



# ADOA - ASET

Arizona Strategic Enterprise Technology

Project Investment Justification

Version 01.01

A Statewide Standard Document for Information Technology Projects

**Project Title:**

**LCS System Modification and Database Conversion**

<b>Agency Name:</b>	<b><i>Arizona Department of Liquor Licensing and Control</i></b>
<b>Date:</b>	<b><i>7/8/2014</i></b>
<b>Agency Contact Name:</b>	Michael Feliberty
<b>Agency Contact Phone:</b>	
<b>Agency Contact Email:</b>	

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## I. Management Summary\*

The Arizona Department Liquor License and Control (DLLC) information technology resources previously developed a custom Licensing and Control System (LCS) that allows users in the department's administration, finance, auditing, licensing, investigations, and compliance areas to manage licensees and license.

DLLC is faced with the following two issues:

1. Incorporating new legislative changes Senate Bill 1397 Amending Sections 4-101, 4-201.01, 4-203, 4-203.01, 4-203.02, 4-203.03, 4-203.04, 4-205.03, 4-205.04, 4-205.05 And 4-205.08, Arizona Revised Statutes; Amending Title 4, Chapter 2, Article 1, Arizona Revised Statutes, By Adding Section 4-205.10; Amending Sections 4-206.01, 4-207, 4-209, 4-210, 4-212, 4-226, 4-227, 4-229, 4-241, 4-242, 4-243, 4-243.01, 4-244, 4-244.04, 4-250.01, 42-3001, 42-3355 And 42-3356, Arizona Revised Statutes; Relating To Spirituous Liquor Licenses.in LCS; and
2. Database technology that has reached End of Life from the company

The current system has been in use since 1991 and developed using IBM Visual Age for Smalltalk Enterprise version 5.0 and Sybase Adaptive Server Enterprise 12.5. The current DB is Sybase and lacks support and resources to make appropriate changes. DLLC wants to move away from this architecture to better preserve the ability to manage its agency key business requirements and legislative mandates.

DLLC proposes to modify the LCS application to support the new legislation and to convert from the legacy database to a more mainstream database. Primarily consultants, with support from internal DLLC staff, will perform the work tasks.

## 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:

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

## III. Business Case

### A. Business Problem\*

Currently, more than 11,000 active licenses and over 25,000 active contacts are stored within LCS. The LCS System was developed and implemented over 15 years ago using IBM Visual Age for Smalltalk Enterprise version 5.0 and Sybase Adaptive Server Enterprise 12.5.

DLLC has received notice from Sybase regarding an End of Life Notice for engineering support in

August 2007. DLLC has therefore been operating with minimal Sybase technical support in the case of catastrophic failure, no patch fixes are being made by engineering support, DLLC business has been working on an unsupported database product for 7 years.

As DLLC is faced with various new state liquor laws, DLLC must make changes to the LCS application to issue two new license series, make minor screen adjustments, and convert to Microsoft SQL Server. DLLC is unable to produce the required modifications without the aid of a SmallTalk developer because the LCS application was developed with hard coded business principles and limited administrative code tables. In addition, DLLC currently does not have staff resources that are able to do a migration from Sybase to Microsoft SQL Server.

**B. Proposed Business Solution\***

DLLC has developed a scope of work for contracted resources to aid in the LCS Application modifications and to convert from Sybase to Microsoft SQL Server. DLLC will acquire Microsoft SQL Server through the existing SHI State contract.

DLLC's project team's first area of emphasis will be to migrate the LCS data stored in Sybase to Microsoft SQL Standard Edition Server 2014 using a formal Software Development Life Cycle approach with system wide end user testing. The migration activity will require LCS code modifications to convert the existing Sybase calls to Microsoft SQL Server calls. At the conclusion of the successful conversion, DLLC will then be able to migrate the environments from DLLC VMware to ADOA VMware environment (see DLLC IT Infrastructure PIJ). This will require two consultants (already identified through Knowledge Services) to be contracted with to perform the application modifications and the database conversion.

DLLC's project team's second area of emphasis will be to get additional application modifications to support the new liquor laws and minor screen adjustments. The new functionality will require a formal development and testing approach with direct end-user involvement to assure adoption. This will require one consultant (already identified through Knowledge Services) to be contracted with to perform the necessary LCS application modifications.

**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

Explain:

While the current solution does work today and it provides business value for the existing users, there are several major reasons why DLLC will perform the system changes and database conversion from Sybase to Microsoft SQL Server. DLLC has identified the proposed project will heighten the customer service functions by supporting the new legislative changes. The migration from Sybase to Microsoft SQL

Server will avoid the danger in the loss of Sybase support and avoid future problems finding resources for the Sybase database.

## IV. Technology Approach

### A. *Proposed Technology Solution\**

Outlined below are the proposed technology solution objectives.

Hardware:

- No additional hardware is required

Software:

- Microsoft SQL Server 2014 – Standard Edition
- 50 Client Access Licenses for Microsoft SQL Server 2014

Professional Services:

- One Senior SmallTalk Consultant to perform the following code modifications to the LCS application
  1. Convert Application Code from Sybase calls to Microsoft SQL Server Calls.
  2. Adding three (3) new license types (in/out of state craft distillers and a 2D);
  3. Modifying the Country of Origin/international licenses;
  4. Modifying the Country of Origin business/personal drop down; and
  5. Adding a 2-year renewal for license types (Optional per Director).
- One Senior Database Conversion Consultant with experience in converting from a Sybase database to Microsoft SQL Server database

### B. *Technology Environment*

DLLC proposes to configure a new virtual machine development/testing environment on the legacy VMware hosting server(s) as listed below. DLLC's existing VMware accommodates the legacy development/testing environment (referenced below) and this legacy environment is isolated from the production environment.

Legacy Development/Testing Technology Environment:

- Sybase Database Server Profile
  - Sybase Virtual Machine Profile
    - Virtual Machine Size: 47.02 GB
    - OS: Windows 2000
    - Sybase Adapter Server Enterprise 12.5 platform
    - Database is a relational database and is currently 3.6 GB in size.
- Developer Workstation Profile
  - Virtual Machine Profile
    - Virtual Machine Size: 10 GB
    - OS: NT 4.0 Workstation
    - IBM Visual Age for Smalltalk Enterprise is version 5.0.
- Client Workstation Profile
  - Windows 7
  - ODBC DRIVERS for Sybase
  - Microsoft Office 2003 and 2007
  - LCS Application for Sybase

DLLC will perform the following steps to configure a new Development/Testing environment. (Note this will avoid operating system migration issues).

1. Configure a new development/testing technology environment using Microsoft Server 2008 and Microsoft SQL Server. (Note: This will exclude operating system migration issues of the legacy development/testing environment.) DLLC will implement a new Development/Testing technology environment as follows and it will be excluded from the production environment.
  - Microsoft SQL Server Database Server Profile
    - Microsoft SQL Server Virtual Machine Profile
      - Virtual Machine Size: 47 GB
      - OS: Windows 2008
      - Microsoft SQL Server 2014 – Standard Edition
      - Create a relational database and is estimated to be roughly 3.6 GB in size.
2. Create in Microsoft SQL Server a new LCS database structure.
3. Using the Microsoft SQL Server administrative tool suite port the LCS data between Sybase to Microsoft SQL Server environments.
4. Configure a new VMWare developer workstation profile under Windows 7.
  - Developer Workstation Profile
    - Virtual Machine Profile
      - Virtual Machine Size: 10 GB
      - OS: Windows 7
      - IBM Visual Age for Smalltalk Enterprise is version 5.0.
5. Configure a new VMWare Client workstation profile under Windows 7 with a connection to Microsoft SQL Server 2014 and an ability to run the new LCS Application connecting to Microsoft SQL Server.
  - Client Workstation Profile
    - Virtual Machine Profile
      - Windows 7
      - ODBC DRIVERS for Microsoft SQL Server 2014
      - Microsoft Office 2010
      - LCS Application for Microsoft SQL Server 2014

Once user acceptance testing has passed and a production migration is successful, then all of DLLC's environments will be migrated over to ADOA VMware infrastructure as a separate project.

### **C. Selection Process**

DLLC followed the following selection process:

1. DLLC identified key deliverables that need to be performed in the LCS application for the legislative changes and database conversion.
2. DLLC developed a Statement of Work to find contract resources on State contract.
3. DLLC interviewed candidates based on the candidates' ability to fulfill the Statement of Work tasks.
4. DLLC received each candidate's hourly rates and verbal estimates for the number hours from the qualified candidates.
5. DLLC's steering committee evaluated each candidate's response to the Statement of Work.
6. DLLC has selected two candidates; one candidate will perform the LCS application legislative changes and a second candidate to execute database conversion.

## V. Project Approach

### A. Project Schedule\*

Project Start Date: 7/8/2014      Project End Date: 12/7/2014

### B. Project Milestones

<a href="#">Major Milestones</a>	Start Date	Finish Date
PIJ Submission	7/8/14	7/11/14
PIJ Approval	7/11/14	7/21/14
Kick Off Project - Internal	7/21/14	7/22/14
Contract Consultants Engaged to Start	7/22/14	7/27/14
Acquire Microsoft Licensing for SQL Server	7/27/14	8/1/14
Create SQL Database Structures	8/1/14	8/6/14
Database Migration from Sybase to Microsoft SQL Server	8/1/14	9/15/14
LCS Development: Application Modifications	9/15/14	10/30/14
UAT Testing (Est. 3 Rounds)	10/30/14	11/29/14
Communicate Go-Live Date To Staff	11/29/14	12/4/14
DLLC - Go-Live Process	12/4/14	12/7/14

## VI. Roles and Responsibilities

### A. Project Roles and Responsibilities

Role / Title	Duties	Name
Executive Project Sponsor	<ul style="list-style-type: none"> <li>Final decision maker;</li> <li>Provide oversight and guidance;</li> <li>Provide leadership and support;</li> <li>Ensure Department of DLLC personnel available for project work;</li> <li>Serve as final escalation point for project issues &amp; decisions;</li> <li>Communicate project status to AZ-Set organization executives;</li> <li>Review and approve project deliverables;</li> <li>Review project status on a weekly basis.</li> </ul>	Alan Everett, Director of DLLC
Project Steering Committee	<ul style="list-style-type: none"> <li>Approve project deliverables;</li> <li>Review project status on a weekly basis;</li> <li>Serve as an escalation point for project issues &amp; decisions;</li> <li>Escalate Issues to Project Sponsors as appropriate;</li> <li>Ensure participation of staff subject matter experts in a timely and consistent basis.</li> </ul>	Pearlette J. Ramos, Assistant Director of Administration/In-House Counsel  Connie Wagner, Manager DLLC
Project Champion	<ul style="list-style-type: none"> <li>Act as the project's primary business contact.</li> </ul>	Mike Feliberty, Manager, Information Technology Connie Wagner, Manager DLLC
Project Oversight	<ul style="list-style-type: none"> <li>Review project deliverables;</li> <li>Provide guidance to the project team;</li> <li>Monitor DLLC project manager and DLLC project staff.</li> </ul>	Alan Everett, Director of DLLC  ADOA-ASET Program Oversight Manager
Project Management	<ul style="list-style-type: none"> <li>Facilitate the development of the project management plan, including the project scope statement, deliverables, time management schedule, cost, communication, change management, and risk management plans.</li> <li>Prepare and present project status reports, including progress measurement and project forecasting, to the Executive Sponsors and</li> </ul>	Eric Tingom, Consultant

<p><b>Power User</b></p>	<p>the Project Steering Committee;</p> <ul style="list-style-type: none"> <li>Facilitate and develop in conjunction with the project team the project activity definitions, including resource estimates, activity sequencing and time durations, in order to better manage the day-to-day project tasks;</li> <li>Coordinate project communication, based upon the established communication plan;</li> <li>Manage project resources, to ensure timely and schedule management objectives are met and competing priorities are addressed;</li> <li>Ensure all deliverables are reviewed, validated and approved;</li> <li>Manage and monitor the project budget and implement cost control measures;</li> <li>Escalate influencing factors and identified project issues, including recommendations for corrective actions, in a timely manner to the Project Team and DLLC staff management</li> </ul>	<p>Cindy Bejar, DLLC - Licensing          Connie Wagner, DLLC - Licensing          Mike Feliberty, DLLC Technical          Wes Kuhl, DLLC - Investigations          Nate Snyder, DLLC - Audit          Mannie Escudero, DLLC - Compliance          Denise Bale, DLLC - Liquor Board          Marlene Buffa, DLLC Technical          Rita Niner, DLLC - Financial Records          Lee Hill, DLLC – Online/Public Records</p>
<p><b>IT Legacy System Support</b></p>	<ul style="list-style-type: none"> <li>Provide technical expertise to the project team;</li> <li>Review, validate and approve project deliverables;</li> <li>Coordinate with other technical staff;</li> <li>Assist in the development of technical documentation and deliverables;</li> </ul>	<p>Mike Feliberty, I.T. (Primary)          Marlene Buffa, DLLC Technical (Backup)</p>
<p><b>Senior Database Administrator for Sybase/SQL Server Conversion</b></p>	<ul style="list-style-type: none"> <li>Perform the database conversion from Sybase to Microsoft SQL Servers;</li> <li>Performs design, database administration, and quality assurance (QA) work;</li> <li>Participate in the development of technical documentation and deliverables;</li> <li>Help determine technical impacts of external system implementations;</li> <li>Review project deliverables;</li> <li>Assist in the implementation of any technology migrations;</li> <li>Provide technical expertise in specific areas of knowledge</li> </ul>	<p>External, Consultant</p>
<p><b>Senior Developer</b></p>	<ul style="list-style-type: none"> <li>Perform the LCS applications changes for the new legislative changes and to access Microsoft SQL Server;</li> <li>Performs design, coding, and quality assurance (QA) work;</li> <li>Participate in the development of technical documentation and deliverables;</li> <li>Help determine technical impacts of external system implementations;</li> <li>Review project deliverables;</li> <li>Assist in the implementation of any technology migrations;</li> <li>Provide technical expertise in specific areas of knowledge</li> </ul>	<p>External, Consultant</p>

**B. Project Manager Certification**

- Project Management Professional (PMP) Certified
- State of Arizona Certified
- Project Management Certification not required
- (Resource identified is a member of PMI has number of hours to qualify. Just has not taken the exam)

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

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

**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 (if applicable for Pre-PIJ)	II. PIJ Type - Pre-PIJ Assessment Cost	0
Total Development Cost	VII. PIJ Financials tab	\$72,072.77
Total Project Cost	VII. PIJ Financials tab	\$79,659.19
FTE Hours	VI. Roles and Responsibilities	500

### C. Agency Approvals\*

Contact	Printed Name	Signature	Email and Phone
Project Manager:	Eric Tingom		
Agency Security Officer (CISO):	Michael Feliberty		
Agency CIO:	Michael Feliberty		
Project Sponsor:	Pearlette J. Ramos		
Agency Director:	Alan Everett		

IX. Optional Attachments

**A. Vendor Quotes**

**B. Resumes**

X. Glossary

XI. Additional Information

Links:

[ADOA-ASET Website](#)

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

Email Addresses:

[Strategic Oversight](#)

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