
VII.A	Project Schedule	●	●	●	

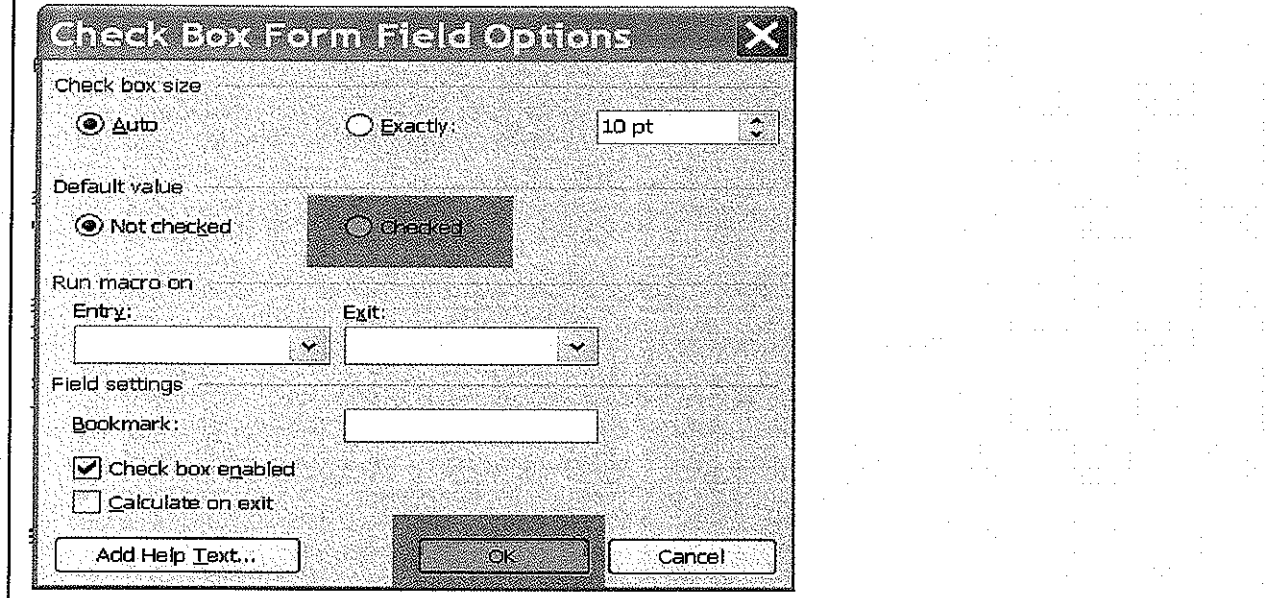
VIII.	Project Financials				
VIII.A	Pre-Assessment Project Financials		●		
VIII.B	Detailed Project Financials.	●		●	
VIII.C	Funding Source	●	●	●	
VIII.D	Special Terms and Conditions (if required)	●	●	●	
VIII.E	Full Time Employee (FTE) Hours	●		●	
IX.	Project Classification & Risk Assessment				
IX.A	Project Classification & Risk Assessment Matrix	●		●	
X.	Project Approvals				
X.A	CIO Review	●	●	●	
X.B	Project Values	●	●	●	
X.C	Project Approvals	●	●	●	
Appendix					
A	Itemized List with Costs	●		●	
B	Connectivity Diagram				●
C	Gantt Chart, Project Management Summary				●
D	NOI (Web Projects Only)	●		●	

* Pre PIJ is optional for agencies seeking approval from external entities to contract for outside labor or resources to assess scope, technology and approach. After the assessment is completed, full project details will be added to the PIJ for final PIJ Approval.

NOTE: Pre PIJ Assessments do not apply to this document.

Document Instructions:

Double click on square Yes No and select "checked" for the appropriate box then select "OK".



ASET Forms:

Project forms are available on the ADOA ASET website – see links below

Project Investment Justification Documents - <http://aset.azdoa.gov/content/project-investment-justification>

Project Oversight Status Report and Change Request Form –
http://aset.azdoa.gov/sites/default/files/media/docs/StatusRpt%26ProjChangeForm_0.xls

Web Development Initiatives - Notice of Intent (NOI) form –
<http://aset.azdoa.gov/node/15>

I. General Information

I.A General Information

Agency CIO:	Mark Masterson	Contact Phone:	
Agency Contact Name:	Shyam Sunder	Contact Phone:	
Agency Contact Email:		Prepared Date:	July 2, 2013

II. Project Overview

II.A Management Summary

I. Problem Description

The Arizona Department of Education (ADE), with sites located in Phoenix, Flagstaff, and Tucson will undergo a refresh (replacement) of all active voice devices, data routers and LAN switches that are within the AZNet II contract scope.

In order for AZNet II to perform their Statement of Work (SOW) there are criteria that ADE must first comply with:

1. Cabling
 - a. "5e or better (1Gb) is required for station cabling..."
 - b. Fiber will need to run from DEMARC/1st floor straight to each floor terminating in an LC connector
2. UPS
 - a. "Provide power and battery backup equipment including UPS
 - b. UPS equipment will need to be upgraded to replace aging and failing equipment and to accommodate increased networking equipment.
3. Power
 - a. Provide power: "20 Amp per 96 ports @ 120 VAC and 240 ports @ 220 VAC"

II. Solution

Plan and implement technology infrastructure required to support AZNet II refresh. This includes 20amp (220vac) electrical, UPS equipment, upgrading data cabling to Cat5e, and running Fiber cable in a prescribed fashion.

III. Quantified Justification

Without these conditions met, ADE will be out of compliance with the AZNet refresh technical specification criteria.

II.B Existing Situation and Problem, "As Is"

Currently ADE has over 200 older data cable runs that must be upgraded. The fiber is the older type and must be upgraded and run differently, and the aging UPS equipment must be replaced. Due to the age of the facility, new 220v power must be run to accommodate the equipment.

II.c Proposed Changes and Objectives, "To Be"

Upgrading the power, cabling and UPS brings ADE into compliance for AZNet II to perform their equipment upgrade.

III. Project Approach

III.A Proposed Technology

Electrical

A total of 4 new [1 per floor] 20amp 220V circuits will be installed. Each outlet will use 2ea L6-20R.

- Please see attached CSI quote for additional detail

Data Cabling – Cat5e

A total of 203 new 4-pair Category 5e Plenum cables will be installed throughout the 1535 W. Jefferson location replacing the same number of data cables on the Basement through 4th floors. A detailed drop count is listed below:

Floors IDF Total Cable Drops

1st Floor – 40 cables

3rd Floor – 130 cables

4th Floor – 33 cables

TOTAL – 203 cable drops

- Please see attached Black Box Network Services quote for additional detail.

Data Cabling – Fiber Optic

Current Technology (50 micron) fiber optic cable needs to be run from the Dmarc to each of the IDF rooms.

- Please see attached Black Box Network Services quote for additional detail.

Uninterruptable Power Supply

10 rack mounted UPS

10 UPS network modules

- Phoenix location

2 UPS

2 UPS network modules

- Flagstaff location
- Please see attached Principia quote for additional detail

Network Engineering

203 patch cables from punch down blocks to switches

- Please see attached Principia quote for additional detail

III.c Major Deliverables and Outcomes

The principal outcome of this project will be a technical infrastructure capable of supporting the AZNET II requirement for the Refresh Project and Wireless

- Place requisitions with SPO and have POs issued
- Cable Installation
- Equipment logistics
- UPS & Network Module installation
- Decommission old equipment

IV. Policies, Standards & Procedures

IV.A Enterprise Architecture

Yes **No** - Does this project meet all 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> as applicable for this project?

If **NO** please describe **NEW** or **EXCEPTIONS** to Standards {Network, Security, Platform, Software/Application and/or Data/Information}:

V. Roles and Responsibilities

V.A Project Roles & Responsibilities:

Please identify Project Roles & Responsibilities:

Project Manager – Shyam Sunder
Michael Holmes – Network Administration
Mike Jones – Facilities Manager

Please indicate Project Manager Certification:

- The **project manager** assigned to the project is:
- Project Management Professional (PMP) Certified
 - State of Arizona Certified
 - PM Certification not required

VII. Project Timeline

VII.A Project Schedule

Provide estimated schedule for the development of this project. These dates are estimates only; more detailed dates will be required at project start up once the project schedule is established.

Project Start Date: 07/01/2013

Project End Date: 08/30/2013

VIII. Project Financials

VIII.B Detailed Project Financials

Development and Operational Project Funding Details

Funding Categories:

Professional and Outside Services: The dollars to be expended for all third-party consultants and contractors.

Hardware: All costs related to computer hardware and peripheral purchases for the project.

Software: All costs related to applications and systems related software purchases for the project.

Communications: All costs related to telecommunications equipment, i.e. switches, routers, leased lines, etc.

Facilities: All costs related to improvements or expansions of existing facilities required to support this project.

License & Maintenance Fees: All licensing and maintenance fees that might apply to hardware, software and any other products as up-front costs to the project (ongoing costs would be included under Operational expense).

Other: Other IT costs not included above, such as travel, training, documentation, etc.

NOTE: FTE costs may be included in section VIII.e below, as required.

VIII.c Funding Source

(Double click on table below – add funding in **whole dollars** and then click outside the table to return to Word doc)

Funding Source Category	Name of Funding Source	Currently Available (\$)		New Request (\$)		Total (\$)
		Development Budget	Operational Budget	Development Budget	Operational Budget	
General Fund	IT GSA (31036)	\$ 88,333				\$ 88,333
Federal ARRA Fund						\$ -
Federal Fund						\$ -
Other Appropriated Funds						\$ -
Other Non Appropriated Funds						\$ -
TOTAL PROJECT COSTS (Should = development and operational totals above)		\$ 88,333	\$ -	\$ -	\$ -	\$ 88,333

VIII.D Special Terms and Conditions (if required)

Special Terms and Conditions (if required)

VIII.E Full Time Employee Project (FTE) Hours

Provide estimated FTE Development hours that will be utilized for the duration of the project. Include IT as well as Business Unit FTE hours, if available. Enter into Project Values table on Approvals page. Enter FTE costs (if known) as well.

Total Full Time Employee Hours – 260

Total Full Time Employee Cost - \$13,000

NOTE: Equipment will be configured and installed as part of daily routine without incurring additional costs.

IX. Project Classification and Risk Assessment

IX.A Project Classification and Risk Assessment Matrix

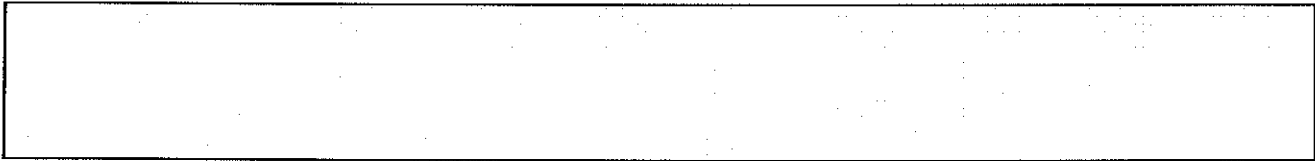
Rate each question to determine risk level at Low (0), Medium (1), High (2), Very High (3).

Enter Risk Score into Project Values table on Approvals page.

RISK EVALUATION RANGES

LOW RISK PROJECT	0 - 8
MEDIUM RISK PROJECT	9 - 25
HIGH RISK PROJECT	26 - 42
VERY HIGH RISK PROJECT	43 +

Add Project Risk Details (if required)



PIJ Project Classification & Risk Evaluation					
Risk Factor	Low (0)	Medium (1)	High (2)	Very High (3)	Score
Project Management Complexity					
Project Team Size (# of people)	1-5	6-10	11-15	> 15	0
Project Manager (PM) Experience	Deep experience in this type of project	Some experience in this type of project and able to leverage subject matter experts	Some experience in this type of project and has limited support from subject matter experts	New to this type of project	0
Team Member Availability	Dedicated staff for project activities only as assigned	Staff is in place, few interrupts for non project tasks are expected and have been accounted for	Available, some turnover expected, some interrupts for non project issues likely	Dedicated team not available; staff will be assigned based on capacity	0
# of Agencies involved in Development activity	1	2	3	> 3	0
Vendor (if used)	No Vendor required	Vendor has been used previously with success	Vendor has been used previously with some management support required	New Vendor and/or multiple vendors	1
Project Schedule	Schedule is flexible	Schedule can handle minor variations, but deadlines are somewhat firm	Scope or budget can handle minor variations, but deadlines are firm	Scope, Budget and Deadlines are fixed and cannot be changed	0
Project Scope	Scope is defined and approved	Scope is defined and pending approval	Scope being defined	High level definition only at this point	0
Budget Constraints	Funds allocated	Funds pending approval	Allocation of funds in doubt or subject to change without notice	No funding allocated	0
Project Methodology	Defined methodology	Defined methodology, no templates	High level methodology framework only	No formal methodology	0
IT Solution Complexity					
Product Maturity (if purchased)	Product implemented & working in > 1 state agency or business of similar size	Product implemented & working in 1 agency or business of similar size	Product implemented & working only in an agency or business of smaller size	Product not implemented in any agency or business	0
Solution Dependencies	No dependencies or interrelated projects	Some minor dependencies or interrelated projects but considered low risk	Some major dependencies or interrelated projects but considered medium risk	Major high-risk dependencies or interrelated projects	0
System Interface Profile	No other system interfaces	1-2 required interfaces	3-4 required interfaces	> 4 required interfaces	0
IT Architectural Impact	Follows State IT approved design; principles, practice & standards	New to the State but follows established industry standards	Evolving "industry standard"	No standards, leading edge technology	0
Deployment Impact					
Process Impact	No business process changes	Agency wide process changes	Multi-State Agency process changes	State-wide process changes	0
Scope of End User Impact	Department or Division level only	Multiple Division or Agency wide impacts	Multi-Agency impacts	State-wide impacts	0
Training Impact	No training is required	Minimal training is required	Considerable training is required	Extensive training is required	0
Total Risk Score					1

X. Project Approvals

X.A CIO Review

Key Management Information		Yes	No
1. Is this project for a mission critical application system?		<input checked="" type="checkbox"/>	
2. Is this project referenced in your agency's Strategic IT plan?			<input checked="" type="checkbox"/>
3. Is this project consistent with agency and State policies, standards and procedures?		<input checked="" type="checkbox"/>	
4. Is this project in compliance with the Arizona Revised Statutes and GRRC rules?		<input checked="" type="checkbox"/>	
5. Is this project in compliance with the statewide policy regarding the Accessibility to Equipment and Information Technology for Citizens with Disabilities?		<input checked="" type="checkbox"/>	
6. Is this project mandated by law, court case or rule? If yes, cite the federal requirement, ARS Reference or Court Case.			<input checked="" type="checkbox"/>

Details: Provide details related to technology as part of the requirement.

X.B Project Values

The following table contains summary information taken from the other sections of the PIJ document.

Description	Section	Significance
Total Development Cost	VIII. Project Financials	\$ 88,333
Total Project Cost	VIII. Project Financials	\$ 88,333
FTE Hours	VIII. Project Financials	260
Project Risk Factors	IX. Risk Summary	1

The PIJ must be transmitted to ASET by email as a Word document. Project approvals may be sent to ASET by email in PDF format. Include the Project Title below for identification. Send to your ASET Oversight Manager, or if not sure who is assigned to your Agency, PIJ docs can be sent to ASET_Projects@azdoa.gov.

X.C Project Approvals

Project Title: AZNET Refresh: Phx, Flag, Tucson
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Responsibility	Printed Name	Approval Signature	Date
Project Manager:	Shyam Sunder		
Agency CIO:	Mark Masterson		
Project Sponsor:	Mark Masterson		
Agency Director:	N/A		

Appendix

A. Itemized List with Costs

Vendor Quotes attached.

D. NOI (Web Projects Only)

Glossary

Document Information

Title: Project Investment Justification – PIJ Version January 2013
Originator: Arizona Department of Administration – AZ Strategic Enterprise Technology Office
Date: January 2013
Download: <http://aset.azdoa.gov/>
Contacts: **ASET Oversight Managers:**
<http://aset.azdoa.gov/content/project-investment-justification>

Web Design (NOI Contact):
<http://aset.azdoa.gov/webtools>