TEXAS REAL ESTATE COMMISSION

INTERNAL AUDIT SERVICES

AN INTERNAL AUDIT OF

IT System Deployment

Report No. 23-004

July 3, 2023

This report provides management with information about the condition of risks and internal controls as a specific point in time. Future changes in environmental factors and actions by personnel may impact these risks and internal controls in ways that this report cannot anticipate.

Audit Report Highlights
IT System Deployment

Why Was This Review Conducted?
McConnell & Jones LLP (MJ) serving as the outsourced internal audit function (Internal Audit) for the Texas Real Estate Commission (TREC) performed this internal audit as part of the approved FY 2023 Annual Internal Audit Plan.

Audit Objectives and Scope
To assess management's planning processes and controls to ensure the upcoming Licensing system implementation meets the agency's needs.

The audit scope period was September 1, 2022 through June 30, 2023.

Audit Focus
The audit focused on the following IT system implementation planning aspects:

- Process changes to include the use of the new system,
- User acceptance testing,
- User awareness and training,
- Data migration,
- Interfaces with other systems, and
- System security.

We wish to thank all employees for their openness and cooperation. Without this, we would not have been able to complete our review.

Thank you!

Audit Conclusions
Overall, TREC's IT system implementation planning processes are generally effective to ensure that the new licensing system is deployed efficiently and effectively to enable TREC to better manage the licensing and other relevant process.

We identified no internal control weakness and six (6) opportunities to strengthen the controls and processes in place.

Internal Control Rating
Generally Effective.

What Did We recommend?
We made no recommendations related to internal controls.

Number of Findings/ Opportunities by Risk Rating

Category	High	Medium	Low	Total
Findings	0	0	0	0

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Introduction

We performed this audit as part of the approved FY 2023 Annual Internal Audit Plan. This audit was conducted in accordance with Generally Accepted Government Auditing Standards (GAGAS). Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained accomplishes that requirement.

Pertinent information has not been omitted from this report. This report summarizes the audit objective and scope, our assessment based on our audit objectives and the audit approach.

Objective, Conclusion, and Internal Control Rating

This audit identified findings that resulted in an overall internal control rating of: **Generally Effective. Exhibit 1** describes the internal control rating**.**

The purpose of this audit was to assess management's planning processes and controls to ensure the upcoming Licensing system implementation meets the agency's objectives.

As such we focused on the following IT system implementation planning aspects:

- Process changes to include the use of the new system,
- User acceptance testing,
- User awareness and training,
- Data migration,
- Interfaces with other systems, and
- System security.

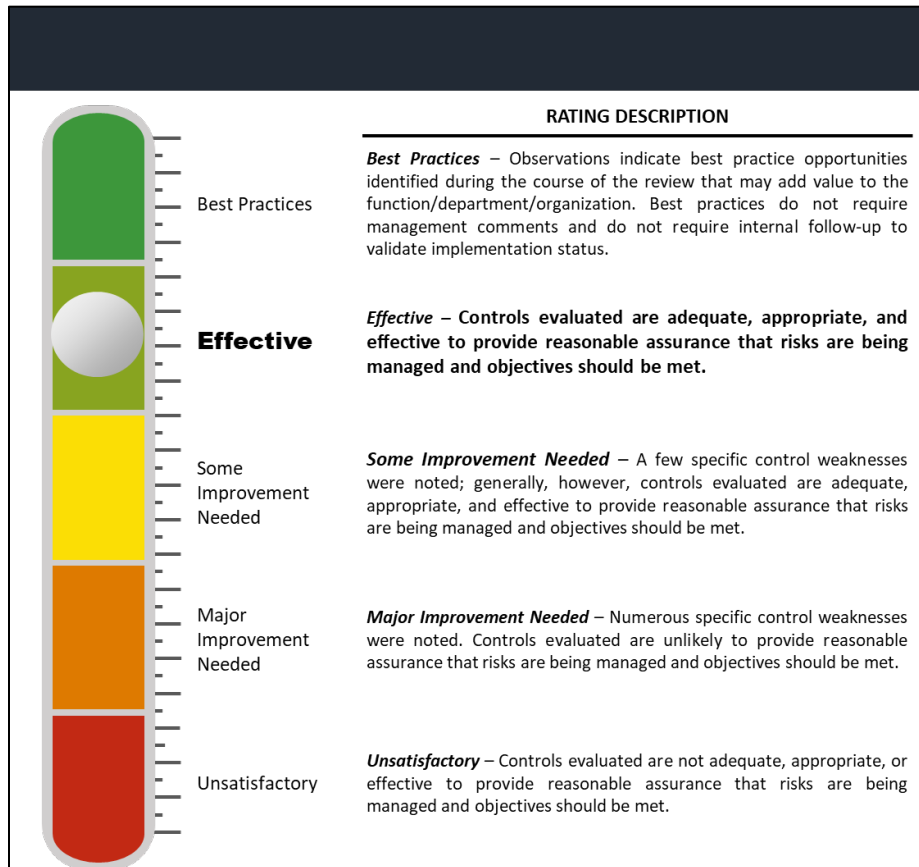The scope period was September 1, 2022, through June 30, 2023.

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Exhibit 1: Internal control rating description.

Finding vs Improvement Opportunity

We define a finding as an internal control weakness or non-compliance with required policy, law, or regulation. We define an improvement opportunity as an area where the internal control or process is effective as designed but can be enhanced.

Findings and Risk Rating Summary

Inherent risk is the business risk associated with the respective function or process if internal controls were not in place or were not effective. Residual risk is Internal Audit's ranking of the remaining risk or likelihood of a negative event occurring with the internal controls and processes in place. **Exhibit 2** provides a summary of our audit observations. See the findings and management response section of this report for a discussion of all issues identified recommendations and management responses.

Business Objective / Focus Area	Business Risk Ranking	Control Effectiveness	Recommendations
Improvement Opportunities			
1. Planning Process	**Inherent Risk: High** **Residual Risk: Low**	**Generally Effective** No findings noted.	No recommendation made as internal controls are generally effective.

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Business Objective / Focus Area	Business Risk Ranking	Control Effectiveness	Recommendations
			Opportunity for Improvement O-1. Designate an individual as the Agency Organizational Change Management (OCM) role to ensure that Agency operational processes align with the technical solution workflow and that end user training is integrated with the OCM campaign. O-2. Update the project schedule that explicitly includes a step to update policies and procedures to reflect the use of the new system. O-3. Review, approve, and update the System Development Methodology Process document as needed to ensure that the procedures reflect the current operating environment. These reviews and approvals should be recorded in the policy history within the document.
2. User Acceptance Testing	**Inherent Risk: High** **Residual Risk: Low**	**Generally Effective** No findings noted.	No recommendation made as internal controls are generally effective.
3. User Awareness and Training	**Inherent Risk: High** **Residual Risk: Low**	**Generally Effective** No findings noted.	No recommendation made as internal controls are generally effective. Opportunity for Improvement O-4. Designate an individual to the Trainer role to ensure that 'Train-the-Trainer' sessions are attended, training materials are built, and

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Business Objective / Focus Area	Business Risk Ranking	Control Effectiveness	Recommendations
			end user training is conducted.
4. Data Migration	**Inherent Risk: High** **Residual Risk: Low**	**Generally Effective** No findings noted.	No recommendation made as internal controls are generally effective.
5. System Interfaces	**Inherent Risk: High** **Residual Risk: Low**	**Generally Effective** No findings noted.	No recommendation made as internal controls are generally effective.
6. System Security	**Inherent Risk: High** **Residual Risk: Low**	**Generally Effective** No findings noted.	No recommendation made as internal controls are generally effective. Opportunity for Improvement O-5. Document the network security role to assign responsibilities for internally reviewing system security and add a post-implementation penetration test to the licensing system implementation plan to ensure timely performance. O-6. Include an annual review of the Accela SOC 2 type 2 report of system controls to ensure TREC effectively monitors Accela's system security activities. This review should also include an evaluation of the end user control considerations to ensure that TREC effectively manages security controls for which TREC is responsible.

Exhibit 2: *Summary of Internal Audit Findings and Recommendations.*

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Background

The Texas Real Estate Commission oversees real estate licensing and regulation activities in the state of Texas. The agency, along with the Texas Appraiser Licensing and Certification Board (TALCB), provides licensing, education, complaint investigation services, and regulation and enforcement of state real estate laws. In 2010, TREC implemented an information management system in support of those services.

Since the 2010 system implementation, the volume of information collected and managed by TREC has increased significantly and the existing system is limited in its ability to manage the increasing workload. In response to this issue, TREC researched internal system requirements and evaluated licensing, education, and regulatory enforcement solutions that would best meet their needs. As a result of their research, the agency contracted with Accela to develop an information management system to replace the existing system. This project, known as the *Regulatory Applications Modernization Project (RAMP),* is intended to create and implement a public-facing portal that will allow customers to apply for, renew, pay, communicate, and maintain licenses regulated by TREC and TALCB.

As of June 2023, the project is in the planning phase, with an expected 'Go-Live' date of September 1, 2024.

Detailed Findings and Management Response

> *This section of the report provides a detailed discussion of opportunities we noted during the audit along with recommendations to improve internal controls or the business process.*

Business Objective #1: IT System Deployment Planning Process.

Business Risk Rating (Inherent): High

Business Risk Rating (Residual): Low

Business Objective: To have planning processes and procedures in place that ensure the upcoming system implementation meets the needs of the organization.

Control Rating: Generally Effective.

Finding Narrative:

A successful system implementation starts with a thorough planning process. TREC's planning process addresses potential changes to the current operating environment by assigning responsibility for determining and communicating business process changes to a core implementation team. Delegation of these responsibilities is documented in the TREC Core Team worksheet maintained by the Information Technology (IT) Director. According to the documentation, division heads are assigned the responsibility of participating in knowledge transfer events to develop an understanding of the system's impact on division operations.

TREC has established an Organizational Change Management (OCM) role and a Trainer role. Individual(s) assigned to the OCM role will be responsible for working with Accela to ensure that agency operational processes are aligned with Accela's technical solution's workflow. As of June 30, 2023, TREC anticipates assigning this role to a third-party independent verification and (IV&V)

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validation contractor. The individual(s) assigned to the Trainer role will be responsible for understanding the solution and communicating that understanding to end users through training materials and by conducting end user training exercises. As of June 30, 2023, TREC anticipates assigning the division SMEs as trainers for their various divisions with support from Accela and TREC IT Business Analysts.

Additionally, the *TREC Financial Services Purchasing and Contract Management Guide and Procedures Manual* establishes contract management procedures (Section 8) in compliance with State of Texas Contract Management Guide, the State of Texas Procurement Manual, and TX Department of Information Resources (DIR) Rules. Furthermore, Subsection 8.4 (Contract Management) of the TREC *Financial Services Purchasing and Contract Management Guide and Procedures Manual* states that relevant TREC departments will be responsible for administering and managing daily operations of required services established in the contract.

Criteria	**TX DIR Security Control Standards Catalog:** ⮑ SA-1 | Policies and Procedures (System and Service Acquisition). ⮑ SA-6 | External System Services (System and Service Acquisition). ⮑ PL-1 | Policies and Procedures (Planning). **COSO Internal Control - Integrated Framework** ⮑ Principle 12. Deploys (Control Activities) through policies and procedures.
Effect/Risk/Impact	⮑ Planning may not address key processes that require updates to reflect the use of the new system.
Control Tests	⮑ Inquired of the IT Director to determine whether the planning process addresses changes to processes to include the use of the new system. ⮑ Inspected the IS-300-001-1 System Development Methodology Process document to determine the established requirement for system deployments. ⮑ Inspected the list of TREC personnel assigned to the core implementation team to determine the individuals responsible for updating organizational processes to reflect the use of the new licensing system. ⮑ Inspected the schedule of pre-tailoring meetings and observed recordings of pre-tailoring meetings between Accela and TREC personnel to determine how TREC and Accela intend to ensure that business processes are updated to include the use of the new system. ⮑ Inspected the *TREC Financial Services Purchasing and Contract Management Guide and Procedures Manual* to determine whether the processes in place to procure external system services establish requirements to update organizational policies and procedures to include the use of the new system. ⮑ Inspected the project schedule to determine whether the planning includes changes to processes to include the use of the new system.
Management Controls in Place	⮑ Updates to policies and procedures relevant to the use of the new system are the responsibility of the various divisions. TREC has created a Core Team to designate responsibility for various implementation tasks, including communicating changes to processes to staff.

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	⮊ TREC has created and implemented a system development methodology process that establishes requirements for system development and deployment. As part of that process, TREC will perform a risk assessment, assign a project team consisting of IT and organizational stakeholders, and perform quality assurance activities. The document also establishes criteria by which success of the deployment can be measured. However, we noted that the document had not been reviewed and updated since 2005 and may not reflect the current environment. ⮊ TREC has activated a core implementation team to establish and delegate various project implementation responsibilities. ⮊ TREC and Accela conducted a series of meetings designed to ensure that business processes are updated to include the use of the new system. ⮊ Relevant TREC departments will be responsible for administering and managing daily operations of required services established in the Accela contract. ⮊ The system deployment project schedule establishes timelines and specifies tasks to be performed throughout system implementation.
Findings / Opportunities	Findings: No findings noted. Opportunities for Improvement: O-1. At the time of our review, the OCM role had not been assigned to an individual. O-2. The Project Schedule does not explicitly include a step to update policies and procedures to reflect the use of the new system. O-3. TREC has implemented a formal system development and deployment procedure. However, the procedure document has not been reviewed, approved, and updated as needed to ensure that the procedure reflects the current operating environment.
Root Cause	⮊ N/A - No findings noted.

Recommended Actions

Findings:

No recommendations are made.

Opportunities for Improvement:

O-1. Designate an individual as the Agency OCM to ensure that agency operational processes align with the technical solution workflow.

O-2. Update the Project Schedule to explicitly include a step to update policies and procedures to reflect the use of the new system.

O-3. Review, approve, and update the System Development Methodology Process document as needed to ensure that the procedures reflect the current operating environment. These reviews and approvals should be recorded in the Policy History within the document.

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Management Response

None required as no findings were noted.

Management recognizes that a formal response is not required, however wanted to acknowledge the opportunities for improvement provided throughout this report. **The opportunities for improvement recommended in the IT System Deployment review are consistent with the planning of the project. IT is evaluating different alternatives in addressing the OCM and training needs presented in project review findings. IT anticipates having a plan deployed by the end of calendar year. This project will follow the agency standard to complete a penetration test prior to deployment of all online websites. Once deployed it will be included in the annual penetration tests conducted by the Department of Information Resources and their 3rd party service providers. The updating of policy, procedures and training materials are not part of the Accela project plan but are items accounted for in additional tasks specific to the agency. All recommendations have merit and will be incorporated in ongoing management of the project.**

Business Objective #2: User Acceptance Testing

Business Risk Rating (Inherent): High

Business Risk Rating (Residual): Low

Business Objective: To have processes and procedures in place that ensure internal and external user acceptance testing (UAT) activities identify any potential issues that may impact the success of the deployment.

Control Rating: Generally Effective.

Finding Narrative:

TREC's system implementation planning process addresses UAT by assigning responsibility for developing user acceptance test cases and performing user acceptance testing to designated division/ departmental subject matter experts (SMEs). Delegation of these responsibilities are documented in the TREC Core Team worksheet maintained by the IT Director. Integration Developer/Report Developer roles have been designated as responsible for performing unit and system testing and a Product/System Administrator role has been designated as responsible for assisting the agency end users with testing.

Additionally, the *TREC and TALCB Regulatory Applications Modernization Project (RAMP) Contract #329230075* states that Accela is responsible for developing, conducting, and providing support for testing to TREC/TALCB and leading all testing efforts other than UAT, which will be led by TREC/TALCB, but supported by Accela.

Criteria	**TX DIR Security Control Standards Catalog:**
	⮥ SA-4 | Acquisition Process.
	COSO Internal Control - Integrated Framework:
	⮥ Principle 9. Identifies and analyzes significant changes.

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Effect/Risk/Impact	➲	Planning processes and procedures may not be in place to ensure that internal and external UAT activities identify potential issues that may impact deployment success.
Control Tests	➲	Inquired of the IT Director to determine whether the planning addresses changes to processes to include the use of the new system.
	➲	Inspected the *TREC and TALCB Regulatory Applications Modernization Project (RAMP) Contract #329230075* to determine the contractual requirements related to user acceptance testing.
	➲	Inspected the list of TREC personnel assigned to the core implementation team to determine the individuals responsible for user acceptance testing.
	➲	Inspected the TREC licensing system implementation plan to determine whether user acceptance testing has been planned and scheduled.
Management Controls in Place	➲	Division heads have been designated as subject matter experts (SMEs) for their particular areas and will participate in UAT.
	➲	Accela will work with TREC and TALCB to develop testing plans and assist in the performance of testing plans other than user acceptance testing.
	➲	TREC has established a core implementation team to establish and delegate user acceptance testing responsibilities.
	➲	User acceptance testing will occur between December 2023 and May 2024. Execution of UAT is planned from May 2024 to July 2024.
Findings / Opportunities		No findings noted.
Root Cause		Not applicable as no findings were noted.

Recommended Actions

No recommendations are made.

Management Response

None required as no findings were noted.

Business Objective #3: User Awareness and Training

Business Risk Rating (Inherent): High

Business Risk Rating (Residual): Low

Business Objective: To have processes and procedures in place that ensure users have the knowledge needed to effectively use the solution.

Control Rating: Generally Effective.

Finding Narrative:

TREC's system implementation process addresses end user training by assigning core implementation team roles with responsibilities for developing training materials and conducting training. The OCM

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role has been assigned responsibility for working with Accela to plan and integrate end user training with the OCM process. The Trainer role has been assigned responsibility for attending the Accela Train-the-Trainer sessions, building training materials, and conducting end user training.

TREC's contract with Accela includes developing knowledge transfer and training plans, developing training materials, and conducting end user training and evaluations for TREC/TALCB where appropriate. The contract states that Accela will create and provide TREC a training plan, course list, and training curriculum. Accela will also document completion of training, the training provided, date, and attendees in a Training Completion Report. Additionally, this report will include a summary of training exercise results, observations with future training recommendations, and satisfaction survey results.

TREC plans to conduct user training between July 2024 and August 2024. Specific steps in the training plan include conducting a Train-the-Trainer session with Accela, conducting end user training sessions, and completing various training deliverables, such as a training plan, course list, curriculum and materials, and a training completion report.

Criteria	COSO Internal Control – Integrated Framework:
	⮞ Principle 4. Demonstrates commitment to competence.
Effect/Risk/Impact	⮞ The planning processes and procedures may not address or be effective to ensure that users have the knowledge needed to effectively use the solution.
Control Tests	⮞ Inquired the IT Director to determine how TREC plans to address end user training.
	⮞ Inspected the *TREC and TALCB Regulatory Applications Modernization Project (RAMP) Contract #32923075* to determine the contractual requirements related to end user training.
	⮞ Inspected the list of TREC personnel assigned to the core implementation team to identify the individuals responsible for end user training.
	⮞ Inspected the TREC licensing system implementation plan to determine whether end user training has been planned and scheduled.
Management Controls in Place	⮞ TREC has created a 'Trainer' role as part of the core team with primary responsibility for developing training materials and conducting training with end users. Core team subject matter experts are expected to support training for their staff as well.
	⮞ Per the *TREC and TALCB Regulatory Applications Modernization Project (RAMP) Contract #329230075*, Accela will develop Knowledge Transfer and Training Plans, develop training materials, and conduct training/evaluation for TREC/TALCB where appropriate.
	⮞ TREC has established a core implementation team to establish and delegate end user training responsibilities.
	⮞ TREC plans to conduct user training between July 2024 and August 2024.
Findings / Opportunities	Findings: No findings noted. Opportunities for Improvement:

	O-4. At the time of our review, the trainer role had not been assigned to an individual.
Root Cause	Not applicable as no findings were noted.

Recommended Actions

No recommendations are made.

Opportunities for Improvement:

O-4. Designate an individual to the Trainer role to ensure that Train-the-Trainer sessions are attended, training materials are built, and end user training is conducted.

Management Response

None required as no findings were noted.

Business Objective #4: Data Migration

Business Risk Rating (Inherent): High

Business Risk Rating (Residual): Low

Business Objective: To have planning processes and procedures in place that ensure data conversions and migration activities prevent data loss and protect the integrity of data moved into the new system.

Control Rating: Generally Effective.

Finding Narrative:

TREC's system implementation planning processes address data conversion and migration by assigning responsibility for these areas to a Data Conversion Lead role as part of the core implementation team. Delegation of these responsibilities is documented in the TREC Core Team worksheet maintained by the IT Director.

As part of the established core team roles and responsibilities documentation, Data Conversion Leads have been assigned responsibility for attending Accela data conversion and database schema training, cleaning legacy data, and creating data mappings for migration. Additionally, the Data Conversion Leads are responsible for writing scripts to move legacy data to the Accela staging area, validating converted data, and participating in mock data conversion and migration runs during implementation as well as the final production conversion. Additionally, division/department SMEs have been assigned responsibilities that include assisting internal efforts towards communicating their business requirements with Accela to ensure that data conversion and migration meets the TREC's operational needs.

TREC's contract with Accela includes developing a data conversion plan that describes the level of involvement between Accela and TREC staff. Accela will also review legacy data and assist TREC staff in cleaning and migrating that data into the new system. Additionally, the contract specifies that the data conversion plan will include a description of the conversion methodology, number of mock

runs to be conducted, description of necessary manual conversions, milestones, list of data converted, how much historical data was converted from the legacy system, manual data entry/error correction after conversion, and a plan for validating converted data.

Criteria	**TX DIR Security Control Standards Catalog:** ➲ SA-10 | Developer Configuration Management. **COSO Internal Control - Integrated Framework:** ➲ Principle 11. Selects and develops general controls over technology.
Effect/Risk/Impact	➲ Planning processes and procedures may not be in place to ensure that data conversions and migration activities prevent data loss and protect the integrity of data moved into the new system.
Control Tests	➲ Inquired of the IT Director to determine whether the planning process addresses data conversion and migration. ➲ Inspected the *TREC and TALCB Regulatory Applications Modernization Project (RAMP) Contract #329230075* to determine the contractual requirements related to data conversion and migration. ➲ Inspected the list of TREC personnel assigned to the core implementation team to identify the individuals responsible for conversion and migration of data. ➲ Inspected the TREC licensing system implementation plan to determine whether data conversion and migration activities have been planned and scheduled.
Management Controls in Place	➲ TREC's planning process addresses data conversion and migration by defining roles and responsibilities for data conversion and migration as part of the core implementation team. ➲ Accela is responsible for developing a data conversion plan that describes the level of involvement between Accela and TREC staff and reviewing legacy data to assist TREC staff in cleaning and migrating that data into the new system. ➲ TREC has established a core implementation team to establish and delegate data migration responsibilities. ➲ TREC management is in the process of reviewing Accela's Data Conversion Plan for approval as of June 30, 2023. As of this time, TREC has begun initial data conversion activities, which are scheduled through and July 2023 with actual conversion and migration activities to occur through July 2024.
Findings / Opportunities	No findings noted.
Root Cause	Not applicable as no findings were noted.

Recommended Actions

Findings:

No recommendations are made.

Management Response

None required as no findings were noted.

Business Objective #5: System Interfaces

Business Risk Rating (Inherent): High

Business Risk Rating (Residual): Low

Business Objective: To have planning processes and procedures in place that ensure the new system successfully integrates with TREC's existing systems.

Control Rating: Generally Effective.

Finding Narrative:

TREC's system implementation planning process addresses system interfaces by defining an Integration Developer role and assigning responsibility for working with Accela and other third-party providers, writing integration methods, and participating in unit and system testing. TREC has also assigned division/departmental SMEs with responsibility for assisting internal efforts towards providing business requirements for integrations.

Accela's contract requires them to work with TREC on the integration of all the solution's and validating those integrations to ensure connectivity and functionality. Accela is also responsible for developing and providing TREC with an interface specification document that identifies all interfaces between the new solution and each system/application. The document will also define interface specifications, map source and destination of each interfaced data field, describe interface requirements, demonstrate compliance with functional/technical requirements, and provide an interface workflow diagram that illustrate user and system-to-system interactions, including alternate and exception paths.

TREC's system implementation plan includes determining requirements for performing a review and acceptance of Accela's interfaces specification document. This process is planned between July and December 2023. TREC plans to develop these interfaces between July 2023 and February 2024.

Criteria	**TX DIR Security Control Standards Catalog:**
	➲ CA-9 | Internal System Connections.
	COSO Internal Control - Integrated Framework:
	➲ Principle 11. Selects and develops general controls over technology.
Effect/Risk/Impact	➲ Planning processes and procedures may not be in place or may not be effective to ensure that the new system successfully integrates with TREC's existing systems.
Control Tests	➲ Inquired of the IT Director to determine whether the planning process addresses interfaces with existing systems.
	➲ Inspected the *TREC and TALCB Regulatory Applications Modernization Project (RAMP) 8329230075* to determine the contractual requirements related to system interfaces.
	➲ Inspected the list of TREC personnel assigned to the core implementation team to identify the individuals responsible for system interfaces.
	➲ Inspected the TREC licensing system implementation plan to determine whether changes to system interfaces have been planned and scheduled.

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Management Controls in Place	➲ TREC's planning process addresses system interfaces by defining roles and responsibilities for working with Accela to establish system requirements, including System interfaces. ➲ Accela is responsible for working with TREC to integrate all components of the solution and validating those integrations to ensure connectivity and functionality. ➲ Accela is responsible for developing and providing TREC with an interface specification document. ➲ TREC has established a core implementation team to establish and delegate data migration responsibilities. ➲ TREC's system implementation plan includes a step to review and accept Accela's interface specification document.
Findings / Opportunities	No findings noted.
Root Cause	Not applicable as no findings were noted.

Recommended Actions

No recommendations are made.

Management Response

None required as no findings were noted.

Business Objective #6: System Security

Business Risk Rating (Inherent): High

Business Risk Rating (Residual): Low

Business Objective: To have planning processes and procedures in place that ensure the upcoming system implementation effectively protects the confidentiality, integrity, and availability of TREC systems.

Control Rating: Generally Effective.

Finding Narrative:

TREC's system implementation planning process addresses system security by establishing specific security controls in the contract with Accela. Per the contract, Accela is responsible for developing a security plan that defines Accela's approach for monitoring system security and updating system security capabilities to address evolving security threats. Accela is also responsible for developing an incident response plan that describes security roles and responsibilities, a strategy to identify/categorize incidents, a process to manage incidents, and post-incident activities to ensure continuous security improvement. The contract states that the security plan will include on-going vulnerability scans, data encryption, and logging of application events.

Accela provided TREC with the Accela Availability and Security Policy, which describes Accela's control activities designed to protect the confidentiality, integrity, and availability of system

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information. Per the security policy, Accela uses industry-standard encryption and has developed an audit and compliance program that includes SOC 2 Type II, HIPAA, CCPA, and PCI-DSS audits.

Throughout the system implementation, TREC's network security team will work with Accela to ensure system and network security requirements are addressed. After implementation, TREC plans to have their network security team perform a post-implementation inspection of the environment to ensure the implemented security controls function as designed.

TREC will utilize TX DIR's penetration testing service to identify and test for vulnerabilities that may affect the Accela software. This DIR service will provide TREC with additional information for monitoring Accela's performance and data security capabilities.

Criteria	**TX DIR Security Control Standards Catalog:** ⬤ SA -9 | External System Services. **COSO Internal Control - Integrated Framework:** ⬤ Principle 11. Selects and develops general controls over technology.
Effect/Risk/Impact	⬤ Planning processes and procedures may not be in place to ensure the upcoming system implementation effectively protects the confidentiality, integrity, and availability of TREC systems.
Control Tests	⬤ Inquired of the IT Director to determine whether the planning process addresses system security. ⬤ Inspected the *TREC and TALCB Regulatory Applications Modernization Project (RAMP) Contract #329230075* to determine the contractual requirements related to system security. ⬤ Inspected the list of TREC personnel assigned to the core implementation team to identify the individuals responsible for system security. ⬤ Inspected the TREC licensing system implementation plan to determine whether system security activities have been planned and scheduled.
Management Controls in Place	⬤ Accela performs custom configuration setup and tailoring for each of its clients to ensure the security of its cloud solution. ⬤ Accela is responsible for developing a security plan that defines Accela's approach for monitoring system security and updating system security capabilities to address evolving security threats. ⬤ Accela is also responsible for developing an incident response plan. ⬤ The Accela solution includes on-going vulnerability scans, data encryption, and logging. ⬤
Findings / Opportunities	Findings: No findings noted. Opportunities for Improvement: O-5. TREC plans to have the network security team inspect the environment and utilize TX DIR's penetration testing services; however, these network security team's role and activities have not been documented in the system implementation planning documentation. O-6. TREC has not included annual reviews of Accela's SOC 2 type 2 report or similar assessments of Accela's system security controls as part of an ongoing process in the project schedule.

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Root Cause	Not applicable as no findings were noted.

Recommended Actions

Findings:

No recommendations are made.

Opportunities for Improvement:

O-5. Consider updating the network security team's role and activities to include responsibilities for internally reviewing system security and add a post-implementation penetration test to the licensing system implementation plan to ensure timely performance.

O-6. Include an annual review of the Accela SOC 2 type 2 report of system controls to ensure TREC can effectively monitor Accela's system security activities. This review should also include an evaluation of the end user control consideration to ensure that TREC effectively manages security controls for which TREC is responsible.

Management Response

None required as no findings were noted.

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