



# ADOA - ASET

Arizona Strategic Enterprise Technology

## Project Investment Justification

Version 01.01

A Statewide Standard Document for Information Technology Projects

### Project Title:

**EHO / OIG Recording System**

|                              |                                      |
|------------------------------|--------------------------------------|
| <b>Agency Name:</b>          | Arizona Department of Transportation |
| <b>Date:</b>                 | August 8, 2014                       |
| <b>Agency Contact Name:</b>  | Jesse MacDonough                     |
| <b>Agency Contact Phone:</b> |                                      |
| <b>Agency Contact Email:</b> |                                      |

## I. Management Summary

The purpose of the project is to replace the hardware and software presently used to record hearings and interviews by Enforcement & Compliance Division's (ECD) Executive Hearing Office (EHO) and Office of Inspector General (OIG).

In accordance with A.R.S. 41-1061(F), all case hearings must be recorded. The EHO manages an average of approximately 19,000 cases per year. Appealed hearings must be readily available for review and transcription purposes. Presently, each judge is issued and operates a handheld digital voice recorder to capture audio recordings of these proceedings. This current technology is inefficient and problematic which results in lost recordings, repeat hearings, additional transcription time and other associated rework.

The current interview audio/video recording system used by the OIG lacks basic recording functionality and scalability to multiple locations, provides low quality recordings, and hinders the sharing of information with other agencies.

We are seeking a new recording solution to increase the efficiency and quality of hearings and interviews conducted by the Executive Hearing Office and Office of Inspector General.

## 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:

6T

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

A Pre-PIJ was submitted and approved on June 3, 2014. An RFP was conducted, now a full PIJ is being submitted after the vendor has been selected.

## III. Business Case

### A. **Business Problem**

The present methods for recording hearings and interviews and file storage/archives by the EHO and OIG are inefficient, error prone, and time consuming. In 2011, ECD conducted an audit of the EHO. This report determined that the current recording solution was inefficient and in need of improvement. This project does not include efforts regarding video conferencing.

EHO method deficiencies:

- Limited availability of the Olympus handheld digital recorders for hearings.

- Limited storage capacity on the current recording device, requiring each judge to frequently upload content to a central file server, to avoid running out of space in the middle of a hearing.
- Time required to upload recorded files to the central file server can be up to 2 minutes per recording. On average, each judge conducts 10 hearings per day. This inefficiency results in a loss of valuable resource time.
- Multiple recording files are created if a judge chooses to pause the recording at any time during the hearing. This causes confusion during the transcription process or when the EHO must provide the recording for an appeal or another request.
- There is no technical support available for the current recording solution used at the EHO.

OIG recording process deficiencies:

- The current system utilizes a proprietary audio/video appliance provided by Honeywell.
- The current system lacks basic recording functionality such as start, stop, pause and mute.
- Poor video file quality.
- The stand-alone video camera runs continuously but its storage capacity is capable of holding only the last 30 days of recorded interviews.
- Recorded interview files can only be viewed with proprietary software that isn't typically used by other agencies. This makes data sharing difficult and burdensome.
- The current system cannot be expanded to multiple rooms, and interviews cannot be viewed in another room while a recording is in progress.

These examples demonstrate the number of substantial issues and limitations with the existing EHO and OIG recording systems. Therefore, we are seeking a new, single-vendor, holistic solution to increase capacity, reliability, and functionality, as well as streamline recording processes.

**B. Proposed Business Solution**

We are proposing the following solution for the EHO and OIG:

**EHO** - The EHO hearing rooms and each judge's office will be equipped with a desktop computer or laptop, USB microphones, digital cameras, and recording device(s).

**OIG** – Each interview room will be equipped with a signal receiving device, hidden digital cameras and hidden microphones. The new recording solution will enable the OIG to conduct interviews in multiple rooms. This will also provide the ability for another officer to view from another location while the interview is progress.

**C. Quantified Benefits**

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

- Service Enhancements:
  - Increased quality and efficiency of audio and video recordings.
  - Simplified recording user interface with basic recording functionalities such as: start, stop, pause, mute, and visible recording indicator.
  - Ability to add notes and automatic time/date stamps to the audio/video recording, while a recording is in progress.
  - Ability to view recordings using a standard, universally available computer media player.
  - Real-time audio/video display for concurrent on-site and remote monitoring.
  - Increase efficiency in transcribing recordings
  - Ability to share information with other agencies.
    - Names of petitioners and driver license numbers are included on the recording of the hearing. Occasionally, a bank account number may also be put on the record. The only people who can access these recordings in the office are judges, case managers, transcriptionists and administrative staff. Anyone can request an audio copy of the hearing. They pay a set fee and provide a blank CD or flash drive.
    - The recordings are fully subject to Active Directory group/user authentication or authorization to achieve recordings access. Please note that sealed recordings can be granted differing access rights than general public recording. A judge might have access to both while a non-judge would be restricted to public portions only.
- Problem Avoidance:
  - An audio/video recording system that is easily scalable to additional rooms.
  - A reduction in the amount of time to transfer recording files from the local recording device to a networked, central repository.
  - Reduction in lost recordings which results in hearings having to be done again, additional transcription time and other associated rework.
- Risk Avoidance:
  - Full vendor provided technical support and end-user training.
  - A holistic ECD audio/video recording solution that meets EHO's and OIG's requirements and is compatible with ADOT's technical and data security standards.

## IV. Technology Approach

### A. *Proposed Technology Solution*

**EHO Solution:** EHO will require the software and recording solutions in their 10 hearing rooms, 2 video conference rooms, and their judge offices in order to conduct hearings. The judge offices will require only the recording software and hardware (microphones, cables, etc.) and will utilize their current desktops in the office.

4 of the hearing rooms already contain desktop solutions, and will require only the recording software and hardware. The remaining 6 hearing rooms and the video conference rooms will require the additional desktop PCs to manage the recording solution.

The unit counts for EHO are detailed here:

**EHO Unit Breakdown**

| Category                  | Units |
|---------------------------|-------|
| Software                  | 34    |
| Software Insurance        | 34    |
| Microphone                | 51    |
| Mixer                     | 10    |
| Audio Converter           | 3     |
| Power Strip               | 34    |
| Power Supply              | 68    |
| Cables                    | 34    |
| Audio/Video Control Cable | 34    |
| Desktop PCs               | 8     |

The recording solution has the capability of transmitting the recording to the archive location on a real-time (actual 3 to 5 second delays) basis. No manual intervention is necessary for archiving the recording file. Playback of the recordings can be conducted by downloading the free player and selecting the hyperlink to the file, or converting the recording to a different format as requested.

A bandwidth impact study was conducted and it was determined that transferring the recordings real time to the backup/archive system will have minimal impact to the network.

**OIG Solution:** OIG will require 2 desktop PCs, 2 recording software installations and 2 sets of covert data capturing devices (microphones/cameras).

The unit counts for OIG are detailed here:

**OIG Unit Breakdown**

| Category                  | Units |
|---------------------------|-------|
| Software                  | 2     |
| Software Insurance        | 2     |
| Hidden Microphone         | 2     |
| Hidden Camera (set)       | 2     |
| Mixer                     | 2     |
| Audio Converter           | 2     |
| Video->USB                | 2     |
| Power Strip               | 2     |
| Power Supply              | 2     |
| Cables                    | 2     |
| Audio/Video Control Cable | 2     |
| Desktop PC                | 2     |

Additionally, due to the potentially large recordings, a local file server will store the recordings until they can be transferred to the archive space. OIG only requires file retention for 1 year, and will transfer each recording to a disc for inclusion into the case files. A nightly backup procedure can be configured to archive the recordings off hours minimizing the impact to the ADOT network.

A bandwidth impact study was conducted and the above solution was recommended, however, subject to vendor input once the vendor has been selected.

## **B. Technology Environment**

The EHO currently uses Olympus Handheld Digital Audio Recorders (DS-2200 and DS-2400 models provided by Honeywell), powered by batteries to record all hearings. The judges record hearings in the hearing rooms and then return to their offices to upload the digital recordings to a central local file server. These handheld recorders are 10 years old.

For the OIG, a stand-alone video camera in one office is currently being used to record criminal and fraud investigation-related interviews. The hidden camera and hidden microphones are located in the interview room and are directly linked via cable to a digital video recorder located in another room. The digital recorder is recording throughout the day until a backup tape has to be replaced. This equipment was obtained in 2011.

Today, A/V systems are available that produce high quality video and audio appropriate for court proceedings. The EHO and OIG are seeking to replace the technology that is currently being used to record hearings and interviews. A new recording solution is needed to increase the efficiency and quality of EHO's and OIG's recordings.

## **C. Selection Process**

After comparing the requirements of the project against current contracted vendor solutions, it was determined that the contracted state vendors do not meet the requirements of this project; therefore an RFP process has been utilized for final vendor selection. This determination is based on current technology being used presently, as well as business requirements and vendor research in this space.

We received 4 proposals from 3 vendors for our RFP. We based the selection on the following criteria:

- Extent and manner that solution meets functional/business requirements
- Extent and manner that solution meets technical requirements
- Demonstrates a clear understanding of the Department's needs and requirements
- Experience of the Company

There was a review panel of 3 people for the proposals:

Representative of EHO

EIS Program Manager

EIS Project Manager

OIG representative was unable to meet evaluation criteria, so delegated OIG interests to the other evaluation committee members

The vendor that was chosen achieved the highest score from the evaluation committee, and met or exceeded the requirements as described.

## V. Project Approach

### A. Project Schedule

Project Start Date: 9/1/2014      Project End Date: 12/19/2014

### B. Project Milestones

| Major Milestones       | Start Date | Finish Date |
|------------------------|------------|-------------|
| Analysis/Design        | 9/1/2014   | 10/06/2014  |
| Construction           | 10/6/2014  | 11/3/2014   |
| Testing                | 11/3/2014  | 11/17/2014  |
| Implementation/Closing | 11/17/2014 | 12/19/2014  |

## VI. Roles and Responsibilities

### A. Project Roles and Responsibilities

| Name              | Description             |
|-------------------|-------------------------|
| Allister Adel     | EHO - Executive Sponsor |
| Michael Lockhart  | OIG - Executive Sponsor |
| Jennifer Lockerby | EHO - Project Sponsor   |
| David Lugo        | OIG - Project Sponsor   |
| Shaun Settle      | EIS Project Manager     |
| Bruce Bosco       | EIS Program Manager     |

### 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 | 640 |
| 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 <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 <b>NO</b> , 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 <b>YES</b> , 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<br>(if applicable for Pre-PIJ) | II. PIJ Type - Pre-PIJ<br>Assessment Cost | \$             |
| Total Development Cost                         | VII. PIJ Financials tab                   | \$192,255      |
| Total Project Cost                             | VII. PIJ Financials tab                   | \$223,368      |
| FTE Hours                                      | VI. Roles and Responsibilities            | 640            |

**C. Agency Approvals**

| Contact                              | Printed Name    | Signature | Email and Phone |
|--------------------------------------|-----------------|-----------|-----------------|
| Project Manager:                     | Shaun Settle    |           |                 |
| Agency Information Security Officer: | Thomas Branham  |           |                 |
| Agency CIO:                          | Doanh Bui       |           |                 |
| Project Sponsor:                     | Allister Adel   |           |                 |
| Agency Director:                     | John Halikowski |           |                 |

**IX. Optional Attachments**



## X. Glossary

## XI. Additional Information

The following security features will be implemented:

- Access Rights control for recorded hearings depending on whether they are public or sealed.
- Recordings will use data encryption features and password control.
- Recordings stored on the server will be subject to Active Directory user authentication or authorization to determine access rights.

Links:

[ADOA-ASET Website](#)

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

Email Addresses:

[Strategic Oversight](#)

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