ADOA-ASET
Arizona Strategic Enterprise Technology

Project Investment Justification

Arizona Biometric Information System

PS20003

Department of Public Safety

Contents

1. GENERAL INFORMATION

PIJ ID: PS20003
PIJ Name: Arizona Biometric Information System
Account: Department of Public Safety
Business Unit Requesting: Biometrics Technology Section
Sponsor: Joseph Skoczen
Sponsor Title: Administrative Services Manager
Sponsor Email: jskoczenii@azdps.gov
Sponsor Phone: (602) 223-2386

2. MEETING PRE-WORK

2.1 What is the operational issue or business need that the Agency is trying to solve? (i.e....current process is manual, which increases resource time/costs to the State/Agency, and leads to errors…):

Pursuant to ARS Statute 41-1750A.11, the Arizona Department of Public Safety (AZDPS) is required to operate and maintain the Arizona Automated Fingerprint Identification System (AZAFIS). This shared statewide computerized system is used to positively identify criminals and other individuals through technical searches of fingerprints against fingerprint images stored in computerized databases. Fingerprint records searched against the AZAFIS databases come from a variety of sources: arrestees booked into jails, criminal suspects, registered sex offenders, adjudicated juvenile offenders, deceased persons, civil offenders, employment and licensing applicants, Arizona Department of Corrections inmates, etc.

In order to meet the Arizona Governors' Cloud Initiative, AZDPS must purchase an upgraded version of the MorphoBIS System. In addition, this upgraded system will enhance the identification services provided to AZDPS and the other law enforcement agencies across the state by providing the latest fingerprint search and matching algorithms which will provide faster and more accurate fingerprint identifications.

2.2 How will solving this issue or addressing this need benefit the State or the Agency?

The proposed solution will ensure that the AZDPS continues to provide required and expected services to its criminal justice and non-criminal justice customers using the latest biometric technology available, which must be regularly updated and expanded. Updated system technology will include:

• Compliance with the FBI's Next Generation Identification (NGI) program. The FBI NGI is a multimodal biometric system, incorporating fingerprint, latent print, palm print, facial recognition, and iris modalities. The ABIS upgrade will allow the State of Arizona to participate in the additional biometric searches and incorporate new programs offered by the FBI, such as the Rapid DNA program, and Rap Back.

• The latest algorithms with improved accuracy and throughput.

• Upgraded fingerprint matching services which will provide faster results, helping to eliminate any backlogs and free up employee resources for other duties.

• An Evergreen solution which will keep the system updated on a regular basis with major upgrades in biometric technology that will occur every 18-24 months. This is a significant change from other system upgrades which only saw technology refreshes every 7-9 years.

• Upgraded Integrated facial recognition system, with enhanced abilities to search mug photos, missing and exploited children, and Motor Vehicle Department photos.

• New Integrated mug photo database for use by law enforcement agencies across the State. The addition of this mug photo database will allow AZDPS to consolidate it's biometric services into one system using one vendor.

• Improved response times for mobile 2-finger identifications from devices deployed to line officers and detectives.

• Incorporate fusion candidates, which will combine the searching of fingerprints, facial, iris, and name to provide more accurate identifications and help prevent inaccurate information from updating the state and FBI systems (i.e., from the wrong person being fingerprinted at a booking station).

• Enhanced record consolidation processes.

• New capability to store and search major case prints, further enhancing latent operator's capabilities to identify prints left at a crime scene.

• Improved File Stop reports for applicant units at DPS to minimize employee

resources needed for researching.

- Additional automated workflows between the ABIS and Arizona
Computerized Criminal History Database to eliminate manual processes,
freeing up more employee time and resources.

- Enhanced research capabilities to identify the Department of Corrections
inmates and Sex Offender registrants who do not have a criminal history on
file.

- Throughput and database increase to accommodate a five-year record
growth additional biometrics projected growth.

- Disaster Recovery with a secondary system hosted at the Azure site in
Texas. The secondary system is regularly replicated from the main center in
Arizona.

In addition, the system upgrade will allow AZDPS to be in compliance with the Arizona Governors' Cloud First Initiative.

2.3 Describe the proposed solution to this business need.

The AZDPS has chosen Idemia (formerly Morpho) as the new system vendor.

The new system will be hosted in the Microsoft Azure Government Fedramp approved cloud.   As part of this project, 80 AZAFIS workstations, including facial recognition, will have their software upgraded, utilizing the current workstation hardware. 29 of the workstations are for the AZDPS with the remaining 51 being deployed to the other 14 Arizona law enforcement AZAFIS user agencies.

2.4 Has the existing technology environment, into which the proposed solution will be implemented, been documented?

Yes

2.4a Please describe the existing technology environment into which the proposed solution will be implemented.

2.5 Have the business requirements been gathered, along with any technology requirements that have been identified?

Yes

2.5a Please explain below why the requirements are not available.

3. PRE-PIJ/ASSESSMENT

3.1 Are you submitting this as a Pre-PIJ in order to issue a Request for Proposal (RFP) to evaluate options and select a solution that meets the project requirements?

No

3.1a Is the final Statement of Work (SOW) for the RFP available for review?

3.2 Will you be completing an assessment/Pilot/RFP phase, i.e. an evaluation by a vendor, 3rd party or your agency, of the current state, needs, & desired future state, in order to determine the cost, effort, approach and/or feasibility of a project?

No

3.2a Describe the reason for completing the assessment/pilot/RFP and the expected deliverables.

3.2b Provide the estimated cost, if any, to conduct the assessment phase and/or Pilot and/or RFP/solicitation process.

3.2e Based on research to date, provide a high-level cost estimate to implement the final solution.

4. PROJECT

4.1 Does your agency have a formal project methodology in place?

Yes

4.2 Describe the high level makeup and roles/responsibilities of the Agency, Vendor(s) and other third parties (i.e. agency will do...vendor will do...third party will do).

Project Management - AZDPS and Vendor

System Installation and Configuration - Vendor

User Acceptance Testing - AZDPS, Outside User Agencies and Vendor

Go-live Activities - AZDPS and Vendor

4.3 Will a PM be assigned to manage the project, regardless of whether internal or vendor provided?

Yes

4.3a If the PM is credentialed, e.g., PMP, CPM, State certification etc., please provide certification information.

4.4 Is the proposed procurement the result of an RFP solicitation process?

No

4.5 Is this project referenced in your agency's Strategic IT Plan?

Yes

5. SCHEDULE

5.1 Is a project plan available that reflects the estimated Start Date and End Date of the project, and the supporting Milestones of the project?

Yes

5.2 Provide an estimated start and finish date for implementing the proposed solution.

Est. Implementation Start Date	Est. Implementation End Date
3/23/2020 12:00:00 AM	6/30/2021 12:00:00 AM

5.3 How were the start and end dates determined?

Based on project plan

5.3a List the expected high level project tasks/milestones of the project, e.g., acquire new web server, develop software interfaces, deploy new application, production go live, and estimate start/finish dates for each, if known.

Milestone / Task	Estimated Start Date	Estimated Finish Date
Kick-Off/Design Review	03/23/20	04/10/20
Design Document Updates	04/13/20	08/21/20
System configuration/programming	05/11/20	12/28/20
Factory Acceptance Testing	09/12/20	11/25/20
Site Installations	11/26/20	03/12/21
Site System Acceptance Testing and Training	01/18/21	04/23/21
Deployment and Monitoring	04/26/21	05/31/21
Project Closure	06/01/21	06/04/21

5.4 Have steps needed to roll-out to all impacted parties been incorporated, e.g. communications, planned outages, deployment plan?

Yes

5.5 Will any physical infrastructure improvements be required prior to the implementation of the proposed solution. e.g., building reconstruction, cabling, etc.?

No

5.5a Does the PIJ include the facilities costs associated with construction?

5.5b Does the project plan reflect the timeline associated with completing the construction?

6. IMPACT

6.1 Are there any known resource availability conflicts that could impact the project?

No

6.1a Have the identified conflicts been taken into account in the project plan?

6.2 Does your schedule have dependencies on any other projects or procurements?

No

6.2a Please identify the projects or procurements.

6.3 Will the implementation involve major end user view or functionality changes?

Yes

6.4 Will the proposed solution result in a change to a public-facing application or system?

No

7. BUDGET

7.1 Is a detailed project budget reflecting all of the up-front/startup costs to implement the project available, e.g, hardware, initial software licenses, training, taxes, P&OS, etc.?

Yes

7.2 Have the ongoing support costs for sustaining the proposed solution over a 5-year lifecycle, once the project is complete, been determined, e.g., ongoing vendor hosting costs, annual maintenance and support not acquired upfront, etc.?

Yes

7.3 Have all required funding sources for the project and ongoing support costs been identified?

Yes

7.4 Will the funding for this project expire on a specific date, regardless of project timelines?

No

7.5 Will the funding allocated for this project include any contingency, in the event of cost over-runs or potential changes in scope?

Yes

8. TECHNOLOGY

8.1 Please indicate whether a statewide enterprise solution will be used or select the primary reason for not choosing an enterprise solution.

There is not a statewide enterprise solution available

8.2 Will the technology and all required services be acquired off existing State contract(s)?

Yes

8.3 Will any software be acquired through the current State value-added reseller contract?

No

8.3a Describe how the software was selected below:

8.4 Does the project involve technology that is new and/or unfamiliar to your agency, e.g., software tool never used before, virtualized server environment?

No

8.5 Does your agency have experience with the vendor (if known)?

Yes

8.6 Does the vendor (if known) have professional experience with similar projects?

Yes

8.7 Does the project involve any coordination across multiple vendors?

Yes

8.8 Does this project require multiple system interfaces, e.g., APIs, data exchange with other external application systems/agencies or other internal systems/divisions?

Yes

8.9 Have any compatibility issues been identified between the proposed solution and the existing environment, e.g., upgrade to server needed before new COTS solution can be installed?

No

8.9a Describe below the issues that were identified and how they have been/will be resolved, or whether an ADOA-ASET representative should contact you.

8.10 Will a migration/conversion step be required, i.e., data extract, transformation and load?

Yes

8.11 Is this replacing an existing solution?

Yes

8.11a Indicate below when the solution being replaced was originally acquired.

July 2014

8.11b Describe the planned disposition of the existing technology below, e.g., surplused, retired, used as backup, used for another purpose:

On premise servers will be surplused. Current workstation hardware will remain in place and used with new system.

8.12 Describe how the agency determined the quantities reflected in the PIJ, e.g., number of hours of P&OS, disk capacity required, number of licenses, etc. for the proposed solution?

Storage capacity was estimated based on prior annual storage capacity usage taking into account a minimum of five years of capacity growth. The number of workstations and sites for the upgrade were replicated from those currently in operation.

8.13 Does the proposed solution and associated costs reflect any assumptions regarding projected growth, e.g., more users over time, increases in the amount of data to be stored over 5 years?

Yes

8.14 Does the proposed solution and associated costs include failover and disaster recovery contingencies?

Yes

8.14a Please select why failover and disaster recovery is not included in the proposed solution.

8.15 Will the vendor need to configure the proposed solution for use by your agency?

Yes

8.15a Are the costs associated with that configuration included in the PIJ financials?

Yes

8.16 Will any app dev or customization of the proposed solution be required for the agency to use the project in the current/planned tech environment, e.g. a COTS app that will req custom programming, an agency app that will be entirely custom developed?

No

8.16a Will the customizations inhibit the ability to implement regular product updates, or to move to future versions?

8.16b Describe who will be customizing the solution below:

8.16c Do the resources that will be customizing the application have experience with the technology platform being used, e.g., .NET, Java, Drupal?

8.16d Please select the application development methodology that will be used:

8.16e Provide an estimate of the amount of customized development required, e.g., 25% for a COTS application, 100% for pure custom development, and describe how that estimate was determined below:

8.16f Are any/all Professional & Outside Services costs associated with the customized development included in the PIJ financials?

8.17 Have you determined that this project is in compliance with all applicable statutes, regulations, policies, standards & procedures, incl. those for network, security, platform, software/application &/or data/info found at aset.az.gov/resources/psp?

Yes

8.17a Describe below the compliance issues that were identified and how they have been/will be resolved, or whether an ADOA-ASET representative should contact you:

8.18 Are there other high risk project issues that have not been identified as part of this PIJ?

No

8.18a Please explain all unidentified high risk project issues below:

9. SECURITY

9.1 Will the proposed solution be vendor-hosted?

No

9.1a Please select from the following vendor-hosted options:

9.1b Describe the rationale for selecting the vendor-hosted option below:

9.1c Has the agency been able to confirm the long-term viability of the vendor hosted environment?

9.1d Has the agency addressed contract termination contingencies, e.g., solution ownership, data ownership, application portability, migration plans upon contract/support termination?

9.1e Has a Conceptual Design/Network Diagram been provided and reviewed by ASET-SPR?

9.1f Has the spreadsheet located at https://aset.az.gov/arizona-baseline-security-controls-excel already been completed by the vendor and approved by ASET-SPR?

9.2 Will the proposed solution be hosted on-premise in a state agency?

No

9.2a Where will the on-premise solution be located:

9.2b Were vendor-hosted options available and reviewed?

9.2c Describe the rationale for selecting an on-premise option below:

9.2d Will any data be transmitted into or out of the agency's on-premise environment or the State Data Center?

9.3 Will any PII, PHI, CGIS, or other Protected Information as defined in the 8110 Statewide Data Classification Policy be transmitted, stored, or processed with this project?

Yes

9.3a Describe below what security infrastructure/controls are/will be put in place to safeguard this data:

This solution will be housed in the AZDPS Azure Gov Cloud. Encryption is in place, the system is utilizing designed and approved controls. Azure has completed the tri-annual CJIS technical audit for compliance. The standard AZDPS and FBI CJIS Security protocols are implemented for this solution/environment.

10. AREAS OF IMPACT

Application Systems

Other

System/Application replacement

Database Systems

Software

COTS Application Customization

Hardware

Hosted Solution (Cloud Implementation)

Other

Microsoft Azure Gov Cloud

Security

Security Controls/Systems - Other

Telecommunications

Enterprise Solutions

Other Imaging - Photos, Fingerprints, etc.

Contract Services/Procurements

11. FINANCIALS

Description	PIJ Category	Cost Type	Fiscal Year Spend	Quantity	Unit Cost	Extended Cost	Tax Rate	Tax	Total Cost
MorphoBis Software	Software	Development	1	1	$250,000	$250,000	0.00 %	$0	$250,000
Project Management	Professional & Outside Services	Development	1	1	$251,100	$251,100	0.00 %	$0	$251,100
Cloud Hosting - Year 1	Other	Development	1	1	$167,050	$167,050	0.00 %	$0	$167,050
Design/ Discovery Phase Support and Document Delivery	Professional & Outside Services	Development	1	1	$245,505	$245,505	0.00 %	$0	$245,505
System Configuration and Factory Testing	Professional & Outside Services	Development	1	1	$252,500	$252,500	0.00 %	$0	$252,500
On-Site MBIS Application/Workstation Deployment	Professional & Outside Services	Development	1	1	$50,250	$50,250	0.00 %	$0	$50,250
Training	Professional & Outside Services	Development	1	1	$50,505	$50,505	0.00 %	$0	$50,505
User Acceptance Testing Support	Professional & Outside Services	Development	1	1	$50,250	$50,250	0.00 %	$0	$50,250
Cutover Support	Professional & Outside Services	Development	1	1	$25,400	$25,400	0.00 %	$0	$25,400
Maintenance Year 1	Professional & Outside Services	Operational	1	1	$627,198	$627,198	0.00 %	$0	$627,198
Maintenance Year 2	Professional & Outside Services	Operational	2	1	$658,558	$658,558	0.00 %	$0	$658,558
Cloud Hosting - Year 2	Other	Operational	2	1	$334,102	$334,102	0.00 %	$0	$334,102
Software License - Year 2	License & Maintenance Fees	Operational	2	1	$404,136	$404,136	860.00 %	$34,756	$438,892
Maintenance Year 3	Professional & Outside Services	Operational	3	1	$691,486	$691,486	0.00 %	$0	$691,486

Software Licensing - Year 3	License & Maintenance Fees	Operational	3	1	$406,605	$406,605	860.00 %	$34,968	$441,573
Cloud Hosting - Year 3	Other	Operational	3	1	$346,345	$346,345	0.00 %	$0	$346,345
Maintenance Year 4	Professional & Outside Services	Operational	4	1	$726,060	$726,060	0.00 %	$0	$726,060
Software Licensing - Year 4	License & Maintenance Fees	Operational	4	1	$409,073	$409,073	860.00 %	$35,180	$444,253
Cloud Hosting - Year 4	Other	Operational	4	1	$364,749	$364,749	0.00 %	$0	$364,749
Maintenance year 5	Professional & Outside Services	Operational	5	1	$762,363	$762,363	0.00 %	$0	$762,363
Cloud Hosting - Year 5	Other	Operational	5	1	$382,462	$382,462	0.00 %	$0	$382,462
Software License - Year 5	License & Maintenance Fees	Operational	5	1	$411,542	$411,542	860.00 %	$35,393	$446,935
Software Licensing - Year 6 Note: Due to ASET Portal limitation, there is no year 6 available in the Fiscal year spend drop down. This is Year 6 software licensing that will be paid in year 6	License & Maintenance Fees	Operational	5	1	$414,010	$414,010	860.00 %	$35,605	$449,615
Cloud Hosting - Year 6 Note: Due to ASET portal limitations, There is no year 6 in the fiscal year spend drop-down. This is Cloud hosting year 6, to be spent in year 6	Other	Operational	5	1	$394,601	$394,601	0.00 %	$0	$394,601

Base Budget (Available)	Base Budget (To Be Req)	Base Budget % of Project
$0	$0	0%
APF (Available)	**APF (To Be Req)**	**APF % of Project**
$0	$0	0%
Other Appropriated (Available)	**Other Appropriated (To Be Req)**	**Other Appropriated % of Project**
$8,526,751	$0	96%

Federal (Available)	Federal (To Be Req)	Federal % of Project
$0	$0	0%
Other Non-Appropriated (Available)	Other Non-Appropriated (To Be Req)	Other Non-Appropriated % of Project
$325,000	$0	4%

Total Budget Available	Total Development Cost
$8,851,751	$1,342,560
Total Budget To Be Req	Total Operational Cost
$0	$7,509,191
Total Budget	Total Cost
$8,851,751	$8,851,751

12. PROJECT SUCCESS

Please specify what performance indicator(s) will be referenced in determining the success of the proposed project (e.g. increased productivity, improved customer service, etc.)? (A minimum of one performance indicator must be specified)

Please provide the performance objective as a quantifiable metric for each performance indicator specified.
Note: The performance objective should provide the current performance level, the performance goal, and the time period within which that performance goal is intended to be achieved. You should have an auditable means to measure and take corrective action to address any deviations.
Example: Within 6 months of project completion, the agency would hope to increase "Neighborhood Beautification" program registration by 20% (3,986 registrants) from the current registration count of 19,930 active participants.

Performance Indicators

1. Improved search and matching algorithms for tenprints. For tenprints, this will be determined by an increase in the number of records processed through Lights Out functionality at DPS. For applicant processing, within 6 months of project completion, increase the lights out-processing from 77% to 90%. For criminal processing, within 6 months of project completion, increase the lights out-processing from 71% to 90%.

2. Within 3 months of project completion, decreased time in record consolidation processes, from the time the FBI submits the request to the time the consolidation is completed in AZAFIS, from 24 hours to less than 2 hours.

3. Within 3 months of project completion, decreased time in completing the Correction of Arrest data in AZAFIS from an accumulative time of 100-125 hours per month to 0 hours (the new system will fully automate this process).

13. CONDITIONS

Conditions for Approval

Should development costs exceed the approved estimates by 10% or more, or should there be significant changes to the proposed technology scope of work or implementation schedule, the Agency must amend the PIJ to reflect the changes and submit it to ADOA-ASET, and ITAC if required, for review and approval prior to further expenditure of funds.

14. OVERSIGHT SUMMARY

Project Background

The Arizona Department of Public Safety (AZDPS) is statutorily obligated to operate and maintain the Arizona Automated Fingerprint Identification System (AZAFIS), which is used to store computerized finger print images for identifying possible criminals. AZDPS is upgrading their current system to provide more accurate fingerprint identifications and to comply with the Governor's Cloud First Initiative. This upgrade enhances the identification services currently provided by AZDPS and other law enforcement agencies by providing up to date fingerprint search and matching algorithms.

Business Justification

This solution ensures that AZDPS can continue to provide expected fingerprint services to its customers with the latest technology. In addition, it complies with the Cloud First Initiative.

Implementation Plan

This solution will be hosted in AZDPS's Microsoft Azure government cloud environment. The vendor will be responsible for system installation, configuration, testing and deployment. AZDPS will be responsible for project management, testing and deployment.

Vendor Selection

AZDPS obtained quotes from three vendors: Idemia, Gemalto Cogent and Griaule. Idemia was selected based on their experience with customized workflows and their higher rated fingerprint algorithms that are used by the FBI. Gemalto Cogent was excluded due to their lack of experience with cloud networking. Griaule was excluded due to their lack of experience with cloud networking and lack of on-site support.

Budget or Funding Considerations

This project is being funded by Other Appropriated and Other Non-Appropriated funds.

15. PIJ REVIEW CHECKLIST

Agency Project Sponsor

Joseph Skoczen

Agency CIO (or Designee)

Daven Byrd

Agency ISO (or designee)

Larry Heinz

OSPB Representative

ASET Engagement Manager

ASET SPR Representative

Thomas Considine

Agency SPO Representative

Agency CFO

Phillip Case