

# STATE TREASURER'S OFFICE



## Debt Management System II Cost Management Plan

Version 1.0

February 2015



**Document Revision History**

Revision Number	Date of Release	Author	Summary of Changes
.1	12/12/2014	Garrett Stratton	Initial Draft
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1.0	2/10/2015	Maisha Dottery	Final Routed for Signature

**Approval Signatures:**

**Risk and Issue Management Plan Acceptance**

*The undersigned acknowledge that they have reviewed the DMS II Risk Management Plan. The signatories also have an understanding of the purpose and content of this document and are in agreement that the Risk Management Plan is sufficient to allow the project to move forward. The Project Manager is hereby authorized to apply organizational resources to project activities.*

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## **1.0 INTRODUCTION**

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The Debt Management System (DMS) II Project is being deployed to accomplish the following objectives:

- Issue and manage the State’s debt in the most efficient, cost-effective and error-free manner feasible
- Carry out fiduciary responsibilities to bondholders as Trustee, Registrar and Paying Agent for State debt
- Comply with Federal and State laws regarding authorization, issuance and maintenance of debt
- Track and manage interim financing, reserve funds, and investments related to debt issuance
- Accurately track lease revenue projects and rental payments
- Maintain accurate records to provide State debt information to management, other entities and the public
- Increase efficiency in interacting with external systems
- Decrease time required to perform project maintenance functions
- Enhance activity tracking capability to ensure applicable staff is aware of critical upcoming tasks
- Maintain pool member, vendor and consultant information

The scope of the Project<sup>1</sup> includes developing a Request for Proposal (RFP), selecting a solution provider, and developing, testing, and implementing an enterprise solution that will incorporate existing DMS functionality, applicable ancillary system functionality and any enhanced capabilities, as defined in the RFP. The scope also includes data conversion, and training and documentation required to facilitate the STO’s use, maintenance and operations of the system.

### **1.1 DOCUMENT MAINTENANCE**

This document will be updated as needed. This document contains a revision history log. When changes occur, the revision history log will be updated to reflect: the next incremental version number, the date of the change, the owner making the change, and the description of the change.

### **1.2 PURPOSE**

The purpose of this Cost Management Plan (“Plan”) is to outline the processes involved in planning, estimating, budgeting, and controlling costs so that the project can be completed within the approved budget.

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<sup>1</sup> See Project Charter for full scope description.

### **1.3 SCOPE OF PLAN**

This Plan covers the roles and responsibilities of various project participants as well as the project's approach to cost management including; cost estimating, cost budgeting and cost control.

### **1.4 SUCCESS CRITERIA FOR PLAN**

This Plan will be considered successful by the project's ability to pay for and report on the costs of required project resources in a timely manner.

### **1.5 INTENDED AUDIENCE AND DOCUMENT USE**

The global roles and responsibilities of the project team are included in the Project Management Plan and the Governance Plan. Specific roles and responsibilities associated with cost management are contained in this Plan. As such, the participants outlined in the roles and responsibilities section of this Plan should be familiar with these processes and their role in it.

### **1.6 SUPPORTING DOCUMENTS**

This Plan outlines a portion of the projects overall project management planning efforts and should be utilized in conjunction with the DMS II Project Plans. Project Artifacts such as the DMS II Project Management Plans are located in the DMS II Project Repository. The Project Artifacts that are referenced or used to build this document are:

- DMS II Feasibility Study Report, revised April 2013 and approved May 14, 2013
- FY 13/14 Budget Change Proposal (BCP)
- FY 14/15 BCP
- FY 15/16 BCP
- DMS II Special Project Report 1, dated XX, 2015
- Cost Worksheets

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## **2.0 ROLES AND RESPONSIBILITIES**

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Project costs are managed and reconciled for the following purposes:

1. State budget and accounting of expenditures, including salary, benefits, and overhead costs, in accordance with State of California processes.
2. Project cost management for planning, tracking and reporting project costs and cost variances.

Table 1 identifies the project roles and responsibilities required to successfully carry out the functions of cost management. Note that these are project roles, not positions or titles.

**TABLE 1: ROLES AND RESPONSIBILITIES**

Role	Responsibility
DMS II Project Management Office (PMO)	Responsible for coordinating the efforts of all project participants to develop cost estimates, cost budgets, and perform cost control. The DMS II PMO performs all tracking and reporting of project costs and cost variances.
STO Budget Office	Responsible for providing Staff Salary, Benefits, OE&E estimates to the as required for project planning and works with the DMS II PMO to develop DMS II budget documents. The Budget Office coordinates the submission and approvals of budget documents in accordance with the State budget process.
STO Accounting	Responsible for approved invoice payment processing and project accounting according to standard State processes. Provides reports to the DMS II PMO that are the basis for recording actual non-redirected State staffing costs including; staff salaries, benefits and OE&E. Works with the DMS II PMO to reconcile project expenditures with budgetary encumbrances.
Public Finance Division (PFD) Reimbursements	PFD Reimbursements staff works with the PMO to track project expenditures and oversees project funding reimbursement activities according to PFD's standard quarterly reimbursement process.
Project Executive(s)	The Project Executive (Business) is responsible for providing input, guidance or approvals to the DMS II PMO for general project and business related activities, approvals, etc. The Project Executive (Technical) is responsible for providing input, guidance or approvals to the DMS II PMO as for technical project and information technology related activities, approvals, etc. For Cost Management, the Project Executive(s) shall be responsible for review and approval of Project costs (e.g. Approves invoices submitted for payment) and shall provide input to the PMO regarding actual or expected cost increases that are less than 5%.
Executive Management Team (EMT)	Responsible for providing input, guidance or approvals to the DMS II PMO and Project Executive(s) as described herein. Provides guidance on resolution for cost increases between 5 and 10%.
Subject Matter Experts (SME)	Responsible for providing input to the DMS II PMO regarding project resources.
Project Steering Committee	Responsible for providing input, guidance or approvals to the PMO and Project Executive(s) as described herein. Provides guidance on resolution for cost increases greater than 10%.
Executive Sponsor	Responsible for providing input, guidance or approvals to the DMS II DMS II PMO and Project Executive(s) as described herein. Resolves any issues that are unable to be resolved by the PSC
Change Control Board (CCB)	The Change Control Board shall approve changes that result in cost increases less than 5% if determined to be applicable by the DMS II

Role	Responsibility
	DMS II PMO and Project Executive(s).
Contractors	Responsible for submitting invoices to the DMS II PMO consistent with the terms of their contract.

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### 3.0 COST MANAGEMENT APPROACH

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The DMS II Project utilizes MS Excel as the primary project management costing software tool. The MS Excel software provides a framework and automated calculations for analysis and reporting that support project cost planning and control. The MS Excel documents (cumulatively referred to herein as the “Cost Worksheets”) are being used to facilitate both the Budget Tracking and Cost Tracking processes. In addition to MS Excel, MS Project will be used to estimate/forecast the schedule aspect of costs.

STO Accounting and the STO Budget Office shall manage, store and access all documents related to project costs consistent with the STO’s standard accounting and budgeting processes. The DMS II PMO shall manage documents related to costs as outlined herein and shall store/access all cost documents, including invoices and Cost Worksheets, in the project repository.

There are 4 processes in this Cost Management knowledge area including:

1. Cost Planning
2. Cost Estimating
3. Determining Budget
4. Controlling Cost

### 3.1 COST PLANNING

Project cost planning involves understanding the elements of the DMS II project, the costs of each element and how to align resources to take advantage of cost reductions. Labor costs are calculated using labor rates per hour by labor type. Materials costs are added to the project costs. The timing of these costs is determined by a project schedule.

A baseline is defined as the approved condition of an item at a specific point-in-time. A baseline is applied to project items, whose content or result has been agreed to and approved by the appropriate authority at a given point-in-time. For the DMS II Project, this applies to all approved project deliverables including documentation, plans, application code, training materials, hardware, software, contracts, etc. The baseline for the Project is derived from the approved FSR or SPR.

### **3.1.1 Cost Budgeting and Project Funding**

Spending authority for the DMS II project is approved each fiscal year. BCP documents are developed and submitted in accordance with Department of Finance (DOF) requirements outlined in the State Administrative Manual (SAM) section 6000. The STO uses specific reimbursement funds to pay for all non-redirectioned costs of the project including; vendor contracts, State staff (non-redirectioned), and Hardware/Software purchases. Redirectioned staff costs including salaries, benefits and OE&E will not be reimbursed by the project thus are not included in the annual funding requests. After each Budget Act is signed, the project may begin expending the funds for that fiscal year. Once expenditures occur, the DMS II PMO shall forward details regarding the expenditure to PFD Reimbursements so that they may seek reimbursement monies from the DMS project funding sources.

### **3.1.2 Cost Estimating and Resource Planning**

Estimating schedule activity costs involves developing an approximation of the cost resources needed to complete each schedule activity. The DMS II PMO will track all resources/expenditures spent on the project and keep this Plan updated as more costs become known.

The DMS II Project has prepared estimates that use the best information available. To determine project estimates, three different costing methodologies were blended and used in estimating the costs for the DMS II Project:

- Top Down Estimating – Comparison of the project to the original DMS project as a whole.
- Analogous Estimating – Utilize established per unit costs to develop cost estimates to compare to the original DMS project.
- Bottom Up Estimating – Identify the tasks and the level of effort to complete those tasks to cost out the project.

Hourly estimates and approximation of costs used by the DMS II PMO rely on a variety of inputs. These inputs include:

- The original DMS project was referenced to develop the expected resource needs and schedule
- Cost Rates - Department of General Services (DGS) Leverage Procurement Agreements (LPA): The DGS LPA's will be used to estimate the prevailing wages for contractor services.
- Contracts – Executed contracts are utilized as both actual amounts as well as a basis for expected future estimates
- Other – Other costs such as future data center services costs were estimated using multiple sources including existing STO operating costs and agreements.

The project costs include actual expenditures and known contract costs combined with resource cost estimates. The cost estimates are based on relevant factors, such as the anticipated classification of staff assigned to the work, level of expertise required, and the duration of time as per the project schedule. These anticipated costs are then totaled and reflected as a resource/labor cost. Finally, resource/labor costs are aggregated and totaled by fiscal year, including one-time and continuing costs.

### **3.2 COST TRACKING**

Costs will be tracked and reported on for any actual expenditure regardless of funding source. Overall project costs are the cumulative total of all costs that are associated with the DMS II project. The decomposition of the overall project costs and the tracking methodology for each decomposed element are detailed in this section. Each element shall be accounted for individually as expenditures occur and shall be aggregated monthly for overall project cost tracking and reporting purposes. The project costs elements are as follows:

#### **3.2.1 State Staff Costs**

##### ***3.2.1.1 Redirected Staff***

Redirected staff salaries, benefits and OE&E will be paid from their regular source of funding and are not a part of the project's annual BCP funding however, redirected staff costs are included in the FSR/SPR and must be tracked and reported on as a part of the project's total costs. Redirected staff will be assigned to work on the project for a certain specified percentage of their time and period of time. As such, the DMS II PMO records the applicable percentage of each staff's estimated salary, benefits and OE&E and reports the resulting amount as a cost of the project. At the end of each quarter, the DMS II PMO shall review the redirected staff's actual participation on the project during just concluded quarter and shall update the cost worksheets to more accurately reflect actual redirected staffing costs.

##### ***3.2.1.2 Non-Redirected State Staff***

Salaries, benefits, and OE&E for non-redirected State staff (staff that are authorized for and included in the annual DMS II project BCP) are charged to the project by STO Accounting. As such, STO Accounting provides CALSTARS reports to the DMS II PMO each month for inclusion into the project's Cost Worksheets. Amounts shown on the CALSTARS reports that are charged to the project but are not considered Staff salaries, benefits or OE&E are reported by the project via alternative sources therefore such amounts are to be adjusted out of the CALSTARS reports totals. CALSTARS reports have, at minimum a one month delay. Further, from time to time, the updated CALSTARS reports will not be available in time to include in the monthly PSR therefore, the Salaries, benefits, and OE&E may not be updated accordingly. These amounts, as well as any other accounting adjustments shall be included in the next PSR directly following when the information or adjustment becomes known or is otherwise available.

### **3.2.2 Contractor Costs**

The DMS II PMO works with the Project Executive(s) and SME's as needed to identify and document specific requirements for the services required by the project. Consultant contract acquisitions are approved by the STO through the STO's standard contract approval process.

Contractor invoices are submitted in accordance with their contract terms and paid only after the appropriate services or deliverables have been received and approved by the DMS II PMO. In the event of an invoice dispute, the contractor must address any issue and submit a corrected invoice if required. Each invoice shall be entered into the project's Cost Worksheets by the DMS II PMO and approved by the Project Executive(s). Once approved, the invoice amount shall be recorded by the DMS II PMO as a cost of the project for reporting purposes and shall be sent to STO Accounting for payment processing and for State budget and accounting purposes.

### **3.2.3 Department of Technology Services Costs**

Department of Technology's (CalTech) Statewide Technology Procurement Division (STPD) and Independent Project Oversight Consultant (IPOC) services are direct billed to the STO. STO Accounting receives a monthly invoice from CalTech detailing their charges. STO Accounting forwards this invoice to the DMS II PMO who must; 1) Review the invoice for accuracy, 2) Enter the invoice information into the project's Cost Worksheets for project cost tracking and reporting purposes, and 3) Notify STO Accounting of the charges that are applicable to the project for them to allocate that portion to the project for State budget and accounting purposes.

### **3.2.4 Hardware/Software Costs**

Hardware and Software acquisitions are generally expected to be included in the prime vendor's contract. Any such purchases will be reviewed, approved and tracked consistent with the contractor costs processes described herein. However, in the event that an acquisition is necessary or desirable to be made outside of a vendor contract, the DMS II PMO will work with the vendor as required and consult with the project SME's to acquire the desired equipment and software through the appropriate procurement vehicle. The DMS II PMO will manage and report such purchases consistent with the budgeting, reporting and cost variance processes described herein.

### **3.2.5 Other Costs/OE&E**

Other project costs may occur that are not included in one of the previously identified cost categories such as OE&E costs of a vendor that is not included in their contract costs. The DMS II PMO shall work with the vendors, the Project Executive(s) and SME's as needed to identify and track any such costs. Invoices, if applicable, shall be entered into the project's Cost Worksheets by the DMS II PMO and approved by the Project Executive(s). Once approved, the

invoice amount shall be recorded by the DMS II PMO as a cost of the project for reporting purposes and shall be sent to STO Accounting for payment processing and for State budget and accounting purposes. The DMS II PMO will manage and report such costs consistent with the budgeting, reporting and cost variance processes described herein.

### **3.3 COST REPORTING AND METRICS**

The DMS II project reports on the status of all project costs in the project's monthly Project Status Report. These reports are delivered to the IPOC for posting to CalTech's IT Project Tracking website.

#### **3.3.1 Cost Monitoring**

The DMS II PMO will monitor and assess the progress of the project from a financial perspective including:

- Cumulative Project Spending
- Costs by Resource
- Budgeted to Actual Costs and Cost Variance

#### **3.3.2 Cost Variance**

Prior to the acquisition of any goods or services, the expected cost variance of such acquisition, if any, shall be reviewed by the DMS II PMO consistent with the Cost Control and Changes section of this Plan to assess its impact on the project's budget as well as to the projects overall costs. Cost variances will be tracked and reported on for any actual expenditure (e.g. a hardware purchase) or expected future expenditure (e.g. a contract is executed) that deviates from the project cost baseline regardless of its funding source. The DMS II PMO monitors cost variances for accumulated savings or shortfalls compared to the project cost baseline.

### **3.4 COST CONTROL AND CHANGES**

A baseline is a set of data at a point-in-time used for comparison to current data. A cost baseline is a time-phased budget that will be the standard against which future project performance will be measured. This comparison can identify areas of cost deviations that require corrective action to ensure the project remains on track.

The project resources detailed in the DMS II FSR is the original cost baseline for project resources. However, whenever it is deemed necessary or desirable, the resource and cost estimates will be revised via an SPR. As such, the most recently approved FSR/SPR will be used as the cost baseline for which project costs will be measured against.

Project costs that are lower than the project baseline may be used to offset costs that are in excess of the baseline. If the cumulative cost variance of actual or expected expenditures is less than five (5) percent of the total project cost baseline, the DMS II PMO shall review, monitor, record and report said variance to the Project Executive(s). The DMS II PMO and the Project

Executive(s) will develop an action plan of corrective actions to be taken, and gain approval from the CCB, if applicable, to ensure proper funding and continued resource availability.

If the cumulative cost variance of actual or expected expenditures reaches greater than five (5) percent but less than ten (10) percent of the total project cost baseline, the DMS II PMO shall review such variance and develop a corrective action plan that shall be reviewed and approved by the Executive Management Team.

If the cumulative cost variance of actual or expected expenditures reaches greater than ten (10) percent of the total project cost baseline, the DMS II PMO shall review such variance and develop a corrective action plan that shall be reviewed and approved by the Project Steering Committee.

Potential corrective actions include but are not limited to:

- Implementing cost avoidance measures,
- Budget change requests,
- Re-planning and Re-Baselining

#### **3.4.1 Cost Avoidance**

If cost avoidance measures are determined to be necessary, the DMS II PMO shall review the project baseline and shall confirm with the Project Executive(s) that all existing or planned future resources are still required at the same levels or if any resources may be modified in such a way that would result in cost savings. If the Project Executive(s) identifies any potential resource modifications, the DMS II PMO shall analyze the modification, quantify the resulting cost savings, if any, and report the amount to the Project Executive(s) for approval. Once approved, any such cost avoidance savings shall be used to offset any cost overages.

#### **3.4.2 Budget Change Requests**

The DMS II PMO is responsible for ensuring the project has sufficient expenditure authority available to pay the project costs for each fiscal year. If a change is required to address a potential funding shortfall, the DMS II PMO will determine if a budget change request needs to be submitted to address the change and if so, the appropriate budget change request timing and type according to the State budget process (e.g. Fall BCP, Spring Finance Letter, intra-schedule transfers of appropriations or budget augmentations for non-state funding as per Budget Act Sections 26 and 28, respectively). For all budget change requests, the DMS II PMO will work with STO's Budget Office to develop and submit the appropriate budget change documents. For all other STO specific budgetary changes, the DMS II PMO will work with STO Accounting to adjust encumbrance amounts and budget documents during the annual cost closeout process.

Any BCP should be developed in accordance with the Project's latest approval document (FSR or SPR). If the Project requires resources not previously approved in an FSR or SPR, an SPR may be required (see SAM Section 4920 through 4945.2)

### **3.4.3 Re-Planning and Re-Baselining**

If the cumulative cost variance cannot be cured by cost avoidance measures or budgetary changes, then the DMS II PMO will work with the applicable SME's and the Project Executive(s) to develop alternatives, including re-planning the resources. If the cost variance of actual or expected expenditures remains greater than ten (10) percent of the total project cost baseline, after performing any corrective actions described by this Plan, an SPR will be required. At such time, the DMS II PMO will notify the Executive Steering Committee of the amount and reasoning for such variance. The Executive Steering shall provide feedback to the PMO and EMT that shall be utilized to guide the development and content of the SPR. The PMO shall develop the necessary documentation, update resource needs and cost estimates, and submit an SPR for approval according to the State process. Once approved, the revised SPR will be the new cost baseline for the project.

### **3.5 COST CLOSEOUT**

The PMO and STO Accounting will collaborate to reconcile actual project expenditures with budgeted amounts and encumbrances at the close of each fiscal year according to STO Accounting's standard closeout process and timeframes. During the annual closeout process, STO Accounting will calculate any encumbrance adjustments that are required and shall forward to the DMS II PMO. The DMS II PMO shall confirm the amounts and make updates to the Cost Worksheets as required. Once final amounts are known the DMS II PMO shall work with STO Accounting and STO Budget Office to update any State budget, accounting and/or contract documents consistent with STO's standard practices and timeframes.

Upon project completion, the DMS II PMO and STO Accounting shall perform a final project cost closeout, consistent with the annual process that reconciles actual project expenditures with budgeted amounts. At such time, the DMS II PMO shall finalize and aggregate all cost elements to quantify and report on the projects overall actual costs.

**APPENDIX A - ACRONYMS**

<b>Acronym</b>	<b>Meaning</b>
BCP	Budget Change Proposal
CALSTARS	California State Accounting and Reporting System
CalTech	Department of Technology
CCB	Change Control Board
DGS	Department of General Services
DMS	Debt Management System
DOF	Department of Finance
EMT	Executive Management Team
ESC	Executive Steering Committee
FSR	Feasibility Study Report
IPOC	Independent Project Oversight Consultant (Dept. of Technology)
LPA	Leveraged Procurement Agreements
OE&E	Operating Expenses and Equipment
PFD	Public Finance Division
PMO	DMS II Project Management Office
PSC	Project Steering Committee
PSR	Project Status Report
RFP	Request For Proposal
SAM	State Administrative Manual
SME	Subject Matter Experts
SPR	Special Project Report
STO	State Treasurer's Office
STPD	Statewide Technology Procurement Division (Dept. of Technology)