

# **Information Technology Capital Plan**

## **Department IT Capital Plan**



**Information Technology Capital  
Plan, Plan Year 2009-10 through  
2013-14 Executive Approval  
Transmittal**

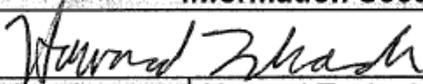
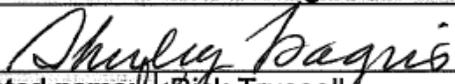
**Department Name** Emergency Medical Services Authority

**APPROVAL SIGNATURES**

I am submitting the attached Information Technology Capital Plan as required by the State Administrative Manual Section 4904.

I certify that the IT Capital Plan was prepared in accordance with State Information Management Manual section 57 and that the proposed IT projects are consistent with our business strategies and information technology strategy.

I have reviewed and agree with the information in the attached Information Technology Capital Plan.

Chief Information Officer		Date Signed
		9-22-08
Printed name:	Ed Armitage	
Information Security Officer		Date Signed
		9-22-08
Printed name:	Howard Tsukada	
Budget Officer		Date Signed
		9-22-08
Printed name:	Rick Trussell	
Department Director		Date Signed
		9-22-08
Printed name:	Steve Tharratt, M.D., MPVM	

## DEPARTMENT IT CAPITAL PLAN

Department Name and Org Code:

4120 Emergency Medical Services  
Authority

Plan Year:

2009-10 through 2013-14

### 1. Summarize your organization's business goals and objectives below:

- **Improve Day-to-Day Emergency Medical Services by promoting quality patient care through effective systems planning and evaluation, technical assistance, and appropriate oversight.**
- **Improve Disaster Medical Response Capabilities through planning activities and direct funding support.**
- **Improve the Emergency Medical Services Authority by updating technology, developing personnel and optimizing internal communications.**
- **Improve Communications with and Services to EMS Constituents through various public relations, education and communication activities.**

### 2. What are your organization's plans to upgrade or replace your IT infrastructure for the following? When responding, please indicate the timeframes of your intended upgrade or replacement efforts.

#### 2.1. Hardware

EMSA is evolving to a three year replacement cycle beginning with the 2009-10 fiscal year. Existing desktop equipment deployed throughout the office is between one and three years old. The bulk of server hardware has been replaced in the last year. Our anticipation is that in two to three years the virtual environment will be widely available. At that time we will address network server equipment.

#### 2.2. Software

EMSA is currently assessing an upgrade of general office software. Although no firm date has been established at this time, it will likely be the 2009-10 fiscal year. There is currently a plan to upgrade our DBMS to SQL Server 2005 or 2008 but the decision on specifically which one will be delayed until bids are awarded for our Paramedic Licensing – EMT Registry project. We plan to upgrade to Exchange 2007 in conjunction with the office move.

#### 2.3. Network

Network operating system Software will be replaced in conjunction with our office move in February of 2009. The upgrade will have all servers running under the Windows 2008 operating system. In the 2009-10 fiscal year we will need to replace the network firewalls as our current vendor, Symantec, is going out of the firewall appliance business at the end of 2009.

### **3. Existing Approved Reportable IT Projects**

**Provide the following information regarding your existing approved reportable IT projects on Table 1 on the following page:**

- Existing IT Project;
- Approved Project Cost;
- Project Number; and
- Implementation Date

### **4. Proposed IT Projects**

**After each proposed IT project has been documented by answering questions 4.1 through 4.15 of the attached IT Project Proposal Form, provide the following information on Table 2 on the following page:**

- The name of each proposed IT project;
- The priority ranking;
- The FSR submission date; and
- The estimated cost

**Table 1-Existing Approved Reportable IT Projects Summary by Department**

Existing IT Project	Approved Project Cost*	Project Number	Implementation Date
California EMS Information System (CEMSIS)	\$1,300,000	4120-9	December, 2007
CAL Med Volunteer	\$1,990,000	4120-11	December, 2002

**\*Note:** If a Special Project Report (SPR) was submitted for review in July 2008 that includes project costs that differ from the last approved project document, enter both the last approved project cost and the revised project cost from the SPR under review.

**Table 2-Proposed IT Project Summary**

Proposed IT Project	Priority Ranking	FSR Submission Date	Estimated Total Cost
Online EMS Licensing and Enforcement	1	10/1/2008	\$3,936,472

## **PROPOSED IT PROJECTS**

Complete this IT Project Proposal Form (questions 4.1 through 4.15 below) for each proposed IT project that meets the definition of a reportable project as defined in the State Administrative Manual Section 4819.37:

**4.1. Proposal name and priority ranking:**

**#1 Online EMS Licensing and Enforcement**

**4.2. Description of the proposed IT project:**

The project will meet the requirements of AB 2917 (currently enrolled) to establish a statewide registry for Emergency Medical Technicians (EMTs) and to provide a central means to track disciplinary actions taken against EMS personnel (EMT – I, EMT – II and EMT – P (Paramedic)).

The only feasible method to create a statewide registry is to extend a common licensing system to 59 certifying authorities throughout the state and to utilize that same system for recording and reporting disciplinary actions. The same system will be utilized by individual EMT personnel to apply for initial licenses and license renewals online, eliminating many of the processes currently required for back office license processing.

**4.3. Which of your department's business goals and objectives does this project support, and how?**

- 1. Improve Paramedic Licensure Customer Service.**
- 2. Standardize EMT Personnel licensure standards.**
- 3. Improve Paramedic Enforcement Case Processing.**

**4.4. What are the expected business outcomes or benefits of the proposal as they relate to your organization's business goals and objectives?**

Paramedic Customer service will be improved by reducing the time and effort required to license paramedics. Service will further be improved by making the license status for Paramedics and certificate status for EMTs available to the public over the Internet. The proposed system will provide a single source of licensure and enforcement information for all EMS personnel throughout the state.

The proposed system will assist in the standardization of EMT Personnel licensure standards by being able to record the receipt of background checks by all EMS personnel. If the background check includes anomalies that can also be recorded and directed to the Enforcement unit for further action. The proposed system will provide a common method to record all information related to EMS personnel that is currently recorded in as many as 59 different systems with no single point of information availability.

Enforcement case processing will be improved by providing a mechanism to record and track progress on cases related to EMS personnel. The proposed system will support standardized case processes and provide departmental management with tools to assess case progress. By allowing the local certifying authorities to use the proposed system, any action taken against an individual will be available to all reducing the possibilities that an individual can have and action taken their certification in one jurisdiction and going to another to get certified.

4.5. The following are from the State's IT strategic plan. Check the appropriate box(es) to identify the goals this proposal supports:

- Supporting and enhancing services for Californians and businesses
- Enhancing information and IT security
- Reducing state operational costs (leveraging, consolidation, new technology, etc.)
- Improving the reliability and performance of IT infrastructure
- Enhancing human capital management
- Supporting state and agency priorities and business direction

4.6. Is the proposal consistent with your organization's Enterprise Architecture?

- Yes
- No

If no, please explain why the deviation from the organization's Enterprise Architecture is necessary.

4.7. Will the proposed system collect, store, transmit, or exchange confidential or sensitive information?

- Yes
- No

4.8. If this proposal is conceptually approved, what is the estimated date (mm/yyyy) the FSR will be submitted?

10/2008

4.9. What is the estimated project start date (mm/yyyy) if the FSR is approved?

01/2009

4.10. What is the duration of the proposed project?

Eighteen (18) months.

4.11. Will the proposed project utilize the existing infrastructure?

- Yes
- No

If no, please explain.

While the project is consistent with the existing enterprise architecture, the application will be housed at the Dept. of Technology Services Data Center (DTSDC) and will not use the existing departmental infrastructure. It will, however, utilize the existing data center infrastructure.

- 4.12. Is the proposal related to another proposal or to an existing project?  
 Yes  
 No

If yes, describe the related proposal or project and how it is related:

- 4.13. Describe the consequences of not doing this proposed project at the planned timeframe:

- The requirements of AB 2917 will not be met.
- The lack of a statewide registry will mean that there will be no means to verify an EMT's credentials or any enforcement actions that have been taken against those credentials, allowing EMTs to seek employment in another area.
- Because of a lack of credential verification, EMTs will not be allowed to volunteer their EMT services in emergencies. (The deployment of healthcare professionals requires continuing automated credential verification and with no registry, that will not be possible.)

- 4.14. Check the appropriate box(es) to identify the proposal's funding strategy:  
 Augmentation needed  
 Redirection of existing funds  
 Other (describe): We are requesting a General Fund loan to be repaid from increased revenue as specified in AB 2917.

- 4.15. What are the estimated cost and funding source(s) by fiscal year through implementation (information should be provided in the following format):

Fund Source	2009-10	2010-11	2011-12	2012-13	2013-14 and future	Total
General Fund						
Federal Fund						
Special Fund*	1,403,439	625,151	639,958	633,962	633,962	3,936,472
Total						

\* The funding source for the project is initially a general fund loan to be repaid from the EMS Personnel fund within three years, a fund that is available only to the EMS Authority. Because of legislation requiring the project there will be increased revenues to EMSA. Because it is a loan rather than an appropriation, the cost of the project is shown from special funds.

Enterprise Architecture

A.1. Does your organization have documented Enterprise Architecture principles, strategies, or standards to guide decisions on technology projects?

- Yes
- No

A.2. Indicate on Table A-1 below, the completion status of the component Reference Models of your formal Enterprise Architecture efforts. If available, please submit a copy of your Enterprise Architecture document.

Table A-1, Enterprise Architecture Completion Status

Component Reference Model	Status			
	Implemented	Implementation in Progress	Planned or Planning in Progress	Not Implemented and Not Planned
Business			X	
Service			X	
Technical			X	
Data			X	

A.3. Describe the governance structure your organization uses to review and approve the Enterprise Architecture and any subsequent changes.

All enterprise architecture changes are proposed by the Chief Information Officer and/or Information Security Officer and approved by the Chief Deputy Director.

A.4. Does your organization have an Enterprise Architect? (if yes, provide their name, telephone number, and e-mail address below)

- Yes
- No

Name: \_\_\_\_\_

Classification: \_\_\_\_\_

Telephone Number: \_\_\_\_\_ E-Mail: \_\_\_\_\_

## Information Security

**B.1. How is your Information Security Officer involved in proposed project development efforts?**

The ISO will be involved in any specifications for the project, once there is a viable project defined.

**B.2. What are your department's core business principles, policies and standards related to information integrity, confidentiality, and availability and the protection of information assets?**

- All access that is not expressly permitted is forbidden.
- All confidential information leaving the office is to be encrypted.
- All vendors having access to EMSA confidential information must sign an agreement that specifies their responsibility for the data and liability should that data be compromised.
- All staff with access to personal confidential information must have successfully completed a background check performed by the Dept. of Justice.
- If confidential information is to be made available over the Internet, it is to be encrypted and made available only to those who have a business need for the information.
- No confidential information is to be left unattended where others could view it. At night all confidential information, including data stored on servers, is to be stored in a locked room with a entry that has an alarm.

We are implementing the following protections:

- All computers with access to confidential information will have two-factor authentication.
- All computers with access to confidential information will not have the ability to send or receive e-mail.
- All computers with access to confidential information will not be able to access the Internet.
- Confidential information is to be transmitted over a separate LAN segment.
- Servers containing confidential information will be encrypted at rest.

**B.3. If data within your department is shared with external entities, does your department implement data exchange agreements with these entities?**

- Yes  
 No

If no, please explain.

- Not applicable

**B.4. How does your department ensure that software developers and programmers follow standards and best practices for Web, application, and system development?**

**Information Security**

**At this point there is no EMSA developed software. For custom vendor developed software we have required CMM-3 level documentation. We have used IPOCs that are familiar with application development and implementation at this level. We have worked with data center staff, including their ISO to insure that our data is protected.**

**B.5. Does your organization have an Information Security Officer? (if yes, provide their name, telephone number, and e-mail address below)**

**Yes**

**No**

**Name: Howard Tsukada**

**Classification: Staff Programmer Analyst (Specialist)**

**Telephone Number: (916) 322-4336 x431 E-Mail: howard.tsukada@emsa.ca.gov**

**Workforce Development, Workforce Planning and Succession Planning**

**C.1. Does your organization have a workforce development plan for IT staff?**

- Yes
- No

If yes, briefly describe it.

**C.2. Check the appropriate box(es) to identify which workforce development tools, if any, your organization is using for IT classifications:**

- Training
- Upward Mobility
- Mentoring
- Career Assessments
- Knowledge transfer program
- Performance Evaluations
- Other (please list)

**C.3. Does your organization have a workforce plan for IT staff (i.e., for Rank and File)?**

- Yes
- No

If yes, briefly describe it.

**C.4. Does your organization have a succession plan for IT staff (i.e., for Management)?**

- Yes
- No

If yes, briefly describe it.

**C.5. IT Staffing**

Provide the following information in table C-1 on the following page:

- The name of each IT classification currently in the organization.
- The number of staff in each IT classification in the organization.
- The number of staff in each IT classification eligible to retire in the next five years.
- The percentage of each IT classification eligible to retire in the next five years.

Table C-1 — IT Staffing

IT Rank and File Staff Classification	Number of IT Rank and File Staff in Classification	Number of IT Rank and File Staff in Classification Eligible to Retire in Next 5 Years	IT Management Staff Classification	Number of IT Management Staff in Classification	Number of IT Management Staff in Classification Eligible to Retire in Next 5 Years
Staff Programmer Analyst (Spec)	1	0	Senior Programmer Analyst (Sup)	1	1
Associate Information Systems Analyst	1	0			

**Project Management, Portfolio Management and IT Governance**

**D.1. Does your organization have a process for improving the alignment of business and technology?**

- Yes  
 No

If yes, briefly describe it.

**D.2. What is the status of implementing a formal portfolio management methodology for technology projects within your organization?**

Implemented (Please describe)

Implementation in progress (Please describe)

Planned or planning in progress

Not implemented and not planned

**D.3. List any automated tools being used for portfolio management. Enter "None" if no automated tools are being used.**

None

**D.4. What is the status of implementing a standard project management methodology for technology projects in your organization?**

Implemented (Please describe)

Implementation in progress (Please describe)

With each project that is bid requirements are included to adhere to the project management principles in the State Information Management Manual (SIMM) Section 200. Included in the feasibility study report are costs associated with consultants to perform Project Management, and Independent Validation and Verification and Independent Project Oversight Consulting.

Planned or planning in progress

Not implemented and not planned

## Project Management, Portfolio Management and IT Governance

**D.5. Does the organization require its project managers to be certified, either through a professional organization (e.g., PMI, ITIL) and/or through completion of specified project management coursework:**

- Yes
- PMI
  - ITIL
  - Agency-specified project management coursework (identify below)
- No

**D.6. Select from the list other areas of training your organization requires of its project managers:**

- Fundamental Project Management
- Systems Development Life Cycle
- Scheduling tool (identify below)
  - Microsoft Project
  - 
  -
- Project Performance Management (e.g., Earned Value Management)
- Business Process Analysis
- Requirements Traceability
- Procurement/Contracts Management
- Other (identify below)
  - 
  - 
  -
- None

**D.7. Describe project-level governance practices, including change management, issue resolution, and problem escalation.**

A project team is organized to include program, technical and vendor staff. Until a feasibility study has been completed there will be no need to involve upper management to participate as a project sponsor. Once a viable project has been identified a project team is formed to include a project sponsor, a program project manager, a project technical manager, a vendor and appropriate program and technical staff as needed.

Progress meetings are held no less often than every two weeks, weekly if necessary. Meetings include vendor management, program and technical managers from EMSA and a contracted project manager and an IPOC. Any problems uncovered will be presented and typically resolved in the meeting. Problems can be identified at any time but are typically only agreed to in the progress meetings. If any modification of the contract is necessary they are documented and agreed to. Before a decision is made a brief risk assessment is made. If necessary a more detailed risk assessment is made and reported at the next meeting. The project sponsor receives progress reports but does not need

**Project Management, Portfolio Management and IT Governance**  
to be actively involved in the progress meetings. The project sponsor makes decisions only when compromises cannot be met at the progress meetings.

Vendors are required to submit a traceability matrix to show how their proposed solution meets the requirements of the bid or statement of work. Once agreed upon, that traceability matrix will become the basis for scripted acceptance tests. Scripted acceptance tests are completed and initialed as completed. The inability to perform a specific acceptance test step does not invalidate the acceptance test. That step must be performed at a later date. Before the product is accepted all portions of the acceptance test must be completed.

**D.8. Does the project management methodology include processes for documenting lessons-learned and applying these to future projects?**

Yes (Please describe)

No