SUNGARD TREASURY MANAGEMENT SYSTEM CONTRACT COMPLIANCE

FINAL AUDIT REPORT

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October 21, 2013

TO: Dan McAllister  
Treasurer-Tax Collector

FROM: Juan R. Perez  
Chief of Audits

FINAL REPORT: SUNGARD TREASURY MANAGEMENT SYSTEM CONTRACT COMPLIANCE AUDIT

Enclosed is our report on the SunGard Treasury Management System Contract Compliance Audit. We have reviewed your response to our recommendations and have attached them to the audit report.

The actions taken and/or planned, in general, are responsive to the recommendations in the report. As required under Board Policy B-44, we respectfully request that you provide quarterly status reports on the implementation progress of the recommendations. The Office of Audits & Advisory Services will contact you or your designee near the end of each quarter to request your response.

Also attached is an example of the quarterly report that is required until all actions have been implemented. To obtain an electronic copy of this template, please contact Mady Cheng at (858) 495-5679.

If you have any questions, please contact me at (858) 495-5661.


JUAN R. PEREZ  
Chief of Audits

AUD:MC:aps

Enclosure

c: Tracy M. Sandoval, Deputy Chief Administrative Officer/Auditor and Controller  
Brian M. Hagerty, Group Finance Director, Finance and General Government Group
INTRODUCTION

Audit Objective

The Office of Audits & Advisory Services (OAAS) completed an audit of the SunGard Treasury Management System Contract. The objective of the audit was to evaluate compliance with contract terms and conditions.

Background

In June 2009, the County's Treasurer-Tax Collector (TTC) entered into a software licensing and services agreement ("Contract") with SunGard AvantGard LLC (SunGard). According to the Contract, TTC acquired a software license for SunGard's AvantGard Quantum treasury management system (AvantGard) and outsourced the related information technology (IT) hosting services to SunGard for five years. The IT hosting services include the monitoring, management, and maintenance of the hardware and software, networking infrastructure, disaster recovery plan, and system upgrades for three application environments (i.e., Production, Test, and Disaster Recovery). TTC users can remotely access the AvantGard application supported by the SunGard data centers.

Audit Scope & Limitations

The scope of the audit included TTC’s Contract with SunGard, as described in the Background section. Specifically, the audit focused on the following two areas from July 2011 to August 2013:

- SunGard’s IT security, as applicable to TTC’s data.
- SunGard’s disaster recovery (DR) plan for TTC’s data and related IT hosting services.

This audit was conducted in conformance with the International Standards for the Professional Practice of Internal Auditing prescribed by the Institute of Internal Auditors as required by California Government Code, Section 1236.

Methodology

OAAS performed the audit using the following methods:

- Interviewed TTC management and requested supporting documents to verify whether TTC had performed a review of SunGard’s Statements on Standards for Attestation Engagements #16 (SSAE 16) audit report.
- Reviewed SunGard’s most current SSAE 16 audit report available (i.e., for fiscal year ending September 2012) and related documents to identify significant IT security issues and to determine whether SunGard had remediated reported issues.
- Interviewed TTC management and requested supporting documents to verify whether:
  - SunGard had developed a DR plan customized to TTC’s IT environment.
  - SunGard had tested the DR plan at least annually, as required in the contract.
– TTC had received and reviewed SunGard’s DR test results annually.

– Any significant DR issues had been remediated.

AUDIT RESULTS

Summary
Within the scope of the audit, OAAS noted that the contractor did not comply with certain contract terms and conditions and TTC could strengthen its monitoring effort to ensure contract compliance.

Finding I: Contract Monitoring of IT Hosting Services Should be Strengthened
There was no evidence that TTC had monitored SunGard’s IT hosting service contract to ensure proper system security. According to TTC’s previous Accounting Manager, she received SunGard’s SSAE 16 audit report every year. However, there was no evidence that TTC had performed a review of the audit report upon receipt. Conducted by SunGard’s auditor, the SSAE 16 audit provides assurance on the design and operating effectiveness of SunGard’s IT general controls. Without a timely review of the SSAE 16 audit report, TTC might be unaware of SunGard’s IT security issues and the resulting impact to TTC’s data. Consequently, corrective actions to remediate reported issues might be delayed or not take place, adversely affecting the availability, confidentiality, and integrity of TTC’s data.

County policies state that each County department is responsible for monitoring its contracts and protecting its data, including the following:

• The County’s Board of Supervisors Policy #A-81, Procurement of Contract Services, specifies that the department head has overall contract administration responsibility for the contract awarded. Specifically, the department head shall be responsible for the overall performance of the contract, including contract monitoring.

• The County’s Administrative Policy #0090-01, County Contracting, states that individual departments are responsible for life-cycle administration of their contracts up to and including final contract close-out.

• The County’s Administrative Policy #0400-01, County Information Systems – Management and Use, states that County departments are responsible for managing department information systems resources in a manner that maximizes service to its customers while maintaining network security.

• The County’s Board of Supervisors Policy #A-111, Data/Information and Information Systems, specifies that designated County departments are responsible for managing and protecting County data/information. Also, the Board directs County departments to implement adequate physical security controls to protect County data/information from unauthorized access, distribution, disruption and accidental loss.

During audit fieldwork, TTC management stated that they have recently designated a staff for contract monitoring and planned to develop a contract monitoring process and related checklists and templates.
**Recommendation:** TTC should develop and implement a process to ensure timely and effective monitoring of the IT hosting service contract, including a review of the contractor's annual SSAE 16 audit report. In particular, if the SSAE 16 audit report identifies any significant security issues, TTC should follow up with the contractor to understand the impact to TTC’s data and ensure timely remediation of any issues.

**Finding II: Disaster Recovery Plan Not Documented or Tested**

Prior to this audit, SunGard utilized a standardized DR plan for TTC, without tailoring the plan to TTC’s data and IT environment. Additionally, TTC had not requested SunGard to perform any DR testing specific to TTC’s data until the end of audit fieldwork.

According to the Contract, SunGard will maintain DR plans for the IT hosting services and TTC’s data, DR plans will be tested at least annually, and DR test results made available for TTC’s review upon request.

Without a DR plan customized for TTC’s data and IT environment, SunGard and TTC will not be able to test the DR plan. Without testing the DR plan, TTC cannot assess the adequacy and effectiveness of the DR plan. As a result, TTC’s data may potentially be unrecoverable or unavailable for an extended period of time, should computer equipment fail or a disaster occur.

**Recommendation:**

1. TTC should request that SunGard develop a DR plan that is up-to-date with adequate details and customized for TTC’s data and IT environment.

2. TTC should work with SunGard to test the DR plan as soon as possible to ensure that the DR process can be executed successfully with satisfactory results and any significant issues remediated.

3. For future IT service provider contracts, TTC should:
   - Require the contractor to have an approved and tested DR plan.
   - Require the contractor to perform DR tests on TTC’s data, at least annually.
   - Review the contractor’s DR test results to identify any significant issues.
   - Ensure any significant DR issues are satisfactorily remediated.
DEPARTMENT’S RESPONSE
10/18/13

TO: Juan R. Perez
Chief of Audits

FROM: Dennis Gibson, Assistant Treasurer-Tax Collector
         Treasury-Tax Collector

DEPARTMENT RESPONSE TO AUDIT RECOMMENDATIONS: SUNGARD TREASURY
MANAGEMENT SYSTEM CONTRACT COMPLIANCE AUDIT

Finding 1: Contract Monitoring of IT Hosting Services Should be Strengthened

OAAS Recommendation: TTC should develop and implement a process to ensure
timely and effective monitoring of the IT hosting service contract, including a review of
the contractor’s annual SSAE 16 audit report. In particular, if the SSAE 16 audit report
identifies any significant security issues, TTC should follow up with the contractor to
understand the impact to TTC’s data and ensure timely remediation of any issues.

Action Plan: The Treasury-Tax Collector (TTC) department agrees with the audit
recommendations. The following steps have been implemented to address the finding:

1. Meetings held with appropriate TTC Managers and a Monitoring Tool template was
   created.

2. The current Contract Registry was posted to the TTC SharePoint website on
   September, 2013.

3. As contract updates occur (documented via the Monitoring Tool template), they are
   entered into the Contract Registry. TTC Administrative division will be checking with
   the appropriate TTC Managers on a quarterly basis to see if any monitoring activities
   had been done.

4. All completed monitoring activities will be entered on the Contract Registry.

5. On an annual basis, TTC will request a copy of the contractor’s SSAE 16 audit report
   and follow up with them on any significant security issues.

6. With all future contracts, we will require that vendors develop a quarterly
   performance matrix report that demonstrates compliance with each of our statement
   of works contract requirements. TTC will meet with each vendor and review this
   report annually to ensure compliance.

Planned Completion Date: Completed. Action plan has been implemented.

Contact Information for Implementation: Ken Jones, Administrative Services
Manager II.
Finding II: Disaster Recovery (DR) Plan Not Documented or Tested

OAAS Recommendation:
1. TTC should request that SunGard develop a DR plan that is up-to-date with adequate details and customized for TTC's data and IT environment.

2. TTC should work with SunGard to test the DR plan as soon as possible to ensure that the DR process can be executed successfully with satisfactory results and any significant issues remediated.

3. For future IT service provider contracts, TTC should:
   • Require the contractor to have an approved and tested DR plan.
   • Require the contractor to perform DR tests on TTC's data, at least annually.
   • Review the contractor's DR test results to identify any significant issues.
   • Ensure any significant DR issues are satisfactorily remediated.

Action Plan: The Treasury-Tax Collector department agrees with the audit recommendations. The following steps have been implemented to address the finding:

1. TTC worked with SunGard to develop a DR plan for the COSD TTC.

2. TTC coordinated with SunGard to plan and test the DR plan.

3. TTC will coordinate with SunGard and future contractors to ensure DR tests are scheduled on an annual basis and test results are either satisfactory or significant issues address in a timely manner.

Planned Completion Date: Completed. Custom DR plan for TTC has been developed and the Disaster Recovery Plan has been tested (date of test was 8/24/13). DR test deemed successful by TTC staff.

Contact Information for Implementation: Israel Garza, Manager Treasury Accounting.

If you have any questions, please contact me at (619) 531-5231.

Dennis Gibson
Assistant Treasurer-Tax Collector

c: Dan McAllister, Treasurer-Tax Collector
   Antoinette Chandler, Chief Deputy Treasury
   Ken Jones, Administrative Services Manager II.
   Israel Garza, Manager Treasury Accounting