

# **TexasOnline Attachment to Master Agreement**

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Between

**The State of Texas, acting by and through  
the Texas Department of Information Resources**

and

**Texas NICUSA, LLC**

## **Attachment G-1 Comprehensive Program Management Plan**

April 13, 2016

Version 1.0

## Version History

The version numbering is as follows:

All internal edits (prior to delivery to either party) shall be marked with 0.01 increments and will be removed prior to delivery to client. The summary of those edits will be added to the 0.1 increment line.

Documents delivered to and returned from client shall be marked with 0.1 increments.

If client sends back change requests via another method (i.e., comments spreadsheet or email) vendor will add a line for the return and fill in the appropriate data.

Once accepted by both parties, it shall be marked with a full number increase (e.g., 1.0, 2.0, etc.).

Version Number	Action (Delivered, Returned, Approved)	Sent Date	Acceptance Date (Major Version Only)	Document Owner/ Reviewer	Summary of Changes
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1.0	Approved		April 13, 2016	DIR	DIR approves the G-1 Comprehensive Program Management Plan

*NOTE: No changes to the document will be allowed when the document is pending approval.*

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# 1. Introduction

The Texas.gov Program is operated through a competitively procured enterprise contract, TexasOnline 2.0 Master Agreement (“Master Agreement”), that established a public-private partnership between the state of Texas, represented by the Department of Information Resources (DIR) and a private partner, Texas NICUSA, LLC (Vendor).

DIR provides contract management, strategic and operational oversight, enterprise-level coordination, and program advocacy. The Vendor contributes the program funding and provides all other aspects of program management and operational support including, but not limited to: custom application design and development, web design and development, security, electronic payment processing, infrastructure and operational support, maintenance, program accounting, customer service, marketing, and analytic reporting.

In addition to Texas.gov, the official website of the State of Texas, the Texas.gov Program also operates the Texas Veterans Portal and the Texas Open Data Portal.

## 1.1. Program Overview

The ongoing mission of the Texas.gov Program is to provide digital government services to Texas state agencies, local government entities, and higher education in support of their missions to effectively and efficiently conduct business with their constituents. To accomplish this mission, Texas.gov operates as a comprehensive enterprise program to offer a common infrastructure, development frameworks, project management methodologies, governance, payment processing, communications, value-added services, and flexible project financial models that allow large and small agencies alike to access IT services and deliver solutions that benefit their constituents and the citizens of Texas.

The Texas.gov Program solves a wide range of agency technology needs in ways that benefit government entities and citizens. Many of the services currently offered have been developed at no cost to the state. Revenues earned through the Texas.gov Program benefit the Texas General Revenue Fund and allow reinvestment into new program projects in order to expand new and existing service offerings to a broad range of government entities. Since its inception in 2000, the Texas.gov Program has processed more than 288 million financial transactions worth more than \$33 billion on behalf of the State and contributed more than \$241 million to the state’s General Revenue Fund.

The Vendor currently works with the DIR and more than 300 participating state agencies, local government, and higher education entities to deliver more than 1,000 online services via the nationally recognized Texas.gov Program. This broad portfolio of digital government services span personal, professional, local, state and higher education activities, and are delivered via multiple interfaces including online, mobile, over-the-counter, and Interactive Voice Response (IVR), as well as more complex back-end systems integration efforts. Examples of these services, which utilize web-enabled payment processing that is integrated with the state’s Uniform Statewide Accounting System (USAS) include:

- Driver license renewals, authorized driver record access, and print-on-demand driver records
- Vehicle registration renewals and specialty license plates
- Professional and occupational licensing
- Vital records (birth, death, and marriage certificates)
- State licenses and permits
- Fee and fine payments
- Commissary purchases and deposits

## **1.2. Purpose**

The Comprehensive Program Management Plan (G-1) describes the goals, principles, policies, and operations of the Texas.gov Program. The purpose of the G-1 is to create a consolidated plan of the governance and operations of the Texas.gov Program and provide a point of reference for the Department of Information Resources, the Vendor, Customers, and Constituents.

## **1.3. Organization**

The remainder of the G-1 is organized into the following major sections.

- Section 2.0 Governance
- Section 3.0 Non-Technical Operations
- Section 4.0 IT Service Management
- Section 5.0 Consolidated Key Terms and Definitions

In order to reduce duplication throughout the G-1, **Attachment H-1 Policies and Procedures Manual (PPM)** is referenced as appropriate when pertinent information is located and maintained in the PPM.

## 2. Governance

The purpose of governance is to align resources, authority, and responsibility so that sound decision making, accountability, and transparency are achieved.

The Texas.gov governance model is designed to:

- Provide program leadership with information to oversee, support, and make informed decisions regarding the strategic direction of the program,
- Provide the program with operational flexibility, stakeholder feedback, and strategic support to operate and grow the program,
- Provide program stakeholder groups (such as: Customers and constituents) with opportunities to promote projects, request changes, and recommend improvements to the program.

Comprehensive information about the governance approach and objectives for the Texas.gov Program is addressed in PPM *Section 4.1.2 Governance Model*.

### 2.1. Organizational Infrastructure

The Texas.gov Program utilizes the infrastructure, technology, and facilities of State-managed and operated resources as detailed below. Use of other resources require DIR approval.

#### 2.1.1. Data Centers

The Texas.gov Program utilizes the state's Data Center Services (DCS) for infrastructure. Use of other data centers, including the NIC Corporate Data Centers (CDC) require DIR approval.

#### 2.1.2. Resources

Workspaces, hardware and software technology assets, and their assignment to people are tracked by the Vendor to include offices, cubicles, phones, computer workstations, and development tools. DCS provides technology assets to the Texas.gov Program; however, the Vendor's technology support organization tracks the use of DCS so that hardware needs are anticipated and licensing compliance is enforced.

#### 2.1.3. Facilities

Facilities for the Texas.gov Program will remain primarily in the Austin, Texas area. However, some work may be performed at DCS facilities in Austin and San Angelo or at Vendor-run data centers. The normal administrative needs of the onsite Vendor team is supported by Vendor corporate resources.

## **2.2. Stakeholders**

Texas.gov is an enterprise program with many stakeholders. For the purposes of the G-1, the stakeholders are segmented into three distinct groups:

- Partner Stakeholders: Defined by the obligations to the Texas.gov Program as described in the Master Agreement
- Primary Stakeholders: Beneficiaries of the Texas.gov Program
- Key Support Providers : Support critical operations of the Texas.gov Program

### **2.2.1. Partner Stakeholders**

The Texas.gov Program's Partner Stakeholders are:

- Department of Information Resources (DIR)
- Vendor

#### **DIR**

DIR serves as the public sector partner with oversight, governance, and strategic responsibilities for the Texas.gov Program. DIR leads Texas.gov in fulfilling the vision of digital government and promoting greater usage of the program's services among the primary stakeholders.

The DIR Partner Stakeholder roles are identified and described with their primary responsibilities in PPM Section 4.2.

#### **Vendor**

The Vendor serves as the private sector partner, provides the financial investment, and executes program management, service delivery, and operational support across a wide range of technical and business teams.

The Vendor Partner Stakeholder roles are likewise identified and described with their primary responsibilities in PPM Section 4.2.

### **2.2.2. Primary Stakeholders**

The Texas.gov Program's Primary Stakeholders are:

- Customers (eligible State, Local, and Higher Education government entities)
- Constituents (end-users of the Texas.gov Program and services)

#### **Texas.gov Customers**

Eligible Texas.gov Customers are defined in Exhibit A in the Master Agreement. These entities can be state agencies, local governments, municipalities, districts, or higher education.

Customers can also be both large and small in terms of budget, resources, constituents, and IT sophistication and staffing. Texas.gov balances the delivery of services across this disparate

field of Customers by taking an enterprise approach to planning, portfolio management, and decision making.

Subsequent sections in the G-1 will describe how Customer feedback and integration is achieved within the Texas.gov Program.

## **Constituents**

The Constituents of the Texas.gov website and services are important stakeholders for several reasons. First, these Constituents are often the Customers' end-users and delivering services to their constituents in a meaningful, helpful, efficient, and value-driven way is critical to accomplishing their missions.

Second, the majority of services provided by the Texas.gov program generate revenue through fees paid by the end-user. Due to this financial relationship, the services offered through the Texas.gov program must be of sufficient value, including ease of use, convenience, and security, for the end-user to choose to pay for them.

Understanding Constituent needs from a stakeholder perspective is critical to the successful delivery of services through Texas.gov. Subsequent sections in the G-1 will describe how end-user feedback and integration is achieved within the Texas.gov Program.

### **2.2.3. Key Support Providers**

The Texas.gov Program's Key Support Providers include:

- TEX-AN
- Data Center Services (DCS)
- CPA Treasury

#### **TEX-AN**

TEX-AN is the centralized telecommunications system for the State of Texas, offering broadband, data circuits, Internet, MPLS, Wi-Fi, and video services to participating state and local governments. TEX-AN controls the network infrastructure connecting the Texas.gov Program with the State network.

#### **DCS (Data Center Services)**

DIR oversees the state's consolidated data center operations that provides mainframe, server, network, data center, and print/mail services across multiple geographically dispersed facilities. The Texas.gov Program leverages DCS in the delivery of Texas.gov services.

#### **CPA Treasury**

The Comptroller of Public Accounts is responsible for distributing the funds collected by Texas.gov services and applications to the intended government entity. This is performed through USAS processes established between the Treasury and the Vendor.

#### **2.2.4. Roles and Responsibilities**

The RACI diagram illustrated in Figure 1 identifies the roles and responsibilities of Texas.gov Program stakeholders including: DIR, Vendor, TEX-AN, DCS, and others. A RACI diagram contains the following attributes:

- Responsible - Those who perform work to achieve a task. There can be multiple resources responsible.
- Accountable - (Also Approver) The resource ultimately responsible for the completion of the task. There is only one "A" specified for each task.
- Consulted - Those whose opinions are sought. Two-way communication.
- Informed - Those who are kept up-to-date on progress. One-way communication.

Figure 1. Texas.gov Program RACI Diagram

Functional Areas	Vendor Executive Director	Vendor Director of Portal Operations	Vendor Project and Change Management Manager/DPS Direct	Vendor Director Project Portfolio Management Office	Vendor Project and Requirements Management Manager	Vendor Contract Mgmt/Alliances Team Lead	Vendor Director of Quality and Service	Vendor Quality Assurance Manager	Vendor Director Finance, Budget and Business Operations	Vendor Director of Technology	Vendor Development Manager	Vendor Chief Information Security Officer	Vendor Director of Market Development	Vendor Director of Development	Vendor Director of Technical Operations	Vendor UX/Creative Services Manager	Vendor Service Transition Manager	NIC Corporate Accounting	NIC Corporate IT	NIC Corporate Security	DIR	DCS	TEX-AN	
	R - Responsible	A - Accountable	C - Consulted	I - Informed																				
Office and Staffing	I	A		I						R	C									R	I			
Service Management	I	A	R	I	R	R	I	R		R	R	R		R	R		R				R	C	R	R
Help Desk Management	I	A		I		R																I		
Incident Management	I	I	R	I	A		I	C		R	R			R	R		C		C		C	C	R	R
Service Requests	I	A	R	I	R					I				R			C				C	R	R	
Problem Management	I	I	R	I	A		I			R	R			R	R		C		C		C	C	R	R
Change Management (CCB)	I	A	C	I	C	R				R			I	R		R						R	R	R
Maintenance Periods	I	I	I	I	I	I	I			A		C		C	R	I	C		C		C	C	R	R
Configuration Management	I	I	C	R	C					A	R	R		R	R		I		C		C	C	R	I
Portfolio Management	I	A	R	R	R					R			I	R								C		
Risk Management	I	R	C	C	C	R	C	C	I	R	C	A		C	C	R	C				C	C	C	
Business Continuity Management	I	R	R	I	R	R	I	I		R				R	A	R	I		R		C	C	R	R
Disaster Recovery	I	R	R	I	R	R	R			A	R	R		R	R	R	I		R		C	C	R	R
Security Management	I	I	R	I	R	R				R	R	A		R	R	R	I		C	C	C	C	C	
Technology Management Plan	I	I	R	I	R	C				A	R	R		R	R	R			C		C	C	C	
Evaluation and Testing		I	R	I	R	R		A		I	C	C	C	R		R	I				C	C	C	
Service Catalog	I	I	R	A	R			I	R				I			I		I			C			
Delivery and Staging	I	I	R	I	R	R		C	I	A			C	R	C	R	I				C	C	C	
Equipment and Software Maintenance		I	I	I	I	I			I	C				A		I		C			C	C	R	R
Software Support		I		I						R	C	I		R		A					I	R		
Asset Inventory and Management		I		R					R						A	I	R				I	I		
Program Management and Support	I	I	R	A	R	R	R									I					C			
Collaborative Applications Support		I		I						A		R			I	R					C	R	R	
Operations Documentation	I	I	R	I	R					R	C	C		R		A					C	C	C	
Training and Communications	I	I					R						A				C				C			
Quality Management		I	R	R	R	R		A		C				C	C		C				C			
Governance	R	R	R	R	R	R	I	I	R	R											A	C	I	
DCS Coordination Processes	I	C	R	C	R	A			I	R	R	R		C	R	I					C	R		
TEX-AN Coordination Processes	I	C	R	C	R	A				I	R	C	R		C	R	I				C		R	
Third-Party Vendor Management Processes	I	I		R		A	C	I		C		R	I	C	I		C				C			
Quality Assurance Process	I	I	R	I	R			A		I		I	C	R	I	I	I				C			
Business Case Approval Process	I	A	R	C	R	I	I	I	I	C		C	I	C	C		C				C	C	C	
Architecture Review Process		I	I	I	I	I		I		A	R	C		C	C						C	C	C	
Published Specifications	I	C	C	C	C	R	C	C	I	A	C	R	I	R	C	C	C				C	C	C	
Customer Agreements	R	R		I			R		I	C		C	I		C		C				A	I	I	
Financial and Account Management	R	R		C		C	C		A	C		C	I					R			C			

2.2.5. Stakeholder Engagement

Stakeholder engagement is a cumulative process by which the program stakeholders' expectations, inputs, goals, and objectives are incorporated into the management and decision-making of the Texas.gov Program. Positive stakeholder relationships contribute to the overall success of the program and the primary purpose of stakeholder engagement is to ensure their needs remain a focus of the program.

## Partner Stakeholders

The primary tools for Partner Stakeholder engagement in the program are:

- The Texas.gov Master Agreement,
- Leadership positions on Texas.gov governance boards,
- The Texas.gov Business Case Process (BCP),
- Customer Agreement approval and processing,
- Project surveys that allow input and comments on Texas.gov projects, and
- Daily, weekly and monthly meetings between Vendor, Customers and DIR.

The standards and practices that govern the coordination and communication of feedback between DIR and the Vendor are addressed in the PPM.

## Customer Stakeholders

Texas government entities can be large and complex, with extensive IT staffs that provide services to a large number of constituents. They may also be relatively small in regards to both their IT budget and number of constituents served.

Several mechanisms exist to solicit feedback and ensure Customers have a voice in the direction and quality of the Texas.gov Program . They include:

- The Customer Advisory Council (CAC)
- Transaction Processing Engine (TPE) Users group and the Occupational License Steering Committee (OLSC),
- The Texas.gov Business Case Process (BCP),
- Portal, application, and project surveys,
- Marketing programs from the Vendor that solicit agency input on improvements, campaigns, and future growth areas, and
- Daily, weekly and monthly meetings with the Vendor.

A detailed description of strategies utilized by the Texas.gov Program to communicate with Customers is located in **Section 3.1 Communication Management**. A detailed description of how feedback gathered from these mechanisms is addressed is provided in **Section 3.1.4. Feedback Process**.

## Constituent Stakeholders

Constituents, including citizens and other end-users, are the ultimate beneficiaries of Texas.gov services. The primary mechanisms for constituent feedback are:

- Portal and application surveys to provide feedback on applications and services,
- Focus groups to provide targeted input for specific Texas.gov projects, and
- Indirect feedback through use of analytic tools on portal applications that provide important portal statistics.

Each feedback mechanism collects either quantitative and/or qualitative data that may be analyzed for improvement opportunities.

Offline sources for this data may include:

- Help Desk
- Service Desk
- Business Development
- Surveys
- Focus Groups
- Governance Structure and Regular Reporting

Online sources for this data may include:

- Online Surveys
- Web Analytics Tools
- Live Help Customer Support
- Online Help
- Disaster Recovery Planning

A detailed description of strategies utilized by the Texas.gov Program to communicate with Constituents is located in *Section 3.1 Communication Management*. A detailed description of how feedback gathered from these mechanisms is addressed is provided in **Section 3.1.4. Feedback Process**.

## **2.2.6. Business Coordination Governance**

Business coordination is required among Texas.gov Program stakeholders during the regular operation of the Texas.gov Program . Successful communication and collaboration across these stakeholder groups is essential to the success of the Texas.gov Program .

Coordination with stakeholder groups can be specific to an individual project. Project plans may include specific communication, marketing, and training plans that detail the relevant stakeholder group(s), the type and frequency of communication, the method for obtaining feedback, and the

process for reporting results. Project plans are specific to each project performed under the Texas.gov Program .

Figure 2 illustrates the planned coordination points between DIR and the Vendor based on the business relationships that are defined in the PPM.

Figure 2. **DIR and Vendor Committees and Meetings**

Coordination Point	Description	Participation
<b>Executive Steering Committee (ESC)</b>	Provides executive management and strategic oversight for the Master Agreement and ensures the Texas.gov objectives are achieved	DIR, Vendor, Customer Advisory Committee Chair, Texas.gov Constituent Representative
<b>Project Review Board (PRB)</b>	Establishes and follows a project request intake (Business Case) process for reviewing and prioritizing information technology requests generated internally or externally.	DIR, Vendor, Customer Advisory Committee Chair
<b>Texas.gov Vendor Bi-Weekly Status Meeting</b>	All open Texas.gov projects are reported on including agenda, action items, issues log, continuous improvement and minutes.	DIR, Vendor
<b>Annual Finance/Budget Meeting</b>	Discuss finances and budgets.	DIR, Vendor
<b>Marketing Plan Results Meeting</b>	Review results of each fiscal year's marketing plan.	DIR, Vendor
<b>Advertising Campaign Results Meeting</b>	Review results of and strategy for paid advertising campaigns.	DIR, Vendor
<b>Security Meetings</b>	Discuss general security issues, as needed.	DIR, Vendor

Unplanned meetings and coordination points occur ad-hoc throughout the relationship and across multiple communication channels including: 1) in-person, 2) phone/conference call, and/or 3) email,.

Figure 3 illustrates the planned coordination points between DIR, the Vendor, and other Texas.gov stakeholders.

Figure 3. **Customer, DIR, and Vendor Committees and Meetings**

Coordination Point	Description	Participation
<b>Customer Advisory Council</b>	Assists DIR in establishing development priorities from a Statewide perspective and provides recommendations directly to DIR.	DIR, Vendor and participating Customers
<b>Occupational Licensing Steering Committee (OLSC)</b>	Assists DIR in establishing development priorities from a statewide perspective and provides recommendations directly to DIR.	DIR, Vendor and statutorily defined Customers
<b>TPE Users Group</b>	Provides a forum for users to communicate TPE related issues and for Texas.gov to announce upcoming plans for payment engine. Vendor will explore the benefits of using blogs and wikis in the future.	DIR, Vendor and Customers
<b>TPE Customer/Agency-Specific Conference Call</b>	Addresses specific issues as needed; examples include the Texas Parks and Wildlife (TPWD) and Comptroller of Public Accounts (CPA) calls.	DIR, Vendor and Customers
<b>TPE Development Workshop</b>	Monthly User forum for TPE developers providing a vehicle for sharing, questions and answers.	Vendor, Agency IT staff
<b>CPA USAS review</b>	Discuss payment/processor related issues, road map and enhancements and USAS items; communicate USAS changes and extreme peak periods.	Vendor, CPA and DIR

## 3. Non-Technical Operations

This section of the G-1 describes the non-technical operations and activities of the Texas.gov Program . Each section describes how the activity is managed to meet the goals and requirements of the Texas.gov Program as described in the Master Agreement.

### 3.1. **Communication Management**

The purpose of Communication Management is to establish the structure, framework, policies, procedures, and feedback systems for Texas.gov Program communications between the Vendor and the program's two primary stakeholders: Customers and Constituents. Program communication is closely integrated with the organizational structure, governance model, and vision for the Texas.gov Program and retains DIR oversight.

#### 3.1.1. **Communication Responsibilities**

The Vendor, with oversight from DIR, is responsible for communications related to the following Texas.gov Program activities:

- **Operations** including incidents, maintenance windows, and new releases. Specific information related to these communication activities is documented in *Appendix A - Customer Communication Plan*.
- **Marketing**. Reference annual calendar year *Texas.gov Marketing Plan* for additional information about planned Marketing activities.
- **Customer Service including Service Desk and 24x7 support**
- **Constituent Service** including Help Desk and Live Chat. Specific information related to these communication activities is document in *Section 4.7 Help Desk*.
- **Projects**. Communication planning for select, approved Business Case projects may occur. In these instances, a tailored communication plan will be created and the Vendor will work in collaboration with DIR and the Customer to assess, develop, and execute the appropriate communication activities for each project.

The Vendor will work in concert with the appropriate governance structure, as defined in the PPM, to ensure that the Texas.gov Program communication policy and procedures are grounded in the governance requirements, communication types, and audiences. Each communication item will have a clearly defined purpose, scope, key message, frequency, sender, recipient, and technology, when applicable.

Figures 4 and 5 contain RACI diagrams illustrating the communication relationships between the various Vendor teams, Customers and Constituents. DIR, Customers, and other stakeholders may have contributing roles in these communication efforts.

Figure 4. Customer Communication Matrix

	Texas.gov Organization									
Customer Communication	Key Personnel	Business Dev & Outreach Team	Development Team	Product Management Team	Marketing Team	Service Desk Team	Finance & Accounting Team	Technical Services Team	Program Management Team	Security Team
Reporting	A	R	R	R	R	R	R	R	R	R
Scheduled Meetings	A	C	C	C	C	C	C	C	C	C
Business Dev & Outreach	A	R	C	R	R	C		C	C	
Marketing	A	C		C	R				C	
End User Training	A	I	R	R	C				R	
Governance	A	R	I	I	I	I	R	R	R	R
Customer Service	A	I	I	I	I	R	I	I	I	I
User Groups	A	C	I	R	R			C	R	
Texas.gov/Solutions	A	C	R	R	R				I	
Surveys	A	C			R				C	
PCI Certification	A	C			C				I	R
Project Specific Communication	A	I	I		C				R	
Incidents	A	I	I	I	I	R	I	R	C	C
Maintenance Window & Release Notifications	A	I	I	I	I		I	R	C	C

\*Key Personnel are defined Section 3.5 Vendor Organization.

R – Responsible | A – Accountable | C – Consulted | I - Informed

Figure 5. **Constituent Communication Matrix**

	Texas.gov Organization									
Customer Communication	Key Personnel	Business Dev & Outreach Team	Development Team	Product Management Team	Marketing Team	Service Desk Team	Finance & Accounting Team	Technical Services Team	Program Management Team	Security Team
Website Info & Messaging	A	C	C	C	R				I	
Press Releases	A	C	I	I	R				I	I
Media Events & Outreach	A	R	I	I	R				I	I
Public Service Announcements	A	I			R					
End User Service Demos	A			C	R				C	
Social Media	A		C		R				I	
In-person/Live Events	A	R			R				C	
Email	A	C		C	R				I	
Search Engine Optimization	A		R		R					
Technical Support	A	I	I	I	I	R	I	R	I	I
Forms Redesign/Postcards	A	C			R				I	
Marketing Tactics	A	R			R	I			I	
Online Surveys	A	I	C	I	R				I	

\*Key Personnel are defined Section 3.5 Vendor Organization.

R – Responsible | A – Accountable | C – Consulted | I - Informed

### 3.1.2. Customer Communication Inventory

Establishing an inventory of required, regular Texas.gov Program communication is central to a comprehensive communication strategy. This inventory establishes and guides the procedures and protocols that will facilitate the coordination of daily operational activities between the Vendor and Customers. Customer communication is any interaction or touch point that occurs between Vendor and Texas.gov partners including DIR, State agencies, local governments, higher education, and other key stakeholders.

Figure 6 details specific Customer communications that may occur for the Texas.gov Program , a description of the communication types, the Vendor team(s) responsible for the communication, and a reference for additional information. While these communications will be executed by the Vendor, DIR, Customers, and other stakeholders may support these efforts. The methods of delivery for the various communication types will be based upon factors such as the audience and the communication type.

Figure 6. **Customer Communication Inventory**

Communication Type	Description	Organization(s) Responsible	Reference (if applicable)
<b>Customer Service</b>	<ul style="list-style-type: none"> <li>Provide support for Customers via Help Desk and Service Desk (Level 1)</li> </ul>	Service Desk	<i>Section 4.7 Help Desk</i>
<b>Business Development and Outreach</b>	<ul style="list-style-type: none"> <li>Proactive activities that promote the Texas.gov Program , encourage participation, provide education, and drive usage</li> <li>Opportunities for cross-agency collaboration</li> </ul>	Key Personnel Business Development/Strategic Account Managers Marketing Product Management	N/A
<b>Governance</b>	<ul style="list-style-type: none"> <li>Provides hierarchical alignment and definition of resources, authority, responsibilities, timeliness, and communication with efficient, transparent processes</li> </ul>	Key Personnel Business Development/Strategic Account Managers Finance & Accounting Program Management Security	<i>Attachment H-1 Policies and Procedures Manual</i>
<b>Texas.gov/Solutions</b>	<ul style="list-style-type: none"> <li>Customer-focused website that provides Customers with access to information about the Texas.gov Program</li> </ul>	Development Marketing Business Development/Strategic Account Managers	N/A
<b>Marketing</b>	<ul style="list-style-type: none"> <li>Marketing objectives for Texas.gov website and applications including web analytics, UI/UX, materials, swag, press releases, conferences &amp; events, etc.</li> </ul>	Marketing Business Development/Outreach Product Management	<i>Texas.gov Marketing Plan</i>
<b>Reporting</b>	<ul style="list-style-type: none"> <li>Routine and ad hoc reporting required in a form and format by DIR</li> <li>Reports include IT Portfolio, Monthly Progress &amp;</li> </ul>	Key Personnel Business Development/Outreach Development	<i>Attachment H-1 Policies and Procedures Manual</i> <i>Master Agreement;</i> <i>Exhibit F: Reporting</i>

Communication Type	Description	Organization(s) Responsible	Reference (if applicable)
	Performance Review, Financial, Statutory, Ad Hoc, and Security	Product Management Marketing Finance & Accounting Technical Services Program Management Security	
<b>Surveys</b>	<ul style="list-style-type: none"> <li>Customer-based surveys</li> </ul>	Business Development/Strategic Account Managers Marketing	N/A
<b>Training</b>	<ul style="list-style-type: none"> <li>Training for new online services, applications, products, and solutions</li> </ul>	Development Product Management Program Management	<i>Section 3.2 Training Management</i>
<b>User Groups</b>	<ul style="list-style-type: none"> <li>Forum for groups of common users (i.e. TPE, Occupational Licenses) to discuss issues, product roadmaps, etc.</li> </ul>	Product Management Program Management	N/A
<b>Payment Card Industry (PCI) Certification</b>	<ul style="list-style-type: none"> <li>Annual initiative to secure appropriate PCI Self-Assessment Questionnaire forms from Customers</li> </ul>	Security	N/A
<b>Project-specific Communication</b>	<ul style="list-style-type: none"> <li>Communication for select, approved Business Case projects.</li> </ul>	Program Management Marketing	N/A
<b>Incident Communication</b>	<ul style="list-style-type: none"> <li>Incidents that involve Impairments or Outages are communicated immediately to DIR and/or specific Customers.</li> </ul>	Technical Services Security	<i>Appendix A - Customer Communication Plan</i>
<b>Maintenance Window &amp; Release Notifications</b>	<ul style="list-style-type: none"> <li>Standard and non-standard maintenance window notifications are sent to all Customers via email, 72 hours in advance by the Technical Services team</li> </ul>	Technical Services	<i>Appendix A - Customer Communication Plan</i>

Note: This inventory identifies the regular communication touch points that are initiated by the Vendor. It does not account for non-regular communication that may occur on an ad hoc basis.

Texas.gov Program -wide communications may be required when specific projects and/or compliance initiatives impact multiple projects or all program Customers as a whole. In these instances, the communication type, content, method of delivery, etc. will be developed on an as-needed basis. The Vendor will solicit the necessary input and/or content from DIR and any pertinent Customers.

### 3.1.3. Constituent Communication Inventory

Establishing an inventory of required Texas.gov Program communication is central to a comprehensive communication strategy. This inventory establishes and guides the procedures and protocols that will facilitate the coordination of daily operational activities between the Vendor and Constituents. Constituent communication is any interaction or touch point that occurs with Texas.gov end users including citizens and businesses.

Figure 7 details specific constituent communications that may occur for the Texas.gov Program , a description of the communication types, the Vendor team(s) responsible for the communication, and a reference for additional information. While these communications will be executed by the Vendor, DIR, Customers, and other stakeholders may support these efforts. The methods of delivery for the various communication types will be based upon factors such as the audience and the communication type.

Figure 7. **Constituent Communication Inventory**

Communication Type	Description	Organization(s) Responsible	Reference (if applicable)
<b>Email</b>	<ul style="list-style-type: none"> <li>Opt-in messages for online services that are time sensitive and require action</li> </ul>	Marketing Business Development/Strategic Account Managers	<i>Texas.gov Marketing Plan</i>
<b>End User Demos</b>	<ul style="list-style-type: none"> <li>Video-based click-through demonstrations of Texas.gov-hosted online services</li> <li>Delivered online via Texas.gov YouTube Channel</li> </ul>	Marketing	<i>Section 3.2 Training Management</i>
<b>Form Redesign / Postcards</b>	<ul style="list-style-type: none"> <li>Streamline forms with strong Internet calls to action</li> <li>Leverage existing communication</li> </ul>	Marketing	<i>Texas.gov Marketing Plan</i>
<b>Customer Service</b>	<ul style="list-style-type: none"> <li>Customer service &amp; support for end users via Help Desk, Live Chat, Email, etc.</li> </ul>	Service Desk	<i>Section 4.7 Help Desk</i>
<b>In Person / Live Events</b>	<ul style="list-style-type: none"> <li>Texas.gov branded handouts at high-traffic locations across the State</li> </ul>	Marketing Business Development/Strategic Account Managers	<i>Texas.gov Marketing Plan</i>

Communication Type	Description	Organization(s) Responsible	Reference (if applicable)
<b>Marketing</b>	<ul style="list-style-type: none"> <li>Tactics including advertising, collateral, conferences and events, media, etc.</li> </ul>	Marketing Business Development/Strategic Account Managers	<i>Texas.gov Marketing Plan</i>
<b>Media Events &amp; Outreach</b>	<ul style="list-style-type: none"> <li>Regular events to draw attention to Texas.gov</li> <li>Stories, byline articles, op-eds</li> </ul>	Marketing	<i>Texas.gov Marketing Plan</i>
<b>Online Surveys</b>	<ul style="list-style-type: none"> <li>End users can opt-in to complete surveys about the Texas.gov website and specific applications</li> </ul>	Marketing	<i>Texas.gov Marketing Plan</i>
<b>Press Releases</b>	<ul style="list-style-type: none"> <li>Leverage media relationships</li> <li>Place stories that highlight Texas.gov</li> <li>Search-engine friendly content to maximize search placements</li> </ul>	Marketing	<i>Texas.gov Marketing Plan</i>
<b>Public Service Announcements</b>	<ul style="list-style-type: none"> <li>Customized program for earned broadcast media exposure</li> </ul>	Marketing	<i>Texas.gov Marketing Plan</i>
<b>Search Engine Optimization (SEO)</b>	<ul style="list-style-type: none"> <li>Redesigned Texas.gov website and media announcements will leverage SEO to ensure prominent results</li> </ul>	Development Marketing	<i>Texas.gov Marketing Plan</i>
<b>Social Media</b>	<ul style="list-style-type: none"> <li>Opt-in solutions including Twitter, Facebook, YouTube, Instagram, etc.</li> </ul>	Marketing	<i>Texas.gov Marketing Plan</i>
<b>Website Messaging / Information</b>	<ul style="list-style-type: none"> <li>Dynamic content and manual updates</li> <li>Accurate, timely Constituent communication/information</li> </ul>	Marketing	<i>Texas.gov Marketing Plan</i>

Note: This inventory identifies all regular communication touch points that are initiated by the Vendor. This does not account for Texas.gov communication that originates from constituents.

### 3.1.4. Feedback Process

The Vendor recognizes the value of collecting and assessing Customer and Constituent data and feedback on a regular basis to understand and evaluate user behavior, as well as receive comments, insights, and suggestions with respect to the Texas.gov Program, website, and online services. Gaining and acting on feedback from Customers and Constituents is critical to

maintaining relevant operations for the Texas.gov Program and implementing new features that will continue to drive adoption and usage.

The Vendor will use both offline and online feedback methods for the Texas.gov Program. These methods may depend on the audience and the objective, and the resulting data will be reviewed and analyzed in order to determine if an appropriate, actionable plan is necessary.

The following feedback methods are utilized during the course of operational activities between the Vendor, Customers, and Constituents.

### **Offline Feedback Methods**

- Third Party Help Desk
  - Categorical capture and resolution of Help Desk support calls from Constituents and Customers.
  - For more information, please reference *Section 4.7 Help Desk*.
- Texas.gov Service Desk
  - Document and coordinate resolutions to all Customer issues that escalate from Help Desk
  - Review and evaluate Help Desk tickets for trends related to application issues, change requests, defects, new service requests, etc.
  - For more information, please reference *Section 4.7 Help Desk*.
- Business Development/Strategic Account Management
  - Track qualified new service requests as opportunities through Customer Relationship Management (CRM) tool.
  - Incorporate into Opportunity Report for review and action in Portfolio Management Report.
- Focus Groups
  - Will conduct by request of the Customer Advisory Council, or Customers as part of project planning, with key audiences for direct, qualitative feedback about the Texas.gov website and/or specific online applications
- Governance Structure and Regular Reporting
  - The Texas.gov governance structure, including the Executive Steering Committee, ensures open lines of communication and feedback, informed decision making, and transparency.
  - The Vendor will work with DIR on an ongoing basis to maintain standardized reporting templates and dashboards to effectively communicate and solicit feedback on the progress of the Texas.gov Program.

## Online Feedback Methods

- Online Surveys
  - Customers can choose to complete customer satisfaction online surveys developed in collaboration with DIR to measure satisfaction with projects completed in partnership with the Texas.gov Program.
  - Constituents can choose to complete online surveys about the Texas.gov website and specific online services.
- Web Analytics
  - Provides informational and performance measurements for the Texas.gov website and its hosted online services, enabling the Vendor to monitor metrics and trends related to traffic, transactions, user behavior, and more.
  - DIR and Customers can acquire a Google Analytics account in order to have access to real-time reports and information about the Texas.gov website and hosted applications
- Live Chat Customer Support
  - Opportunity for end users to request a live, online chat facilitated by the Vendor's third party help desk service provider.
- Online Help Center (Texas.gov Help and Texas.gov FAQ)
  - Located on the Texas.gov website, the Help section includes Technical Support contact information and a link to Live Chat, and the FAQ area includes answers to popular questions.

## Feedback Reporting

The process for reporting feedback to DIR and Customers will depend on the method used to gather it. In the instances of offline feedback, the Vendor and DIR will meet as needed to review, analyze, and act on feedback findings if a Corrective Action Plan has been recommended and/or implemented. During these meetings, the Vendor will review the feedback, the action plan to address feedback, and measure progress from previous meetings. Online feedback is reported to DIR on a quarterly basis for the Portal, Application, and Live Chat surveys. Customer satisfaction reporting will also be reported monthly via the Performance and Progress Report. For more information, please reference PPM, *Reporting*.

### **3.2. Training Management**

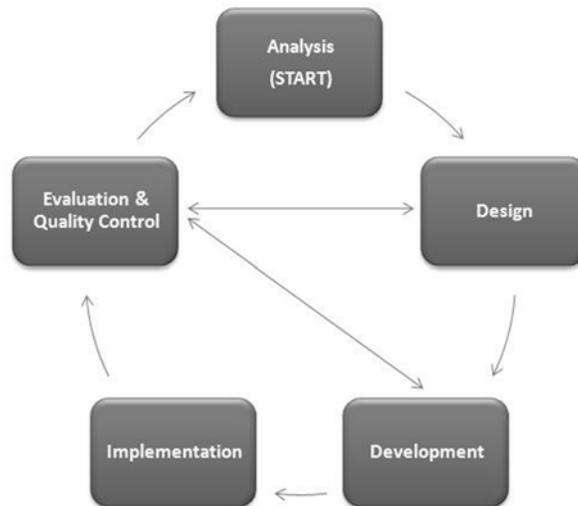
The purpose of Training Management is to establish the structure, policies, procedures, and methodology for Customer training. Efficient, effective Customer training will enable the Vendor to facilitate coordination of the day-to-day operational activities between DIR, Customers, other vendors, subcontractors, and stakeholders of the Texas.gov Program, and will ensure Customers receive the maximum benefit from their participation in the Texas.gov Program.

### 3.2.1. Training Approach

The Vendor's over-arching goals for training are intended to increase service adoption and satisfaction, improve performance, and provide a consistent, usable experience for Customers and/or Constituents. The Vendor will follow a phased approach to develop training program for Texas.gov Program initiatives requiring training, and include key stakeholders and subject matter experts in the training development phases.

The Vendor will employ the ADDIE instructional design approach which consists of the following phases: **A**nalysis, **D**esign, **D**evelopment, **I**mplementation, and **E**valuation (see Figure 8). This approach will be tailored to the complexity of each initiative.

Figure 8. **ADDIE Instructional Design Approach**



#### **Analysis**

The analysis phase identifies who must be trained, what must be trained, and when/where the training will occur. The product of this phase is the foundation for all subsequent development activities for the course/training program.

#### **Design**

During the design phase, the Vendor's designated trainer(s) for the project requiring training will combine their understanding of the target audience with their system knowledge to design the training program. This process is driven by the products of the analysis phase and ends in a model or blueprint of the training program.

#### **Development**

During the development phase, the Vendor's designated trainer(s) apply the design principles to create the course/training program deliverables. This phase builds on the learning objectives that were produced in the design phase. The end result is the completed instructional courseware.

## Implementation

Deploying the course to the appropriate audience and ensuring accessibility are essential to its adoption and use. The learners must be scheduled and notified, and any pre-reading material must be available to learners ahead of time. The Vendor’s training staff may require training (train-the-trainer) to perform their roles in the learning process.

## Evaluation

Continual evaluation and quality control is performed during all phases of the instructional design process to measure the output produced at each checkpoint. The Vendor will evaluate feedback to measure a course’s effectiveness and identify opportunities for improvement of future training courses.

The Vendor will utilize project-specific training plans to describe the overall approach and strategy for training including identifying audience needs, optimal delivery methods, curricula, content development, deployment, training site, and knowledge transfer activities. As necessary, the Vendor will subcontract with a qualified HUB vendor to augment training capabilities.

### 3.2.2. Training Delivery

The Vendor will design and develop appropriate materials that may utilize a variety of delivery methods, appropriate to course content and audience, as listed in Figure 9 below.

Figure 9. Training Delivery Methods

Training Delivery Methods			
eLearning solutions	On-demand, self-paced training	Instructor-led training	Reference Aids
FAQs	Webinars or Seminars	Train-the-Trainer	Demonstrations
Online Help	Blended Models		

### 3.2.3. Training Projects

Upon Business Case or Statement of Work approval, projects may include a training plan led by a seasoned instructor provided by the Vendor or Vendor’s subcontractor.

## Project-Specific Training

The Vendor will develop a project-specific training plan for each approved Business Case, Statement of Work or Corrective Action Plan (CAP), if training is determined to be required. Each project-specific training plan will define the strategy to be used to train a specific audience(s) as determined by the individual needs and requirements of the project.

### 3.2.4. Existing Training Inventory

The Vendor has established an inventory of regular, ongoing training activities in Figure 10.

Figure 10. Existing Texas.gov Program Training Inventory

Training Delivery Method	Description	Audience	Organization Responsible
<b>Texas.gov Hosted Application/Service User Guides</b>	<ul style="list-style-type: none"> <li>Document-based user guides with start-to-finish instructions to complete a transaction are developed for Texas.gov hosted applications and services</li> </ul>	Help Desk Support Customer personnel	Program Management
<b>Application/Service FAQs</b>	<ul style="list-style-type: none"> <li>Customer-generated content provided on Texas.gov online application or hosted on Customer website and linked to FAQ page on Texas.gov application.</li> </ul>	Constituents	Customer Agency
<b>Texas.gov User Guide</b>	<ul style="list-style-type: none"> <li>Includes overview and information about Texas.gov Program processes &amp; procedures such as governance, change management, business case process, advisory groups, etc.</li> </ul>	Customers	Business Development Marketing
<b>TPE® Onboarding Guide</b>	<ul style="list-style-type: none"> <li>Document providing Customers with the information and forms necessary to accept payments via TPE</li> </ul>	Customers	Product Management
<b>TPE® Instructor-led Training (via classroom or webinar)</b>	<ul style="list-style-type: none"> <li>Customer-focused training for Texas.gov services TPE®</li> </ul>	Customers (e.g. TPE User Group)	Product Management

## 3.3. Program Quality Management

The Texas.gov Program Quality plan provides an inclusive framework of how program quality is defined, envisioned, measured, and managed.

### 3.3.1. Program Quality Objectives

Program quality objectives are a core set of quality management principles which provide a vision for the overall success and value of the program. Program quality is created from the combination of quality services, processes, personnel, and outcomes. The individual elements of program quality support one another, and when combined, create overarching program quality.

The framework, as set forth by the ISO 9000 Quality Management Principles, serves as a guide for considering program quality. The eight quality management principles are:

- Customer focus
- Leadership
- Involvement of people
- Process approach
- System approach to management
- Continual Improvement
- Factual approach to decision making
- Mutually beneficial supplier relationships

The quality objectives reflect the ISO Quality Management Principles within the context of the Texas.gov Program and an inclusive approach to quality. Quality objectives are utilized to inform program strategy and guide decision-making. Program quality objectives include:

- **Customer Focus:** The program maintains strong ties and relationships with its Customers to ensure it is providing quality service and services. Customer feedback is solicited, received, and considered in support of continual improvement and growth.
- **Constituent Focus:** The program supports and aids our Customers to accomplish their missions to improve the lives of Texas citizens. The program leadership retain focus on serving constituents by meeting the needs of end users, and evaluating success through direct and indirect measurements.
- **Governance and Oversight:** The program maintains governance procedures including reporting, meetings, and deliverables to allow DIR appropriate influence, oversight, visibility, and communication to support the program and perform their partner stakeholder role.
- **Leadership:** The program receives feedback, support, and guidance from DIR and alignment of Vendor and DIR leadership remains strong at all times.
- **Personnel:** Program quality relies on competent and professional staff who provide value to the Texas.gov Program. Vendor personnel quality is promoted by the use of best practices in hiring, retention, and human resources, for example:
  - Training, continued education, and career development opportunities,
  - Annual performance evaluation,
  - Program culture, volunteerism, wellness, and team-building events, and
  - DIR input into the replacement of Key Personnel per the PPM.
- **Process and Project Quality:** Quality processes and successful projects are important. Individual projects should adhere to DIR, Vendor, industry, and contractual standards to

insure overall program quality; leveraging relevant components of the Project Management Body of Knowledge, the Agile development framework, the Texas Project Delivery Framework, Information Technology Infrastructure Library (ITIL), and ISO standards.

- **Application Quality:** The program provides the state of Texas with access to high quality applications. Applications meet the needs of the Customer, provide a benefit to constituents, reflect current technology, and meet requirements for performance.
- **Flexibility:** The program is adaptable to technological, statutory, and changing Customer needs to ensure that Texans are well-served.
- **Continual improvement:** The program must always be adapting and growing to provide applications, support, and service to Customers to further their strategic missions. The program strives to improve through evolving processes, technology, training, and outcome-based measures. Continual improvement is supported through formal and informal mechanisms.
- **Growth:** The program must attract new Customers and grow its service offerings to fulfill its duty to the state. Growth insures it is providing new and increased value to agencies and constituents.
- **Financial strength:** The program must maintain financial health, statutory compliance and transparency to the state. The financial strength of the program is supported by the annual independent audit and budget report, and monthly financial reporting.
- **Security:** Vendor implements security policies, processes, and standards that appropriately balance functionality and usability with privacy and security. Program security is measured through independent auditing and regular reporting.

### 3.3.2. Quality Measurement through Performance Criteria

*Exhibit D – Performance Criteria* of the Texas.gov Master Agreement forms the basis of program performance evaluation. The performance criteria reflect the Vendor’s responsibilities under the Master Agreement and quantitative program success metrics.

DIR measures quality in the following areas:

- Implementation
- Management Plans
- Portal and Application Performance
- Portfolio Management
- Reports
- Security and Privacy
- Help Desk

- Customer Satisfaction

Additionally, *Exhibit F – Reporting* of the Texas.gov Master Agreement offers DIR a mechanism to measure performance against these criteria. The Monthly Progress and Performance Report focuses on program status indicators not included in the project specific IT Portfolio Reports. Governance structures, roles, and policies in the PPM allow quality to be assessed, analyzed, and improved.

Performance is ultimately reported to state leadership through the biennial performance evaluation provided to the Legislative Budget Board (LBB). The report on the status, progress, benefits, and efficiency gains of the program provides total accountability of Texas.gov Program quality.

### 3.3.3. Audits

The audits scheduled for the Texas.gov Program are defined in Figure 11.

Figure 11. Texas.gov Program Audits

Type of Audit	Frequency	Sponsor
Statement of Auditing Standards (SAS)70	Annual	Texas.gov/Vendor
Payment Card Industry (PCI)	Annual	NIC, Inc. and Texas.gov/Vendor
International Organization for Standardization (ISO/IEC) 27001 and 27002	Every two years	NIC, Inc.
Sarbanes-Oxley	Quarterly	NIC, Inc.

Upon request, the Vendor will supply DIR with copies of quality assurance audit reports.

### 3.3.4. Program Quality Management Process

Texas.gov relies on program governance structures and artifacts, including policies and procedures followed at the project, program, and portfolio levels to promote quality. Deliverables such as the management plans under Exhibit G, the PPM and the G-1 define processes and procedures which are improved through an iterative annual process.

The purpose behind these activities is to promote quality through individual business practices, and when combined, promote overall program quality. Program quality management follows a similar approach to quality management at the individual project level. Program management incorporates common standards such as Texas Project Delivery Framework, Project Management Body of Knowledge (PMBOK), Information Technology Infrastructure Library (ITIL),

ISO 9000 quality management, and ISO 21500 project standards for program and project management.

### Quality Management Cycle Overview

The Quality Management process illustrated in Figure 12 follows a four step cycle: quality planning, quality assurance, quality control, and quality improvement.

Figure 12. **Quality Management Cycle**



### Stages of Quality

Texas.gov Program quality is achieved through four primary paths that mirror the four step quality cycle process, as illustrated in Figure 13.

Figure 13. Quality Stages

Stage	Contributors	Key Activities
<b>Stage 1: Quality Planning through Governance</b>	<ul style="list-style-type: none"> <li>• DIR Leadership</li> <li>• Vendor Leadership</li> <li>• Governance Committees</li> </ul>	<ul style="list-style-type: none"> <li>• Establish program and project objectives, criteria, and standards</li> <li>• Develop processes and procedures to support overall quality</li> <li>• Define quality measurement techniques</li> <li>• Identify the types of quality measurement techniques to be undertaken</li> </ul>
<b>Stage 2: Quality Assurance through Process Adherence</b>	<ul style="list-style-type: none"> <li>• Project Review Board (PRB)</li> <li>• Customer Advisory Council (CAC)</li> <li>• TPE User Group (TUG)</li> <li>• DIR Board</li> <li>• Vendor PPMO</li> <li>• DIR Program Staff</li> </ul>	<ul style="list-style-type: none"> <li>• Perform project reviews and portfolio prioritization</li> <li>• Adhere to governance procedures for decision gates and approvals</li> <li>• Follow defined processes and procedures during implementation, execution and release of projects</li> </ul>
<b>Stage 3: Quality Control through Production</b>	<ul style="list-style-type: none"> <li>• DIR Contract Management</li> <li>• Vendor Business Teams</li> <li>• Vendor Technical Teams</li> <li>• Vendor Security Team</li> <li>• Vendor Change Control Board</li> </ul>	<ul style="list-style-type: none"> <li>• Measure deliverable and process quality during business activities</li> <li>• Take action to enhance the level of deliverable and process quality</li> </ul>
<b>Stage 4: Quality Improvement through Change</b>	<ul style="list-style-type: none"> <li>• Vendor Contracts Team</li> <li>• Vendor PPMO</li> <li>• Vendor Technical Teams</li> </ul>	<ul style="list-style-type: none"> <li>• Perform lessons learned reviews and learning sessions after projects</li> <li>• Update processes and procedures based on performance assessment</li> <li>• Provide reporting to appropriate governance bodies and receive feedback</li> </ul>

### Stage 1: Quality Planning through Governance

Governance is a central element to the success of the Texas.gov Program. As such, it is expected that the Texas.gov governance entities will engage in project and program risk review and management as needed. The PPM defines the Texas.gov governance entities and their function, authority and key responsibilities. In addition, the PPM describes a Texas.gov Program compliance policy to ensure the long-term success of the program by appropriately managing quality.

### Stage 2: Quality Assurance through Process Adherence

Deliverables, such as the management plans under Exhibit G and the PPM, create strong processes and procedures which are improved through iterative, annual reviews and updates.

The purpose behind these activities is to promote quality through individual business practices to promote overall program quality.

The Texas.gov management plans define and document the processes and methodologies to be followed for the Texas.gov Program. To support quality management, program and project compliance with the documented processes is reviewed based on the requirements of the Texas.gov Master Agreement.

To inform new Vendor resources and to new support adherence to the management plans, all team members are required to complete training on the contents of each management plan.

### **Stage 3: Quality Control through Production**

Program quality management follows a similar approach to quality management at the individual project level. Program management incorporates common standards such as Texas Project Delivery Framework, Project Management Body of Knowledge (PMBOK), Information Technology Infrastructure Library (ITIL), ISO 9000 quality management, and ISO 21500 project standards for program and project management.

For information on project quality management and quality assurance, see *Section 4.3 Project Quality Management*.

### **Stage 4: Quality Improvement through Change**

As projects undergo reviews and feed the results back into the project, results from quality management at the project level are used to improve project quality for both current projects and future projects. Program managers and project managers use the results of quality reviews to revise processes and procedures and provide continual improvement. These results are made available to the Texas.gov Program management team. Based on these aggregated results, the appropriate governance entities have insight into and can take steps to control the overall quality of the Texas.gov Program. Tracking of continual improvement of these program areas is delivered in regular meetings and reviews and in reports required by the Master Agreement and described in the PPM.

#### **3.3.5. Obtain and Consolidate DIR and Customer Input into Quality Management**

DIR and Customer feedback flow into program, project, and quality management processes. Tools to record this feedback include meeting minutes, action items and survey results. Some project-level feedback may be appropriate to apply at the program level. An example of a functioning mechanism for DIR feedback would be the bi-weekly program review where feedback can be received, documented, and actioned. Similar reviews occur with Customers. Actions related DIR and Customer input may include:

- Process updates
- Requests for change
- Plan updates

Such updates and change requests complete the feedback loop and iteratively allow for continuous quality improvement.

### **3.4. Portfolio Management**

The fundamental objective of Portfolio Management is to effectively manage the portfolio of projects and services provided by the Texas.gov Program to provide maximum business value to our partners while realizing benefits from our investments. Portfolio management provides the strategy and processes used to evaluate Business Cases and select projects that complement and enhance the Texas.gov Program.

The following provides an overview of the processes, tools, and governance required to manage enterprise-wide projects for Texas.gov:

- Evaluation and Approval
- Initial Concept
- Assessment
- Maintenance and Surveillance
- IT Portfolio Management Tools
- Reporting and Controls

Tools used for portfolio management enable the Vendor to maintain project information and aid in selecting the optimal project portfolio, given value objectives, resources, and risk constraints. The portfolio management repository provides key stakeholders with visibility into the portfolio of projects facilitating strategic alignment with the State.

More information about portfolio recommendations, decisions, and reporting responsibilities as managed by group and individual roles is provided in *Section 4.1.2 Governance Model* of the PPM.

#### **3.4.1. Evaluation and Approval**

The Vendor portfolio management methodology allows for continuous alignment of Business Cases and projects with the strategic objectives of the State, given financial and resource constraints and risk tolerances. The Change Management and Business Case processes are the means to build a prioritized and strategically aligned portfolio.

At the operational level, the PRB has primary responsibility for evaluating and approving Business Cases and making recommendations to the Vendor's management. The Change Control Board (CCB) is responsible for assessing proposed changes that do not meet the threshold for a project. The CCB makes recommendations for these requests. Reports required for successful portfolio tracking and management are generated at the operational level.

#### **3.4.2. IT Portfolio Management Methodology**

There are five steps that describe the high-level process overview of the Texas.gov portfolio management methodology:

### **1) Initial Concept**

The Vendor and DIR set strategic goals and objectives for the Texas.gov portfolio which inform the Business Case selection process. New concepts for projects are drafted by originators for initial assessment, and DIR and the Vendor may collaborate on concept drafts.

Business concept originators can be anyone (internal and external to Vendor). Externally developed business concepts can be submitted to Vendor for assessment, review, and feedback prior to submission to the PRB/CCB, or can be developed independently of the Vendor and presented directly to the PRB for consideration.

#### **Output:**

Draft business concept documents created by the various originators and ready for assessment. The same information might be used to complete Section 1, Opportunity Assessment, of the standard Business Case template.

### **2) Assessment**

Business concept drafts are reviewed and assessed by the Vendor's business development team. Part of the assessment process is to define relevant groups of projects to which a common set of criteria can be applied for evaluation, selection, prioritization, and balancing. This allows the organization to balance its investment and its risks between all strategic categories and strategic goals.

The Vendor recommended framework identifies four types of projects:

- maintenance
- productivity
- growth
- innovation

This framework provides the flexibility to compare and prioritize different types of projects by allocating different risk and value criteria scoring based on the project's nature. Both project type and project size are considered when determining whether the request is governed by the PRB or the CCB charter. The CCB will review only those changes that fall beneath the threshold defined for review as a project by the PRB.

#### **Output:**

The output of this step is the application of these project groupings to the list of ongoing and proposed projects. When a project defies categorization, the appropriate governance entity, based on the thresholds established in the PPM will determine the category. That governance entity will then decide whether the proposed project remains on the list for further evaluation.

### **3) Refine Business Case**

The purpose of this step is to refine and filter the Business Case by developing and utilizing appropriate data to fully assess all aspects of a Business Case, applying set standards and processes as defined in the PPM.

Both qualitative and quantitative information are gathered, summarized, and assessed. The data collection process is iterative, until the information collected reaches the required level of accuracy. The Business Case template and associated tools are used as the repository for proposed project information. The Vendor creates and manages a list of ongoing, proposed, and new projects that are entered and maintained in the IT Portfolio Report.

**Output:**

The outputs of this process consist of a refined Business Case for each proposed project that meets the threshold for Business Case development. A list of Business Cases, including the scoring matrices and any necessary information to evaluate each proposed project, is then provided to the PRB.

#### **4) Review and Approve Business Cases**

Each refined Business Case is then submitted to the PRB for evaluation. This evaluation determines the value of each proposed project and is part of the information used to determine project disposition.

Business case recommendations can apply to a project, a category, or the entire portfolio and may include project prioritization, segmentation, acceptance, or rejection of the proposal. The PRB approves projects based on their overall strategic value to the Texas.gov Program.

**Output:**

The output of this process is a list of categorized, evaluated, and approved projects chosen for their fit within the Texas.gov portfolio. This list is maintained by the Vendor and delivered as the IT Portfolio Report.

Business Case templates are stored in SharePoint and can be requested through the Vendor Contracts Manager.

PRB-approved Business Cases that introduce a new fee or contain an End of Term (EOT) Value must receive DIR Board Approval as the final step. The approved Business Case is first submitted to the DIR Board Subcommittee for their questions and feedback. It is then submitted to the DIR Board for their approval.

Further explanation of the DIR Board's role is provided in the H-1 Policies and Procedures Manual.

#### **5) Approved Business Case Prioritization**

The purpose of this process is to create a prioritized list of approved projects across all categories. The process ranks initiatives based on multiple criteria including type of strategic category (e.g., maintenance, productivity, growth, innovation), investment time frame (e.g., short, medium, and long-term), risk versus return profile, and organizational focus (e.g., Customer, supplier, and internal) according to established criteria.

This step also takes into account components required to balance the portfolio. The priority of initiatives is determined through the Business Case process, which also takes Customer needs, schedules, and other factors into consideration.

**Output:**

Initiatives are prioritized and filtered regularly by the Vendor Director Team as new resources become available and recommendations are then validated by leadership. Business Case scoring and feedback from Partners and Customers (i.e., requested implementation date) are reviewed at this time in consideration with available resources.

**3.4.3. Business Case Process**

The Business Case Process applies to both potential new Texas.gov projects and changes to existing Texas.gov projects, services, or applications that meet specific criteria listed in the PPM.

**3.4.4. Maintenance and Surveillance**

Overall program monitoring will occur, with the results available through regular reporting. The monthly status report and quarterly customer satisfaction reports include information that indicates the health of the overall portfolio and its individual components.

**3.4.5. IT Portfolio Management Tools**

Once a business case is approved and becomes a project, a project is created within the Vendor’s portfolio management tool suite. The project information includes known requirements and provides the mechanisms for resource allocation and scheduling.

The tool suite provides visibility into all work scheduled and a near real-time view of progress. The support ticketing system enables change, release, and deployment management processes and methodologies, as well as the tracking of related activities. Figure 14 lists information maintained in these tools.

Figure 14. Activity Tracking Tools, Types, and References

Activity	Tool	Type	References
<b>Personnel Assignments</b>	Portfolio Management tool suite	Resource utilization and allocation	<b>Attachment G-10 Technology Management Plan – Section 10 Program Activity Tools</b>
<b>Change Request</b>	Support Ticketing System and Portfolio Management Tool Suite	Modification Service Request (SR)	<b>Attachment H-1 Policies and Procedures Manual – Section 8.2 Roles and Responsibilities</b>

Activity	Tool	Type	References
<b>Release &amp; Deployment Management</b>	Support Ticketing System	Release	<b>Attachment H-1 Policies and Procedures Manual – Section 8.2 Roles and Responsibilities</b>
<b>Software Specifications Correction Request</b>	<b>Portfolio Management Tool Suite</b>	<b>Requirements Correction</b>	<b>Attachment G-10 Technology Management Plan – Section 10 Program Activity Tools</b>

### 3.4.6. Reporting and Controls

The primary reporting tool used for portfolio management is the IT Portfolio Report. Status reports are detailed in *Exhibit F, Reporting* and contain:

- Portfolio status
- Progress

Performance measures are detailed in *Exhibit D – Performance Criteria* and contain:

- Performance measures

## 3.5. Vendor Organization

The Vendor is acutely focused on achieving the mission and goals of the Texas.gov Program, and operates an organizational plan that delivers on both the short- and long-term vision of the Texas.gov Program.

### 3.5.1. Key Personnel

The Vendor selects key personnel with the experience, skill sets, and practical knowledge of the digital government industry in order to provide strong leadership and guidance for the Texas.gov Program.

The Vendor has assigned the following key personnel as senior, experienced resources to operate onsite in Austin, Texas:

- **Executive Director, Craig Shinn**, was the Executive Director equivalent for the award-winning Tennessee.gov enterprise portal prior to coming to Texas. Craig has more than 20 years of progressive experience in the IT industry.
- **Director of Portal Operations, Erin Hutchins**, was the Executive Director equivalent for the award-winning Maine.gov enterprise portal, and also held the Director of Portal Operations position for two other award-winning enterprise portals (Virginia.gov and Alabama.gov). Erin is responsible for the management of the Texas.gov Program transformation and governance processes.

- **Director of Technology, Pete Eichorn**, served as Director of Information Technology at The Home Depot where he was instrumental in driving their technology vision across various technologies, including e-commerce capabilities at homedepot.com. Pete has also served as a management consultant at Ernst & Young, focusing on information technology. Pete is responsible for leading the technology roadmap, innovation, and strategy for the Texas.gov Program.
- **Chief Information Security Officer, Tim Zeimann** is a Certified Information Systems Security Professional (CISSP). Tim is responsible for the compliance, security, privacy, and risk management for the Texas.gov Program.

Due to the critical nature of leadership in the Texas.gov Program, the Vendor works closely with DIR to select and manage Vendor Key Personnel. Specific information about the state's Management of Vendor Key Personnel can be found in the TexasOnline Master Agreement, *Exhibit B Terms and Conditions, Article 4 Contractor Personnel Management, and Attachment H-1 Policies and Procedures Manual, Section 4.2.3 Key Personnel and Subcontractor Replacement Process.*

### **3.5.2. Team Structure**

The Vendor coordinates quality personnel into customized teams that are dynamic both in structure and activity. This approach to team management promotes quality in production and maximizes benefit to the program.

Operation of the Texas.gov Program is managed by existing staff, but may be augmented through new-hires or contract staff, as required by the Business Cases for specific implementations. Vendor staffing may increase or decrease dependent on resource utilization, business opportunity, and/or fiscal fitness. Additional organization information is shared with DIR on a quarterly basis.

Figure 15. Team Structure

Director Role	Team Name and Core Activities
<b>Director of Development</b>	The <b>Development team</b> has developed more than 1,000 online services. Team members participate in all phases of the Software Development Lifecycle (SDLC), including requirements, design, development, peer code review, unit and system testing, and production support.
	The <b>User Experience team</b> is responsible for the design, layout, and usability of websites and applications. This team adheres to Grade A Browser Support to ensure applications are compatible with the latest Internet browsing technology and designs all new applications to be 100% mobile-optimized and 100% Section 508 accessibility compliant.
<b>Director of Project Portfolio Management</b>	The <b>Project Portfolio Management team</b> is comprised of project managers, requirements analysts, and change managers who follow established methodologies to plan projects, define solutions, and manage projects.
<b>Director of Technology</b>  <b>Director of Operations</b>	The <b>Enterprise Technology Services team</b> includes architects and Infrastructure staff that support the delivery and maintenance of new services and maintain Texas.gov uptime requirements. This team complies with Information Technology Infrastructure Library (ITIL), PCI, and Sarbanes-Oxley (SOX) standards.
	The <b>Architecture and Database team</b> is involved with all tiers of development, including user interface, application level, service layer, and back-end database.
<b>Director of Quality and Service</b>	The <b>Service Desk Team</b> provides 24/7/365 operations support for all applications, including incident management, service request fulfillment, problem management, customer communication, and oversight of a 3rd party help desk.
	The <b>Quality Assurance team</b> verifies that each application adheres to the requirements for functionality, design, accessibility, content, and industry and organization standards. This team performs functional, performance, regression, stress, and accessibility testing.
<b>Director of Market Development</b>	The <b>Marketing team</b> is responsible for a wide range of activities including advertising, public relations, marketing, social media, and communication initiatives. This team employs integrated marketing tactics to drive awareness and generate transactions for online applications.
	The <b>Business Development team</b> provides structure and process around the development of new business cases and builds strategic relationships with potential Customers. This team supports the creation and implementation of growth opportunities for the program.
<b>Director of Finance, Budget, and Business Operations</b>	The <b>Contracts team</b> maintains contract compliance, manages Customer and subcontractor agreements, and performs critical coordination activities to support program governance.

Director Role	Team Name and Core Activities
<b>CISO and Director of Security</b>	The <b>Security team</b> maintains the highest standards of local, state and federal mandates and security requirements, and diligently monitors security controls and emerging threats associated with e-commerce and safeguards the confidentiality, integrity, and availability of data.
	The <b>Finance and Accounting team</b> performs a full range of services ranging from invoicing to general ledger accounting to annual budgeting. Since inception of the TexasOnline/Texas.gov Program, all independent third party audit opinions have been “unqualified” – the best opinion possible.

### 3.5.3. Responsibilities

The Vendor believes that while an organization hierarchy is required for escalation and performance management functions, all personnel are responsible for the Texas.gov Program, including transformation efforts, consistency of core services, business development, partner relations, and customer service. The RACI chart illustrated in Figure 16 provides a basic snapshot of how the Vendor’s personnel interact across the Texas.gov Program.

Figure 16. Texas.gov Program RACI Diagram

Functional Areas	Vendor Executive Director	Vendor Director of Portal Operations	Vendor Project and Change Management Manager/DPS Direct	Vendor Director Project Portfolio Management Office	Vendor Project and Requirements Management Manager	Vendor Contract Mgmt/Alliances Team Lead	Vendor Director of Quality and Service	Vendor Quality Assurance Manager	Vendor Director Finance, Budget and Business Operations	Vendor Director of Technology	Vendor Development Manager	Vendor Chief Information Security Officer	Vendor Director of Market Development	Vendor Director of Development	Vendor Director of Technical Operations	Vendor UX/Creative Services Manager	Vendor Service Transition Manager	NIC Corporate Accounting	NIC Corporate IT	NIC Corporate Security	DIR	DCS	TEX-AN	
	R - Responsible	A - Accountable	C - Consulted	I - Informed	Vendor Role	DIR Role	Key Support Provider																	
Office and Staffing	I	A		I						R		C								R	I			
Service Management	I	A	R	I	R	R	I	R		R	R	R		R	R		R				R	C	R	R
Help Desk Management	I	A		I		R																I		
Incident Management	I	I	R	I	A		I	C		R	R			R	R		C		C		C	R	R	
Service Requests	I	A	R	I	R					I				R			C					C	R	R
Problem Management	I	I	R	I	A		I			R	R			R	R		C		C			C	R	R
Change Management (CCB)	I	A	C	I	C	R				R			I	R		R		C					R	R
Maintenance Periods	I	I	I	I	I	I	I			A		C		C	R	I	C		C			C	R	R
Configuration Management	I	I	C	R	C					A	R	R		R	R		I		C			C	R	I
Portfolio Management	I	A	R	R	R					R			I	R								C		
Risk Management	I	R	C	C	C	R	C	C	I	R	C	A		C	C	R	C					C	C	C
Business Continuity Management	I	R	R	I	R	R	I	I		R				R	A	R	I		R			C	R	R
Disaster Recovery	I	R	R	I	R	R	R			A	R	R		R	R	R	I		R			C	R	R
Security Management	I	I	R	I	R	R				R	R	A		R	R	R	I		C	C		C	C	C
Technology Management Plan	I	I	R	I	R	C				A	R	R		R	R	R			C			C	C	C
Evaluation and Testing		I	R	I	R	R		A		I	C	C	C	R		R	I					C	C	C
Service Catalog	I	I	R	A	R			I		R			I				I		I			C		
Delivery and Staging	I	I	R	I	R	R		C	I	A			C	R	C	R	I					C	C	C
Equipment and Software Maintenance		I	I	I	I	I		I	C						A		I		C			C	R	R
Software Support		I		I						R	C	I		R		A						I	R	
Asset Inventory and Management		I		R					R						A		I	R				I	I	
Program Management and Support	I	I	R	A	R	R	R										I					C		
Collaborative Applications Support		I		I						A		R			I		R					C	R	R
Operations Documentation	I	I	R	I	R					R	C	C		R			A					C	C	C
Training and Communications	I	I					R						A				C					C		
Quality Management		I	R	R	R	R		A		C				C	C		C					C		
Governance	R	R	R	R	R	R	I	I	R	R												A	C	I
DCS Coordination Processes	I	C	R	C	R	A			I	R	R	R		C	R		I					C	R	
TEX-AN Coordination Processes	I	C	R	C	R	A			I	R	C	R		C	R		I					C		R
Third-Party Vendor Management Processes	I	I		R		A	C	I		C		R	I	C	I		C					C		
Quality Assurance Process	I	I	R	I	R			A		I		I	C	R	I	I	I					C		
Business Case Approval Process	I	A	R	C	R	I	I	I	I	C		C	I	C	C		C					C	C	C
Architecture Review Process		I	I	I	I	I		I		A	R	C		C	C							C	C	C
Published Specifications	I	C	C	C	C	R	C	C	I	A	C	R	I	R	C	C	C					C	C	C
Customer Agreements	R	R		I			R		I	C		C	I		C		C					A	I	I
Financial and Account Management	R	R		C		C	C		A	C		C	I					R				C		

### **3.5.4. Human Resources**

The Vendor provides processes and procedures for staff planning, staff management, and organizational improvement.

#### **Organizational Management Tools**

The Vendor utilizes a number of tools in support of the ongoing management and improvement of the organization. These tools assist both employees and supervisors to manage expectations and have an awareness of operational requirements and wellness. The tools are also used to manage the hiring and release of personnel from the organization.

#### **Organizational Analysis Tools**

Critical to the success of the Texas.gov Program is the ability for the Vendor to have a clear understanding of resource requirements, needs, and availability. The Vendor uses a project and portfolio management tool to track resource availability and utilization and to manage capacity. As project tasks are associated with a particular resource, their “available” capacity is appropriately diminished.

Combining capacity management with the accounting tools, the Vendor conducts regular reviews of resource utilization and develops trending to ensure that proper analysis is completed before making decisions about hiring or releasing personnel.

### **3.5.5. On-boarding/Off-boarding**

The Vendor has developed an on-boarding/off-boarding process that enables the entire organization to be informed of the hiring of new employees, the on-boarding of new contractors, as well as the release of employees or contractors.

As part of the on-boarding process, all new employees are entered into the time-reporting tool as a resource. The Vendor registers an individual’s role, team, physical and automated security needs, contact information, and workspace assignments. On-boarding training is conducted to educate new staff about Texas.gov Program processes, tools, and applications. The lead or manager of each team is responsible for evaluating when on-boarding training is completed.

When employees or subcontractors complete their work on Texas.gov and leave the program, the Vendor tracks their security rights expiration and works with the appropriate team to re-allocate their computer hardware.

Additionally, an on-boarding/off-boarding report is developed weekly and distributed to key staff who have a direct role in the on-boarding/off-boarding process. As a result, Key Personnel and other responsible parties are made aware of resource management activities and can ensure that security, access, recruiting, space-planning and other activities are done in a timely and meaningful way. Information regarding personnel changes is provided to DIR on a quarterly basis.

### **3.5.6. Organizational Changes**

Organizational changes are inevitable and, in many cases, predictable based on recognized changes to the requirements of the Texas.gov Program. Alternatively, some changes are unexpected. In either case, it is critical that the Vendor respond in a timely and appropriate manner.

#### **Planning for Change**

In order to best ensure continuity of operations, the Vendor plans for organizational change on an ongoing basis. The Vendor uses resource utilization tracking and reporting to review the need for modifying the organization's operations. In some instances, this may require hiring additional staff, reducing staff, or shifting staff between divisions of the Vendor's operations.

The logical time for long-term planning for organizational modification is during the Vendor's budget cycle. The Vendor is required to complete an operational budget for each fiscal year. As part of that process, the Vendor completes a staffing review to assess resource utilization for positions across the organization. Those resources are compared against the services budgeted for the next fiscal year and an analysis of what the long term needs might be is completed.

#### **Recruiting**

Depending upon circumstances and skill-set requirements, the Vendor recruits for open positions which may include the following methods: internal hire, temp-to-hire, contract-to-hire, and inter-Vendor operations transfer.

All new hires are on-boarded by both the Vendor's corporate parent and the local team. The managers responsible for the direction of new hires are responsible for on-boarding staff to their specific position, operational responsibilities, contractual responsibilities and processes.

#### **Terminations**

Occasionally, the Vendor has need to terminate the employment of individuals within the Vendor's organization. The Vendor follows its off-boarding procedures to ensure compliance with the Vendor's security processes, and also proceeds with terminations in such a way as to cause minimal impact to Customers and Citizens.

#### **Notification of Change**

The Vendor provides a current organizational chart to DIR on a quarterly basis. Where the State has requested a modification to the organization, in accordance with *Exhibit B Terms and Conditions, Article 4 Contractor Personnel Management*, the specific processes outlined within the exhibit or the *Attachment H-1 Policies and Procedures Manual, Section 4.2.3 Key Personnel and Subcontractor Replacement Process* is followed.

### **3.5.7. Organizational Improvement**

The Vendor recognizes that in order to attain the goals of innovation and continuous improvement related to the Texas.gov Program, the focus must remain on the improvement of

our organization. With this in mind, the Vendor focuses on ongoing performance development, not just an annual review. The Vendor is also focused on maintaining a strong team environment with the understanding that a happy team works better together and stays focused on their goals.

### **Performance Development**

The Vendor believes that employees should receive ongoing professional development with a focus on satisfactory performance, identification and attainment of goals, and a focus on growth. As a result, the Vendor practices ongoing performance development efforts that include:

- A clear statement of the purpose for each job, the duties and responsibilities, with the understanding that it is critical for all team members to have cross-disciplinary experiences.
- A description of the performance standards that are expected for each job.
- A statement and description of goals with measurable outcomes.
- A continuous review of priority and time management.

The process for performance development includes:

- Supervisors hold interim discussions providing constructive feedback against stated goals, duties and standards.
- Supervisors maintain an ongoing record of performance through critical incident reports.
- Employee's peers, Customers, and subordinates can provide feedback on performance.
- Administration of improvement and mentoring plans for personnel not meeting expectations.

### **Annual Performance Evaluation**

The Vendor's corporate parent requires an annual performance evaluation. The feedback, measurement, and results of the performance development process guide the scoring of the annual review.

#### **3.5.8. Training**

The Vendor understands training is a critical element of personnel and organizational improvement. The Vendor revisits training on at least a semi-annual basis, collecting requests from personnel for training opportunities that will benefit the individual as well as the organization. Approved training requests are incorporated into the annual budget, with a contingency in the budget for opportunities not previously identified.

The Vendor's corporate parent also offers training, including new employee orientation, security, and anti-harassment. These courses help to educate, inform, and protect the Vendor's employees and interests. Compliance related courses are required on an annual basis and are provided to new employees when they join the organization. The Vendor's training-development methodology enables a variety of training delivery methods, appropriate to course content and audience including:

- E-learning solutions
- On-demand, self-paced training
- Webinar seminars
- Blended models

### Internal Training

The Vendor understands the importance of and need for internal training for Vendor staff. The Vendor requires all staff to complete a new employee orientation, security, and anti-harassment training.

Role-specific training is available through various channels via in-house and third-party providers. Figure 17 highlights a proposed training roadmap for Vendor staff.

Figure 17. Vendor Internal Training Roadmap

Team	Training
<b>All Team Members</b>	ITIL Awareness
	SDLC Methodology
	Annual Security Awareness
	Annual Anti-Harassment
	Texas.gov Management Plans
<b>Project Management Office</b>	Project, Program & Portfolio Management Training
	Agile Scrum Master Certification
	Agile Business Analyst Certification
	Agile Methodology Overview Training (Scrum, SAFe)
	Business Analysis
	ITIL Foundations
	SharePoint 2010
	SXSW Interactive
Conferences	
<b>Security Team</b>	IT Audit
	Web Application Security
	Cloud Computing

Team	Training
	Mobile Device Security
	Security Assessment and Auditing
	PCI DSS
	Intrusion Detection and Prevention
	File Integrity
	Security Incident/Event Management (SIEM)
<b>Marketing Team</b>	Innotech Marketing Conference
	SXSW Interactive Conference
	NIC Marketing Conference
<b>Development Team</b>	SharePoint 2010
	SOA Suite 11g BPEL
	Agile Scrum Master
	WordPress
	Mobile Web/App Development
	Data Science/Big Data
	Grails
	Business Intelligence
	mongoDB
	AngularJS
	Architect certification
<b>Technical Operations</b>	ITIL Methodology/Awareness
	ServiceNow ITIL Application Suite
	Cisco+F5 Networking

Team	Training
	VMWare
	Microsoft Security Essentials
	Oracle (e.g., Fusion, Goldengate/Streams)

### 3.5.9. Team Culture

The Vendor believes incorporating teambuilding efforts into ongoing organization planning are in the best interests of both the company and its employees. The Vendor’s emphasis on a team culture is focused on community service, healthy living, and celebrations.

The Vendor has a voluntary community service committee that offers suggestions and manages opportunities for community service. The Vendor’s employees collect donations for several causes including the local food bank, local animal shelter, and elderly support services. The Vendor also participates in Meals-on-Wheels, environmental clean-up, and other community services organizations.

The Vendor also has a strong interest in the physical well-being of our employees, and has a voluntary committee with a focus on team-based sporting activities. Vendor personnel are encouraged to participate in fund-raising races, softball and kickball teams among others. The Vendor’s corporate parent provides regular contests for physical fitness and healthy living.

Vendor believes that employees deserve recognition of their achievements. Vendor celebration activities include project launch celebrations, birthday celebrations, potluck team lunches, and seasonal celebrations.

Other personnel retention efforts are considered on an annual basis as part of the Vendor’s business planning process. Retention practices are developed in concert with all managers and have both a team-wide focus, as well as specialized strategies, based on the operational groups.

## 3.6. Subcontractor Management

The Texas.gov Program delivers many applications to a wide-range of Customers. This diversity requires the need to utilize Subcontractors for additional skills and services on an ongoing basis to various areas of operation within the Texas.gov Program. Subcontractor performance is managed consistently and regularly utilizing industry standard subcontract management practices. Subcontractor management practices are an intricate part of the overall assurance of quality for the Texas.gov Program.

### **3.6.1. Master Subcontract Agreements and Statements of Work**

Each Subcontractor is required to enter into a Master Subcontract Agreement which ensures, as appropriate, flow-downs from the Master Agreement. For each project performed by Subcontractor, a detailed Statement of Work is developed and agreed upon that defines the deliverables and services for the project. Key areas addressed within the Statement of Work include:

- **Scope of work** – defines the work with specific details, requirements, and specifications.
- **Deliverables** – describes the deliverables required and the timeline for completion.
- **Hours and timeline** – details the hours of work needed for completion. If the subcontractor requires additional hours, prior approval is required from the project manager.
- **Quality and acceptance criteria** – any technical or functional requirements are documented (e.g., projects that must meet Federal and State guidelines for accessibility).

### **3.6.2. Management of Subcontractors**

Subcontractors must provide weekly status reports to the Vendor's Texas.gov functional manager, as appropriate. The status report must contain key reporting metrics such as hours worked, tasks completed, deliverables/milestones met, issues and risks reported.

The Vendor provides key Constituent-facing services that may leverage subcontracted support. Due to the nature of their interactions with the end-user, these providers are considered key Subcontractors to the Vendor:

- Telephone/Chat/Email Support
- Field Services Support

Subcontractors providing key services are subject to all of the requirements, provisions, and compliance measures and compliance metrics that are detailed in specific project deliverables.

Reporting of Subcontractors must be made in accordance with *Exhibit T HUB Subcontracting Plan and Exhibit G, Reports*.

### **3.6.3. Integration with Subcontractors**

Changes to activities or services provided by Subcontractors may be subject to Business Case requirements. For the purpose of some projects, the Vendor may enlist the services of other Subcontractors. In those instances, the relationship will be governed by the Master Agreement and Subcontractor agreements in place for that project.

The Vendor's Subcontractor management is overseen by the Vendor Contracts Manager as well as Vendor Director of Finance, Budget, and Business Operations. The Vendor Contracts Manager and Contracts team are responsible for ensuring contracts are in accordance with the

TexasOnline 2.0 Master Agreement. The Vendor team members who work directly with Subcontractors have frequent informal interactions, which aids in coordination and collaboration.

Large subcontracting management efforts are managed by the following:

- Marketing – Marketing Manager
- Help Desk – Service Desk Manager
- Field Services Support – Service Desk Manager

#### **3.6.4. Subcontractor Communication**

The Master Subcontract Agreement and Statement of Work form the basis of the relationship between the Subcontractor and the Texas.gov Program. The supervising manager in conjunction with the Contracts Manager maintains the Subcontractor's work-related correspondence and other documentation that details the Subcontractor's performance.

Subcontractors are subject to the same policies and procedures as the Vendor's employees regarding work-related documents.

#### **3.6.5. Conduct Subcontractor Evaluation**

After the subcontractor engagement is complete, the Vendor Director of Quality and Service will evaluate the Subcontractor's performance as a reference tool for future projects. The Vendor may replace a Subcontractor at their discretion with input from DIR or replacement of Subcontractors can also be performed in accordance with *Exhibit B Terms and Conditions, Article 4 Contractor Personnel Management* at the request of DIR.

#### **3.6.6. Management of Key Subcontractors**

Vendor provides key end-user facing services that may leverage subcontracted support. Due to the interaction with the end-user, these providers are considered Key Subcontractors to the Vendor. Key Subcontractors are managed in accordance with the provisions of Section 8 of the Program Management Plan. Key services provided by Subcontractors are outlined in Section 8.5.1 of the Program Management Plan. These key services are:

- Telephone/Chat/Email Support
- Field Services Support

Subcontractors providing key services are subject to all of the requirements, provisions and compliance measures as well as any compliance metrics called out in specific project deliverables.

#### **Multi-Channel Help Desk Customer Support**

The Vendor manages a Help Desk subcontractor that provides multi-channel telephone, live chat, and email customer support for Constituents and end-users.

The Help Desk Key Subcontractor employees must maintain a high standard as representatives of the Texas.gov Program. Quality assurance scores and overall job performance are used to determine which agents will qualify to staff the Vendor's Help Desk.

Training and qualifications for representatives include:

- Meeting specific screening requirements by the Subcontractor's HR department
- Training in basic customer service skills
- Level 1 and Level 2 support training
- 80 hours of training per representative to prepare for Level 1 help desk support
- Established training goals, with periodic checks to determine if the representative has met these goals
- Encouragement to acquire and maintain specific industry standard certifications, such as Cisco, CCNA, Microsoft MCSE, Network A+ and A+.

### **Field Services Support**

The Vendor's field services representatives provide direct in-person field support for hardware deployed to remote end-user locations. These services can include:

- Hardware delivery
- Hardware repair
- Hardware reclamation
- Hardware trouble-shooting and software updating

In addition to the subcontractor management provisions defined in this document, field services support personnel who interact directly with end-users carry credentials provided by the agency, to identify themselves as representatives of the agency. The key subcontractor reports end-user service calls to the Vendor. These reports include: purpose, time, location, and end-result of the field visit.

## **3.7. Program Financial Management**

The Vendor is committed to the successful financial management and reporting of the Texas.gov Program. Program financial management practices are in place to promote the stewardship of the program and ensure the quality and accuracy of the program financial records.

### **3.7.1. Accounting Practices and Team**

The Vendor's accounting practices for the Texas.gov Program comply with Texas Government Code Chapter 2054.2721 Independent Annual Audit (in accordance with Generally Accepted Accounting Principles) and are consistent with the accounting policies and procedures required by the Vendor's parent company, NIC, Inc.

Accounting for the Texas.gov Program is managed by the Vendor's team located in Austin, Texas. The Accounting team is composed of experienced staff and overseen by a Certified Public Accountant. With an average of five plus years accounting experience, this team is a solid, successful group committed to quality and accuracy.

### **3.7.2. Management of Costs**

The Texas.gov Program manages costs through an annual budget. Monthly results are compared to the budget throughout the year. The Vendor's executive management and directors are responsible for controlling costs and managing within the budget.

### **3.7.3. Corporate Monitoring**

The Vendor's parent company, NIC, Inc., provides oversight to the accounting practices of the Vendor through the following activities:

- Sarbanes Oxley (SOX) compliance reviews
- Periodic reviews of account reconciliations
- Monthly reviews of various analyses
- Monthly reviews of budget to actual costs for the program

### **3.7.4. External Audits**

A financial audit of Texas.gov is conducted annually by external auditors selected by DIR.

### **3.7.5. Accounting Review Processes**

#### **Payroll, Accounts Receivable and General Ledger**

Payroll entries are posted each month by NIC, Inc. and reviewed by the Vendor's accounting team. Accounts receivable and general ledger functions are performed at the Vendor's Austin, Texas location under the direction of the Director of Finance, Budget, and Business Operations.

#### **Accounts Payable and Budget**

Accounts payable and budget duties are completed under the direction of the Director of Finance, Budget, and Business Operations. NIC, Inc. provides review and oversight to both the Vendor's accounts payable and budget functions.

## 4. IT Service Management

This section of the G-1 describes the IT Service Management and activities of the Texas.gov Program. Each section describes how the activity is managed to meet the goals and requirements of the Texas.gov Program as described in the Master Agreement.

### 4.1. Standards

Standards establish specifications and procedures designed to maximize the reliability of products and services. The Vendor recognizes the importance of standards, particularly in the development, implementation and support of technology with respect to the Texas.gov Program. The Vendor utilizes the following recognized industry standards:

#### 4.1.1. Project Management Standards

The Project Management Institute (PMI) provides global standards for project, program, and portfolio management. PMI standards provide guidelines, rules, and characteristics for achieving specific project results and professional excellence. The PMI Project Management Body of Knowledge (PMBOK) guide provides generally recognized fundamental practices to achieve excellence in project management. The Vendor utilizes PMI's *PMBOK Guide and applicable extensions* as a reference tool when managing projects within the program. In addition, PMI's industry recognized project manager certification, Project Management Professional (PMP), is maintained by many Vendor staff.

#### 4.1.2. ISO 27002

International Organization for Standardization (ISO) 27002 is an internationally-recognized standard of good practice for information security. The standard is explicitly concerned with information security (e.g. computer data, documentation, knowledge and intellectual property) and not just IT/systems security or "cybersecurity."

The Vendor's adheres to ISO practices and undergoes an ISO 27002 Audit every two years to ensure international best practices are applied in the area of information security. For additional information, see Attachment G-9 Security Management Plan.

#### 4.1.3. Information Technology Infrastructure Library (ITIL)

Information Technology Infrastructure Library (ITIL) is a unified set of policies and best practices to manage information technology services, including development and operations. The Vendor recognizes the importance and benefits of ITIL and employs that approach to IT service management in its day-to-day operations of the Texas.gov Program.

The Vendor has ITIL V3-certified staff whose focus is on improving service, redesigning processes, and delivering new functionality to the production environment.

#### **4.1.4. Open Web Application Security Project (OWASP)**

The Open Web Application Security Project (OWASP) is an open community that provides tools, standards, and other resources to help organizations develop, purchase, and maintain secure applications. The Vendor uses OWASP as a tool for analyzing Texas.gov Program applications for vulnerabilities, limiting vulnerabilities, and protecting the Texas.gov website and online applications against future risks.

#### **4.1.5. Management of Standards**

The Vendor manages standards for the Texas.gov Program via the following activities:

- Reviewing changes to standards and updating internal processes accordingly (i.e., PMI, OWASP, and ITIL).
- Communicating changes in standards to the appropriate governance groups for action (e.g., updates to the Architecture and Standards Board to proactively plan infrastructure needs to support approved Business Cases.)
- Updating Texas.gov operational documents (e.g., *Attachment H-1 Policies and Procedures Manual*, project schedule templates, and checklists).

### **4.2. Project Management Methodology**

The Vendor is committed to utilizing industry best practices in order to support quality service delivery to all Customers. This section details how projects within the Texas.gov Program are managed from conception to delivery by the Vendor.

#### **4.2.1. Project Identification**

A potential Texas.gov project may be identified and requested by DIR, the Vendor, Customers, or other Stakeholders. The Texas.gov Business Case Process (BCP) establishes a formal process that ensures all potential projects are documented, reviewed, qualified, ranked, and prioritized prior to becoming a recognized project and moving into project initiation. A project is defined in *Attachment H-1 Policies and Procedures Manual*.

#### **4.2.2. Project Initiation**

The Texas.gov Business Case process is the first step in project initiation. PRB-approved Business Cases are communicated to the Vendor's Director of Project Portfolio Management Office (PPMO) by the Vendor's Director of Portal Operations. The PPMO then incorporates the new project into the Texas.gov Program's project portfolio and assigns a project manager.

### **4.2.3. Project Planning**

The Vendor performs the following activities during project planning and assumes the completion of project team formation and project kick-off.

#### **Project Schedule**

The project manager works with the project team and stakeholders to create a project schedule. Any training required for team members that was identified, budgeted, and approved in the Business Case is incorporated into the project schedule.

The Vendor maintains a project and portfolio management tool that, in conjunction with integrated development toolsets, provides a near-real time view into the project progress.

#### **Project Staffing and Resource Utilization**

Staff availability is an important consideration when determining the targeted start and completion dates for a project. The Vendor's project and portfolio management tool supports project planning based on resource availability and utilization. The tool provides a view of team utilization across all projects and ensures projects are effectively staffed.

#### **Project Communications**

A project-specific communication plan may be utilized to promote effective communications occur throughout the life of the project. This plan identifies information such as the type of communication, the recipients, methods of delivery, and frequency.

#### **Project Marketing**

Marketing requirements for each project are identified early in the planning process. Marketing resources work with the project manager to understand project objectives in order to determine marketing needs, as appropriate, and subsequently develop marketing strategies that are tailored to Customer needs.

For additional information, reference *the Annual Texas.gov Marketing Plan*.

#### **End-User Training**

Training for end-users is considered during the project planning process, if included in the Business Case. The target audience, Customer constraints, and obstacles are documented in order to ensure that training is focused and effective. For additional information on training, reference *Section 3.2 Training Management*.

#### **Risk Identification and Mitigation**

The project manager establishes a Risk Register to document risks and mitigation strategies for the project during the planning phase. Risks are identified and managed throughout the Software Development Life Cycle (SDLC).

For additional information on the Risk Register and the Vendor's Risk Management processes, see *Section 4.8 Risk Management*.

## Project Documents

The Vendor follows an Agile approach to software development and will make efforts to accommodate a Customer's needs for Waterfall SDLC documentation and project artifacts by utilizing a blended approach.

Agile SDLC documentation occurs as separate activity and may vary according to specific project needs. Agile teams, in practice, document requirements in the form of stories throughout the development lifecycle with design and specifications documented as built in the form of working software.

Agile Emergent Documentation states that documentation becomes part of the development process, not a separate activity. The team documents as they discover, and document only what they actually did, as opposed to what they thought they were going to do.

The Waterfall SDLC phases and the objectives, activities, and documents for each phase are depicted in Figure 18.

Figure 18. Waterfall SDLC Phases

DEFINITION Phase	DESIGN Phase	DEVELOPMENT Phase	TEST Phase
Objectives: Define and document the functional and non-functional requirements for the application and/or system.	Objectives: Develop and document the technical solution for the application and/or system.	Objectives: Ensure adherence to requirements and design and prevent defects from being introduced to the applications	Objectives: Ensure functional specifications are correct and adhere to the signed-off business requirements.
Activities: -Document walkthroughs -Document inspections -External SME reviews -Develop marketing plan -Develop training plan -Develop communications plan	Activities: -Document walkthroughs - Document inspections -External SME reviews -Test design: detailed planning for test preparation and execution -Develop marketing material -Design training	Activities: -Peer reviews of code -Component/code inspections -Unit tests -Create test scripts for system, integration test -Create performance test scripts	Activities: -Execute system and integration test scenarios -Log, track, and monitor system defects -Execute performance testing (includes load & stress tests) -Create User guide and/or training manual
Documents: -Project QMP -Marketing plan -Communication plan	Documents: -Software requirements specifications (SRS) -User case specifications (UCS)	Documents: -Quality Assurance Test Plan (includes Test Scenarios and Test Cases)	Documents: -User guide and/or training manual -Release notes

-Training plan	-User experience design - Content Delivery Plan  -Marketing Material	-Performance test plan	- Customer user acceptance testing (UAT) approval  -Roll-back plan
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For brief descriptions of the documents in Figure 17 above, reference Figure 18 below.

Projects utilizing a waterfall or blended development methodology will identify the project-specific artifacts that will be required during the course of the project during project planning. These artifacts are recorded as deliverables in the project schedule. Upon completion of the deliverable, the project manager reviews the work with the Customer and, where appropriate, receives acceptance/approvals to move forward.

Documents required for PRB-approved application development projects are noted with an asterisk (\*) in Figure 19.

Figure 19. Document Descriptions

Document	Description
<b>Business Case*+</b>	Specifies desired high-level scope and financial requirements for a given product, application or service.
<b>Project Communication Plan</b>	Defines communication methods and frequency for the project.
<b>Customer User Acceptance Test (UAT) Approval+</b>	Provides the documented Customer approval/sign-off following the successful completion of UAT.
<b>Customer Requirements Acceptance+</b>	For application development projects, Customer indicates acceptance of the requirements documents (SRS and UCS) by signing the signature page inserted in the SRS. Additional documents such as wireframes, Enterprise Architect reports, visual layouts, Content Delivery Plans or other types/combinations of documents may be utilized to best document requirements for Customer acceptance.  For non-application development projects, the Business Case may fully define project requirements. In this situation, Project Review Board approval of and Customer signoff on the Business case will serve as Customer requirements acceptance.
<b>Marketing Plan and Materials+</b>	The marketing plan defines the marketing effort that the Vendor will use to promote the product or service. Materials such as collateral, press release, and/or social media may be distributed when the application or service is deployed to production.
<b>Performance test plan</b>	Documents the appropriate performance testing activities required for the project.

Document	Description
<b>Project Quality Management Plan*</b>	Documents the metrics to be tracked and the documents that will be created for the project.
<b>Roll-back Plan</b>	Documents the steps to be taken to roll-back a change introduced into the production environment.
<b>Software Requirements Specifications (SRS)+</b>	Documents the detailed functional requirements (specified in use case specifications) as well as non-functional requirements and quality attributes of the software artifact that is being developed.
<b>Quality Assurance Test Plan (includes Test Scenarios and Test Cases)</b>	Documents the test cases and scenarios that will be used to verify functional and non-functional requirements.
<b>Content Delivery Plan (CDP)+</b>	Documents the page content and translation (if necessary) for an application or website.
<b>Training Plan+</b>	Documents the required by the target audience(s) and the appropriate media to use for training.
<b>Use Case Specifications (UCS)+</b>	Documents the detail functional requirements, including: actors, business rules, special requirements, data source tables, assumptions and open issues, etc.
<b>User Interface Design</b>	Wireframe layout or a click-through of the web application pages.
<b>User Guide/Training Manual+</b>	Documented guide for using the new application.

Note: Projects vary considerably in scope, scale and objectives. Documents must be determined on a project-specific basis. Documents that require Customer acceptance to move forward (Project deliverables) are noted with a plus sign (+).

### **Project Quality Management Plan**

A project Quality Management Plan (QMP) is created at the outset of each new project to identify the metrics to be tracked and the documents to be created for the project. Depending on the scope, scale and objectives for each project, as defined in the Business Case, different metrics and documents may be applicable.

Quality metrics are selected from a common list of metrics at the start of a project and help gauge the quality of the work. Quality metrics values are collected at the review points and project milestones. See Figure 20 for details.

Required/minimal metrics to be tracked for all Project Review Board approved application development projects are noted with an asterisk (\*).

Figure 20. **Quality Metrics – Details**

Metrics Name	Metrics Definition	Metrics Algorithm	Intent of the Metrics	Unit	Source	Teams Responsible
<b>Schedule Variance*</b>	Schedule variance is defined as the ratio between difference in actual elapsed time and baselined elapsed time to baselined elapsed time.	$(\text{Actual elapsed time} - \text{Baselined elapsed time}) * 100 / \text{Baselined elapsed time}$ Actual Elapsed Time = Actual End Date - Actual Start Date Planned Elapsed Time = Planned End Date – Planned Start Date	Used for project tracking	%	SDLC toolset and/or manual	PPMO
<b>Effort Variance*</b>	Effort variance is defined as the ratio between difference in actual and baselined effort to planned effort.	$(\text{Actual effort} - \text{Baselined effort}) * 100 / \text{Base-lined effort}$	Used for project tracking	%	SDLC toolset and/or manual	PPMO
<b>Requirements Volatility</b>	Requirements Volatility is defined as the ratio of sum of new requirements added, modified and deleted to original requirements	$(\text{Number of requirements added} + \text{Number of modifications to requirements} + \text{Number of deleted requirements}) * 100 / \text{No. of Original requirements}$	Used for monitoring changes to requirements.	%	SDLC toolset and/or manual	PPMO
<b>Productivity</b>	Productivity is defined as the ratio of the size of the code developed, to the total project effort in person hours required to develop the product.	Project Size/Total Project Effort	Used for estimation for similar projects	FP or Objects/ Person Hours	SDLC toolset and/or manual	PPMO and Dev.
<b>Code and Unit Testing Productivity</b>	Code and Unit Testing Productivity is defined as the size of the code developed to the effort spent on	Project Size/Coding and Unit Testing Effort	Used for estimation for similar projects	FP or Objects/ Person Hours	SDLC toolset and/or manual	PPMO and Dev.

Metrics Name	Metrics Definition	Metrics Algorithm	Intent of the Metrics	Unit	Source	Teams Responsible
	coding and unit testing					
<b>Size Variance</b>	Size variance is defined as a difference between actual size and estimated size	$(\text{Actual Size} - \text{Baselined Size}) * 100 / \text{Base-lined Size}$	Used for managing project scope	FP or Objects	Manual	PPMO
<b>Quality Assurance Test (QAT) Efficiency</b>	Quality Assurance Test Efficiency is defined as the ratio of number of system integration testing defects to sum of quality assurance testing (QAT) and UAT defects	$(\# \text{ of quality assurance test defects}) * 100 / \text{sum of quality assurance test and UAT defects}$	Used for measure the effectiveness of QAT	%	SDLC toolset and/or manual	PPMO and QA
<b>Defect Removal Efficiency</b>	Defect Removal Efficiency is defined as the ratio of sum of review, SIT defects to sum of review, SIT, pre-UAT and UAT defects	$(\text{sum of review, SIT, pre-UAT defects}) * 100 / (\text{sum of review, SIT, and UAT defects})$	Used to measure the effectiveness of review and testing process	%	SDLC toolset and/or manual	Dev. QA PPMO
<b>Issues and Risks created by or escalated to PPMO*</b>	Issues and Risks are recorded, tracked and managed to resolution or closure.	# Issues overdue/total # open issues. # Risks that become an issue/total # risks	Used to measure management of issues and risks	Date	SDLC toolset and/or manual	PPMO

Note: Projects vary considerably in scope, scale and objectives and SDLC methodology, therefore metrics must be determined on a project-specific basis.

Note: Certain items capitalized for enhanced legibility; not key terms

Once the appropriate quality metrics have been identified for a given project, they are documented in the project QMP that is tailored to the project.

In addition to specifying the quality metrics that are tracked, the project QMP defines which project documents will be reviewed by the Quality Manager. For more detail on quality assurance being performed as part of a regularly scheduled project activity, see *Section 4.3.2 Perform Quality Assurance and Control*.

#### **4.2.4. Project Execution**

During the project execution phase, the project manager conducts project review meetings and tracks progress against goals. The project manager continuously measures performance and communicates progress, issues and risks to stakeholders.

##### **Requirements Definition**

Requirements are captured and defined in the Define and Design phases of a project following the Waterfall SDLC. The Vendor typically follows an Agile (iterative) and Lean approach and will work to align requirements documentation with the Customer needs, as outlined in the Project Planning section above.

##### **Development**

The Vendor primarily utilizes an Agile (iterative) development approach which incorporates forward planning; however, waterfall or a blended approach may be utilized based in on specific needs.

##### **Risk Management and Mitigation**

The objective of risk management is to ensure that potential risks are identified and actively managed to avoid negative impacts on the project. Risk management and mitigation is performed continuously during the project execution phase and is an iterative process of identifying, analyzing and tracking risks and reviewing risk response plans. This helps ensure that mitigation strategies are up to date and that any new risks are identified. For more information on Risk Management processes, see *Section 4.8 Risk Management*.

##### **Issue Management**

Issues, similar to risks, are identified, tracked, and managed throughout the life of a project. Issues are assigned owners and target completion dates, and are reviewed regularly to ensure resolution in a timely and satisfactory manner.

##### **Project Quality Management**

The project manager works closely with the project team to ensure that all scoped work is completed in a timely manner and that the results are of the level of quality expected. During the course of the project, the project manager performs reviews of the project work, deliverables, and project artifacts in order to gather the quality metrics for the project as defined in the Project QMP. The project manager completes a weekly project status report, communicates progress and escalates issues and risks as appropriate.

##### **Managing Procurement Activities**

Managing procurement processes and activities is also performed during the project execution phase. The procurement process includes obtaining quotations, bids and proposals as well as negotiating Statements of Work for the services or products to be purchased for the project.

#### **4.2.5. Project Controls**

Project controls and active governance ensure that the project goes according to plan.

##### **Controlling Change/Change Management**

A request for change may be identified by a project team member, a Customer, or a stakeholder. All requests for change must be evaluated and approved (or disapproved) to recognize and control risk. The Change Control Board (CCB) ensures that all requested changes are reviewed, approved, managed and planned for before being introduced into the environment. For additional information on Change Management, see *Section 4.4 Change Management*.

##### **Controlling Scope**

Active change management is necessary to avoid increasing project scope and cost. Change management ensures that any proposed changes to the scope follow the documented change management process and are evaluated by the CCB.

##### **Controlling Schedule**

Schedule control requires constant monitoring of the project's progress, completion of activities and management of deliverables. The project manager monitors the project schedule to identify any variance in plan and works with team members to develop contingency plans, as needed, to complete work on-time.

##### **Controlling Budget**

The project manager monitors the project budget in connection with schedule monitoring. If project hours are projected to exceed the budget, the project manager provides an alert in the weekly project update. In addition, the project manager reports business case hours, hours expended to date, estimate to complete and estimate at completion in the IT Portfolio Report. Projects with an anticipated overage of at least 20% are presented to the Project Review Board for further guidance.

##### **Controlling Quality**

###### ***Deliverable Peer Reviews***

Throughout a project, the Vendor team members perform peer reviews of each other's work. The work products that receive a peer review may include project plans, use cases, software design documents and other deliverables completed by an individual or team. Once a peer review is complete, the document originator(s) and the document reviewer(s) discuss the work product and make necessary changes.

###### ***Project Quality Audits***

As defined in *Section 4.3 Project Quality Management*, audits and reviews are conducted throughout the lifecycle of a project to ensure required documentation exists and project metrics are collected. The quality review process ensures teams follow documented procedures and continuous improvement techniques are applied.

## Project Reporting

Project status is available through access to activity tracking systems used by the program, verbally at status meetings, and through an online program tracking site. Project status reports are organized into the areas shown in Figure 21 and contain highlights for each area impacting the project.

Figure 21. **Project Status Report**

Project Name	Update Notes
	SCOPE: SCHEDULE: QUALITY: TEAM: ACCOMPLISHMENTS THIS WEEK: ACTIVITIES PLANNED FOR NEXT WEEK: RED FLAGS: ACTION ITEMS:

### 4.2.6. Project Closeout

Upon successful completion of the project, the project manager completes close-out documentation and receives written acceptance from the project sponsor. The project manager conducts a post-project Lessons Learned session, documents lessons learned, and archives all project related documents.

### Lessons Learned

Project managers conduct Lessons Learned sessions when a project closes. The objective of the session is to identify any project challenges and the processes, tools and solutions that were used to resolve them. Lessons learned are reviewed and applied, as appropriate, to new projects. Output from internal lessons learned sessions may be disseminated via the applicable Committee and/or Team as defined in *Attachment H-1 Policies and Procedures Manual*.

## 4.3. Project Quality Management

Project Quality Management provides the framework for a comprehensive, continuous, and measurable quality assurance program to ensure project quality. It embodies the Vendor's endorsement of the fundamental importance of quality by promoting, reinforcing, and acknowledging quality management activities. Quality Management includes strategies and

processes to promote quality and procedures to periodically measure and report quality performance to the State throughout the term of the Master Agreement.

Throughout the project, quality assurance deliverables are evaluated at the relevant phase. These deliverables reviews allow for corrective action if the project is not on target to meet its goals.

### 4.3.1. Quality Management Roles and Responsibilities

Figure 22 identifies roles and responsibilities supporting the Vendor’s quality management process for the Texas.gov Program.

Figure 22. **Quality Management Roles and Responsibilities at the Program and Project Level**

Role	Responsibility
Customer	<ul style="list-style-type: none"> <li>• Supports the quality processes within the project and fosters a quality-focused environment</li> <li>• Performs in-depth reviews of key project deliverables, when appropriate</li> <li>• Validate requirements and communicate any defects and issues to the project manager for resolution</li> <li>• Generate and execute test scenarios and test scripts.</li> <li>• Formally indicates acceptance of key project deliverables</li> <li>• Reviews and accepts the benefits and cost of meeting quality requirements</li> </ul>
Director of Quality and Service/Quality Manager	<ul style="list-style-type: none"> <li>• Presents findings and recommendations regarding non-compliant areas as well as person(s) accountable for these areas to the management team</li> <li>• Approves metrics, based on industry standards, and results of the quality audits and reviews</li> <li>• Approves project processes, documents, and work products</li> <li>• Reports on quality activities</li> <li>• Reports on quality audit to ensure internal compliance and consistency with quality best practices</li> <li>• Participates in quality issue resolution escalations</li> </ul>
Project Manager (PM)	<ul style="list-style-type: none"> <li>• Ensures quality management for deliverables by supporting processes.</li> <li>• Manages within the project and fosters a quality focused environment.</li> <li>• Assesses based on type and scope of the project which performance testing activities are appropriate and documents them in the plan.</li> <li>• Communicates quality-related project status to project stakeholders.</li> <li>• Participates in quality issue resolution activities, and serves as the lead in quality issue resolution meetings.</li> <li>• Confirms that ongoing quality control takes place.</li> <li>• Performs in-depth reviews of key project deliverables when appropriate.</li> <li>• Coordinates quality reviews and approves/disapproves project deliverables</li> <li>• Identifies quality-related findings and escalates them when necessary</li> <li>• Reports the results of reviews of documents, deliverables and processes to the quality manager</li> </ul>

Role	Responsibility
<b>Quality Assurance Manager</b>	<ul style="list-style-type: none"> <li>• Develops/revises and reports metrics, based on industry standards, and results of the quality audits and reviews</li> <li>• Verifies and validates project processes, documents, and work products</li> <li>• Communicates and clarifies expectations related to quality activities to project teams</li> <li>• Performs quality audit to ensure internal compliance and consistency with quality best practices.</li> <li>• Participates in quality issue resolution activities</li> </ul>
<b>Marketing Manager/Associate</b>	<ul style="list-style-type: none"> <li>• Supports program and project quality during the software development life cycle by crafting consistent messaging for online applications and services</li> <li>• Assists, develops, manages and monitors Customer feedback mechanisms and feeds back output into quality management</li> </ul>
<b>Project Team Leads/Functional Managers</b>	<ul style="list-style-type: none"> <li>• Support quality processes within the project</li> <li>• Perform peer reviews of deliverables, processes, and software as appropriate</li> <li>• Execute ongoing quality control (i.e., self-reviews)</li> <li>• Participate in quality issue resolution activities</li> <li>• Manage and/or complete quality tasks, as assigned in the project schedule</li> <li>• Report quality issues weekly on assigned tasks (status reporting on project schedule tasks)</li> <li>• Complete quality reviews of project deliverables prior to submission of project deliverables to Customers</li> <li>• Supervises, evaluate, recruit, hire, on-boards, and manages new staff</li> <li>• Identifies quality-related findings and escalates them when necessary</li> </ul>
<b>Project Team Members</b>	<ul style="list-style-type: none"> <li>• Support quality processes within the project</li> <li>• Execute ongoing quality control (i.e., self-reviews)</li> <li>• Participate in quality issue resolution and/or complete quality tasks as assigned in the project schedule or as directed by the quality manager</li> <li>• Manage and/or complete quality tasks, as assigned in the project schedule</li> <li>• Report quality issues weekly on assigned tasks (status reporting on project schedule tasks)</li> <li>• Performs technical writing reviews for deliverables, processes, and software</li> <li>• Supports Customer satisfaction activities</li> <li>• Assist the project team and Texas.gov Program staff in preparation for external auditors, and assists external auditors when necessary</li> <li>• Schedules and monitors the results of quality reviews with the project manager</li> <li>• Cooperates with quality manager in providing documentation to assist with annual internal audit</li> <li>• Verifies and validates project processes, documents, and work products</li> <li>• Reports the results of reviews of documents, deliverables, and processes to the quality manager</li> </ul>

Role	Responsibility
	<ul style="list-style-type: none"><li>• <b>Performs other quality roles and activities as instructed by the quality manager</b></li></ul>

### 4.3.2. Perform Quality Assurance and Control

Unlike the activities of quality control which are primarily concerned with the collection of quality metrics selected and set up for tracking during the quality planning process, quality assurance focuses on process health. Project Managers and Functional Managers verify Project quality through project reviews, and ensure project activities align with Texas.gov management plans. The review process is supported by measurements, which are the output of collecting quality metrics in order to perform quality control. These reviews are scheduled and recorded in the project schedule maintained in the Atlassian tools.

### 4.3.3. Perform Quality Audits and Reviews

The project manager is tasked with maintaining quality metrics and project documents for projects and programs. Functional managers are tasked with maintaining quality metrics and documentation for their respective functional organizations. All documents are subject to peer and management review. Peer and management reviews verify compliance with Project QMPs and review activities against the Texas.gov G-1.

All defects discovered during peer review activities become part of the quality metrics tracked for the project and roll up to the overall status at the program level. Any defects identified in a review are reviewed for proper disposition to ensure compliance with the goals of the project. As the defects are worked, performing quality assurance may result in:

- Process updates
- Requests for change
- Plan updates

Additional opportunities for iterative quality requests and feedback should be communicated to the Service Desk for traceability and necessary response. Individual agency program reviews may also be used as a forum for updates on any quality requests.

### Project Process Review

The project's process review is ongoing and managed through peer review for the process areas listed in Figure 23.

Figure 23. Process Reviews

Process Areas	Emphasis On:
<b>Requirements engineering</b>	<ul style="list-style-type: none"> <li>• Bi-directional traceability of the initial requirements through software delivery (Waterfall SDLC only).</li> </ul>
<b>Project deliverable review process</b>	<ul style="list-style-type: none"> <li>• Actionable results recorded resulting from peer reviews.</li> <li>• Actionable results recorded resulting from Customer reviews.</li> <li>• Customer sign-off.</li> <li>• Customer feedback is captured through the mechanisms established in <i>Exhibit D, Performance Criteria</i>.</li> </ul>
<b>Estimation process</b>	<ul style="list-style-type: none"> <li>• Initial cost estimation by department recorded and stored in project document repository.</li> <li>• Refined cost estimation (upon completion of detailed requirements) recorded and stored in project document repository.</li> </ul>
<b>Tracking, logging and reporting</b>	<p>Mechanisms:</p> <ul style="list-style-type: none"> <li>• Atlassian toolset: tools which support logging, tracking and reporting on quality metrics.</li> <li>• Weekly status updates:</li> </ul> <p>Project managers ensure regular project and team status updates are completed so that all team members are kept apprised of progress. This weekly status update is generated in Atlassian toolset and includes the following sections:</p> <ul style="list-style-type: none"> <li>• Issues</li> <li>• Risks</li> <li>• Status Indicators (red, green yellow) for: <ul style="list-style-type: none"> <li>– Scope</li> <li>– Schedule</li> <li>– Quality</li> <li>– Team</li> <li>– Action Items</li> <li>– Red Flags</li> </ul> </li> <li>• Weekly or bi-weekly project status meetings: <ul style="list-style-type: none"> <li>– Complement the weekly status updates by providing a means for regular, live communication with the project managers, team members, subject matter experts (SME) and other key resources</li> <li>– Help identify and coordinate cross work stream interactions and interdependencies</li> <li>– Meeting agenda items include: <ul style="list-style-type: none"> <li>▪ Key project activities</li> <li>▪ Review of project progress to date</li> <li>▪ Review of project plan and work stream interdependencies</li> <li>▪ Coordination of activity crossing multiple work streams and review issues related to work stream interactions/interdependencies</li> </ul> </li> </ul> </li> <li>• Process and project areas tracked for reporting and managing in Atlassian toolset: <ul style="list-style-type: none"> <li>– Risk management process: <ul style="list-style-type: none"> <li>▪ Risks tracked managed and reported</li> </ul> </li> <li>– Issue management process: <ul style="list-style-type: none"> <li>▪ Issues tracked and managed</li> </ul> </li> </ul> </li> </ul>

Process Areas	Emphasis On:
<b>Defect management</b>	<ul style="list-style-type: none"> <li>Defects tracked in the Atlassian toolset and worked to resolution</li> </ul>
<b>Project monitoring and control</b>	<ul style="list-style-type: none"> <li>Project schedules in the Atlassian toolset updated and baselined</li> <li>Reasons for re-scheduling milestones documented</li> </ul>
<b>Configuration management</b>	<ul style="list-style-type: none"> <li>Project documents and project deliverables are maintained in Atlassian toolset or other software</li> </ul>

#### 4.3.4. Quality Metrics and Artifacts Reviews

While process review focuses on the process areas within a project lifecycle, project metrics and artifacts reviews focus on the metrics and documents of the project or product. The project teams define at the outset the project documents and project deliverables to be produced.

The quality management team performs scheduled reviews of the project metrics and documents identified in the Project QMP or Agile team documentation. Project metrics and artifacts reviews are to verify compliance with the Project QMP or Agile team documentation.

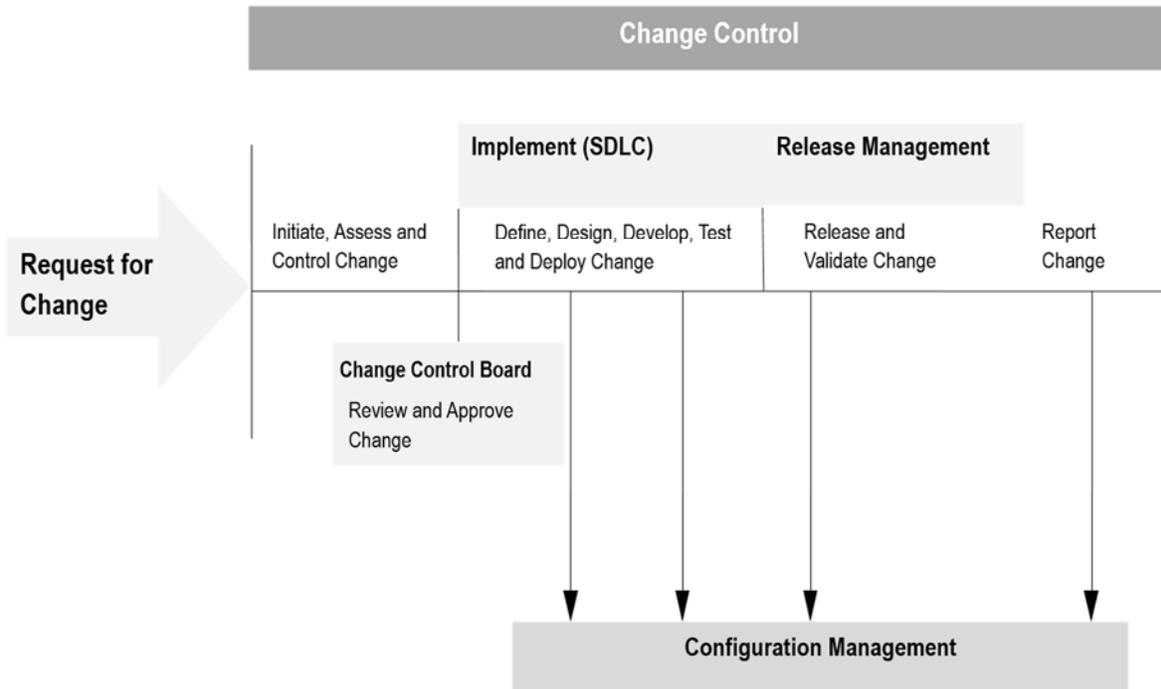
### 4.4. Change Management

The Vendor is dedicated to a strong change management approach to control the lifecycle of all changes, ensuring that beneficial changes are made with minimum disruption to services. This section provides an overview of the strategy and methodology utilized for controlling and managing changes to the scope of an approved project or to an existing application or service in the Texas.gov Program.

#### 4.4.1. Process Overview

The Change Management Process includes Change Control, the implementation of approved changes following the Software Development Life Cycle (SDLC), Release Management, and Configuration Management as depicted in Figure 24.

Figure 24. Change Management Process Phases



#### 4.4.2. Change Control Process

All Requests for Change must be evaluated and approved (or disapproved) in order to recognize and control risk. The Vendor ensures that all changes put into the production environment receive proper approvals. The Vendor provides DIR with reports of changes, as defined in *Attachment H-1 Policies and Procedures Manual*.

A change that meets the criteria for a Business Case, as defined in *Attachment H-1 Policies and Procedures Manual*, will be considered a new initiative. These types of proposed initiatives will enter the Business Case Process (BCP), as defined in *Attachment H-1 Policies and Procedures Manual*.

The diagrams in the figures below depict the Vendor’s change control process, from identification through approval and implementation. The roles responsible for carrying out the process are displayed along the left hand side. The status of the Request for Change (RFC) as it moves through the process is also detailed in each process box.

Figure 25. Change Control Process

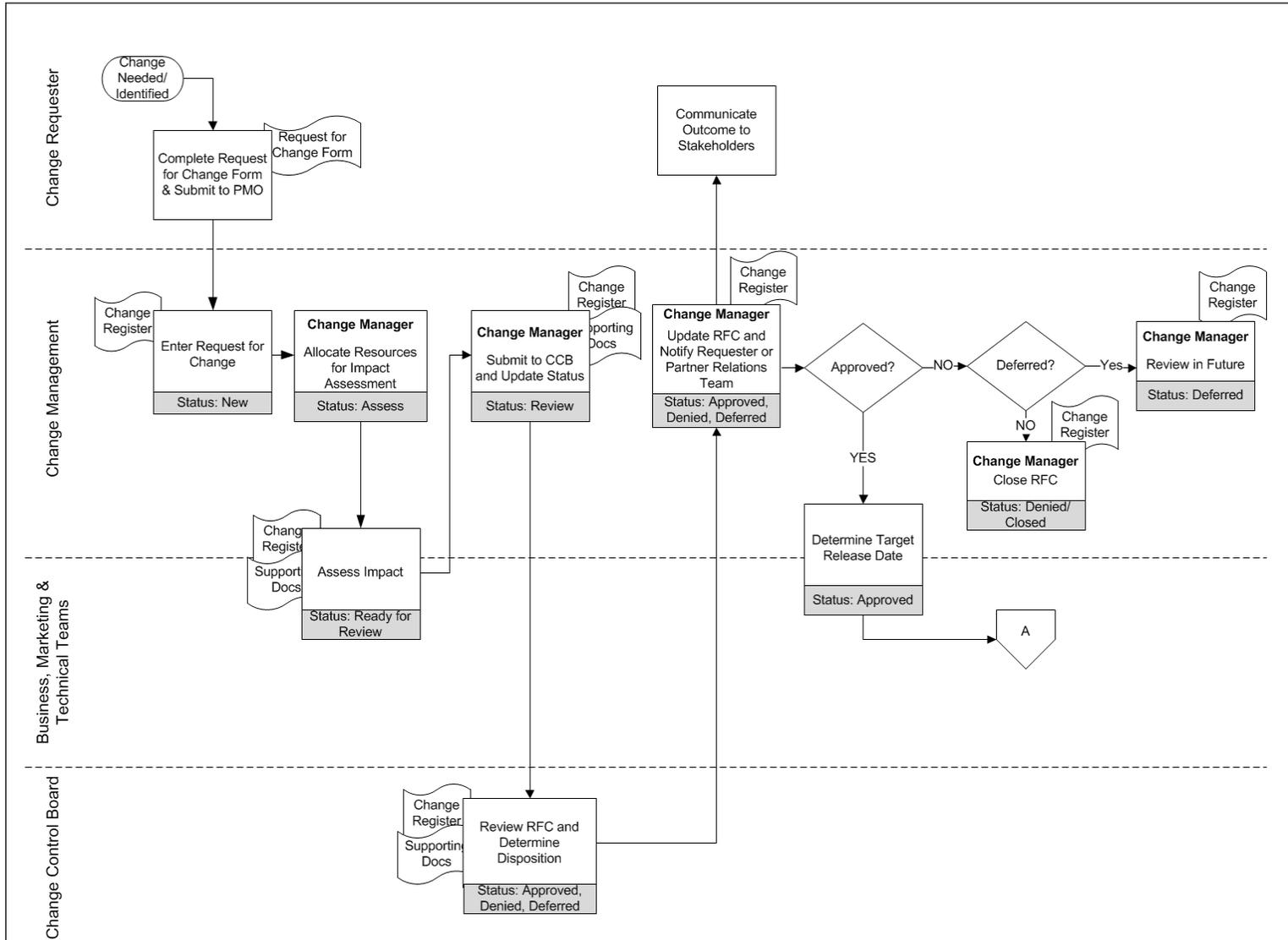
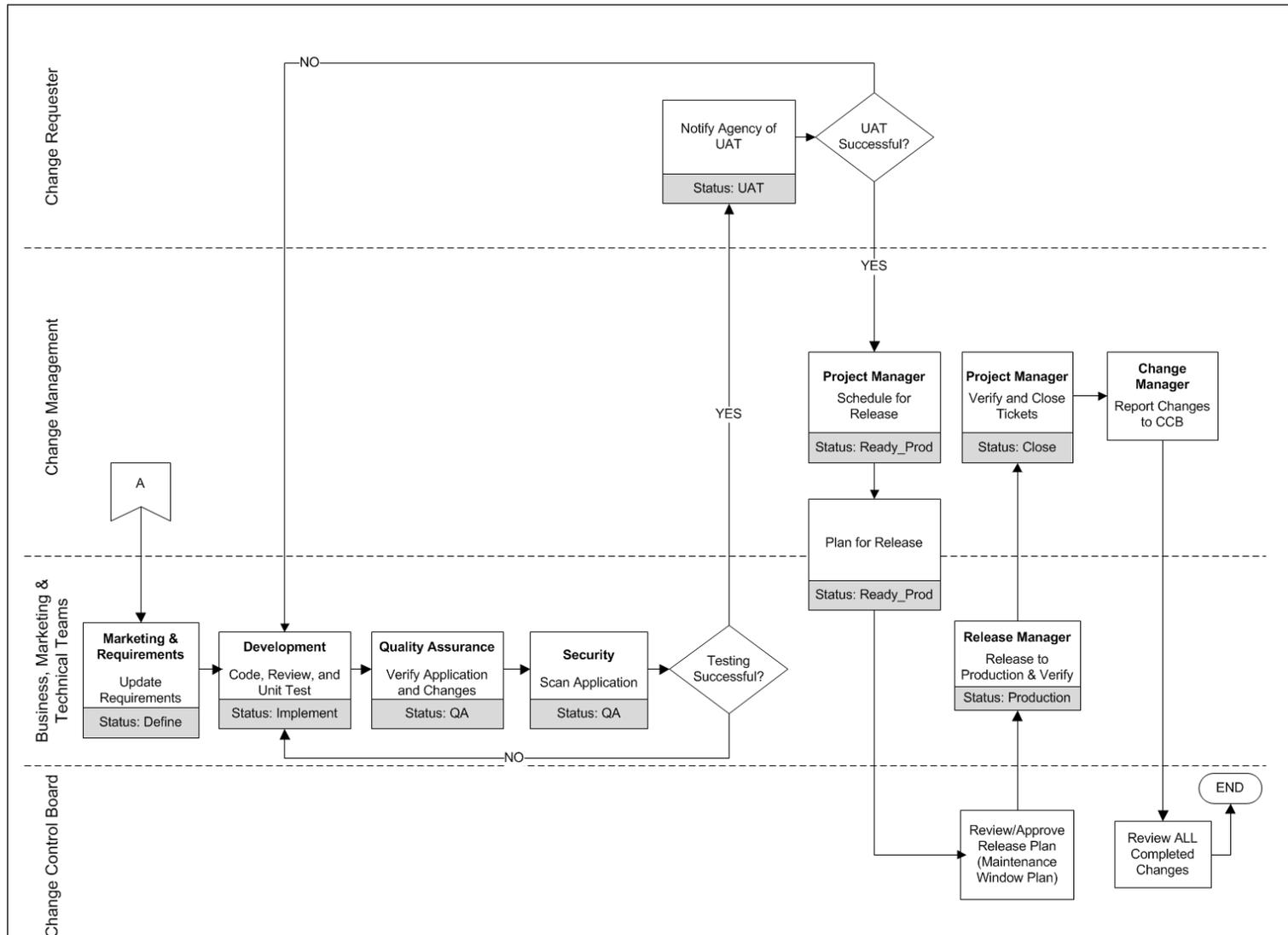


Figure 26. Change Control Process (continued)



## Objectives

The objectives of Change Control are to:

- Effectively manage and coordinate all changes to a project, application, or system
- Coordinate all of the work activities associated with a Request for Change
- Eliminate problems by providing sufficient information on impact analysis to support informed decisions
- Control risk
- Eliminate or reduce “scope creep”
- Provide an audit trail for future reference

## Roles and Responsibilities

Figure 27 outlines the individual and group roles and responsibilities in the Change Control Process.

Figure 27. Change Control Roles and Responsibilities

Role	Responsibility
<b>Change Requester</b>	<ul style="list-style-type: none"> <li>• Raise a Request for Change and provide basic information on the proposed modification or enhancement</li> <li>• Communicate outcome of CCB review of Request for Change to stakeholders</li> </ul>
<b>Change Manager</b>	<ul style="list-style-type: none"> <li>• Define and specify the full set of components, processes, and activities that are to be brought under change management control</li> <li>• Define the standards with which Requests for Change, must comply, including the handling of urgent changes</li> <li>• Define the roles and responsibilities of the agents involved in all aspects of change management</li> <li>• Implement and manage the Change Management Process and system</li> <li>• Ensure that all relevant changes are prioritized and approved by the relevant authorities</li> <li>• Record or confirm each Request for Change is logged in the Change Register and contains sufficient information to analyze and assess the change</li> <li>• Oversee progression of changes through the SDLC in accordance with change schedules ensuring that change management record details are maintained</li> <li>• Ensure that all implemented changes are reviewed to verify that change objectives have been met and to verify consistent application of the change process and procedures</li> <li>• Maintain appropriate change documentation and update Change Register</li> <li>• Update status of Requests for Changes with approved, rejected or deferred decisions</li> <li>• Support communication on changes to stakeholders</li> <li>• All responsibilities as defined in Attachment H-1 Policies and Procedures Manual</li> </ul>
<b>Project Manager</b>	<ul style="list-style-type: none"> <li>• Work with Requirements Analyst to review current specifications and determine the scope, impact, and considerations of the change for submission to the approval authorities</li> <li>• Ensure that impacted Project and/or system documentation is updated</li> </ul>

Role	Responsibility
<b>Business, Marketing and Technical Support Teams</b>	<ul style="list-style-type: none"> <li>• Analyze change requirements and document estimates for scope, schedule, and budget</li> <li>• Coordinate impact assessments with internal and external constituents as required</li> <li>• Implement and test changes</li> <li>• Release and verify changes</li> </ul>
<b>Change Control Board (CCB)</b>	<ul style="list-style-type: none"> <li>• All responsibilities as defined in Attachment H-1 Policies and Procedures Manual</li> </ul>

### Change Control Phases

The Vendor’s change management plans follows the defined lifecycle of events in order to ensure consideration of scope, schedule, cost, and prioritization against other pending changes and requests for service. The Change Manager guides and oversees the sub-processes within the Change Control Process:

- Initiate and document RFC
- Perform impact analysis of RFC
- Present, prioritize, and schedule change
- Implement and manage change
- Review and report change

### Initiate and Document RFC

Changes in Customer rules, legislation, systems, and processes typically generate Requests for Change. Application or system issues may also generate Requests for Change. The Change Requester will coordinate with the Change Manager to document the change by following these steps:

- The Change Requester provides sufficient detail to enable an initial assessment to be performed, including reason for the change, urgency, and reference to any related logged incidents.
- The Change Requester creates a Request for Change record that includes the title and description of the change, Change Requester, urgency, deadline, impacted Application, system or service, and other required data in the designated change control tracking system.
- The Change Manager assesses the change details against change standards, Customer agreements, and other documentation, confirming with appropriate management as necessary, and assigns an initial priority for the change.
- The Change Manager determines the need and extent of participation by other support resources.

## Perform Impact Analysis of RFC

The Change Manager appoints an Impact Assessor to analyze the probable implications and considerations of the change as they relate to:

- Effect on infrastructure and environment
- Effect on the business service quality
- Impact of non-implementation
- Risk of the change
- Ability to provide the support and resources required to implement
- Any additional resource requirements or training post implementation
- Associated costs and schedule impact

The Change Manager verifies the details of the request for Change documentation and that it conforms to any relevant change standards, including the associated CCB assessment and documentation requirements.

## Present, Prioritize, and Schedule Change

Once the impact analysis is complete, the Change Manager then presents the Request for Change to the approval authorities for review, discussion, and consideration. A change that is assigned a high priority will customarily be presented prior to a change with a low priority. The priority of each Request for Change will be validated by the approval authorities. Requests for change are classified as:

- **High Priority** – includes significant time, scope, and cost and/or will have an immediate or considerable impact across other areas of the Texas.gov Program.
- **Medium Priority** – includes moderate time, scope, and cost; execution is required for a non-critical path deliverable and/or will have some impact across other areas of the Texas.gov Program.
- **Low Priority** – includes minimum time, scope, and cost but execution is not vital (“nice to have” or cosmetic change) and/or will not have any impact on other areas of the Texas.gov Program.

If the change is approved, the Change Manager annotates the Request for Change accordingly and works with the support team leads to schedule and implement the change. If the change is denied, the Change Manager may return it to the Change Requester for modification and/or re-work, or update the status as denied in the Change Register. If the change is deferred, the Change Manager updates the request in the Change Register. For all decisions, the Change Manager works with involved parties to appropriately schedule change-related activities and communicates the outcome of the approval process to the Change Requestor, who will in turn communicate the results to the stakeholders.

## **Implement and Manage Change**

Development and testing requirements are identified by the Change Requester, Project Manager, Change Manager, and Technical Support Teams. The Change Manager communicates the scheduled change to the Project Manager and appropriate groups and users prior to the start of development and testing.

The impact assessment for changes to an in-progress project will include evaluation against the established Project schedule or a known baseline. A baseline represents the full set of project or system components from detailed design documents and statements of work, to source code, database tables, and configuration files. Once a change to a project is approved, the project work plan will be updated to include the effort estimated for the change. Additionally, once the change is implemented by the Vendor, the project and system documentation will be updated to reflect that change.

For changes to an existing system, application or service, the impact assessment will include evaluation of impact to ongoing projects and availability of resources needed to implement the proposed change. Once a change to an existing system, application or service is approved, the change management team will oversee implementation of the change.

The Change Manager identifies required resources to implement the change, ensuring that specified standards and procedures are followed. Baseline documentation such as requirements documentation and source code are updated during the development and testing process. After testing validates the success of the change implementation, the outcome is recorded on the Request for Change and communicated to the Change Requester. The Change Manager will communicate the results of the change implementation to appropriate stakeholders, and will schedule User Acceptance Testing (UAT) as needed. The Change Manager will also notify appropriate support groups of the outcome of the change implementation and will document any problems.

Where tests have failed or there are unexpected results, the details are recorded within the Request for Change record and the troubleshooting documentation is updated. The change will be backed out according to the documentation supplied and the service should be thoroughly tested to confirm that full service has been restored.

## **Review and Report Change**

The Change Manager verifies the success of the change with the Change Requester by establishing that:

- The change has met objectives and requirements
- The change has not created any unexpected or undesirable side-effects
- Resource and cost estimates were accurate
- Planning and priority requirements were met
- The change has conformed to the requirements of the Change Control Process

The Change Manager updates the Change Register, ensuring that the outcome, including any problems, is accurately recorded. The Change Manager determines whether the completed change should be reviewed by the approval authorities and schedules a review meeting as necessary.

### **Low Risk/Low Impact Changes**

Many of the day-to-day changes in the Vendor's Texas.gov Program environment are customarily low risk, low impact changes and can be performed without interruption to normal operations or performance. These changes are also frequently determined to be high priority either because they are time sensitive or need to be completed to resolve user issues. Examples of these types of changes include, but are not limited to, user ID management, content changes, IP changes or additions, and modifications to non-production environments such as test and stage as well as changes that are required to restore normal functionality in an outage situation.

In an effort to allow these activities to continue in a timely fashion and in order not to overburden the normal Change Management Process, a maintenance path is provided for these activities. Initially, these changes are sent through the normal change control process requesting pre-approval authorization. Once initial approval/exemption is granted, and the change type is added to the pre-approved change list, all changes of this type are implemented in future maintenance without additional formal review and approval.

Low impact/low risk changes are recorded in the support ticketing system. The list of pre-approved or exempt change types is posted and available online to all participants in the change process. DIR reserves the authority to suspend the pre-approved status of a low impact/low risk change type at any time.

### **Emergency Changes**

The normal Change Management Process is suspended for emergency changes and the Vendor follows the guidelines defined in the *Attachment H-1 Policies and Procedures Manual*.

### **Change Control Reporting**

A Change Register is utilized by the Vendor to formally track information about all Requests for Change. The Vendor creates and provides Change Control reports as defined in *Attachment H-1 Policies and Procedures Manual*.

#### **4.4.3. Release Management**

The change control process facilitates the definition of the scope of each release. For a full description of the Change Control Process, please review *Attachment G-4 Change Management Plan*.

### **Application and Infrastructure Releases**

There are two types of releases: application and infrastructure. Releases are deployed in maintenance windows per the Vendor's published schedule. Application releases include new

applications/services and requests for change approved through the CCB; while infrastructure releases include patches and required upgrades and address other internal maintenance requirements for the Texas.gov Program.

### **Emergency and Expedited Releases**

For emergency and expedited releases, the Change Manager will follow the escalation and emergency procedures described in *Attachment H-1 Policies and Procedures Manual* to obtain approval for a release as described in *Attachment G-4 Change Management Plan*.

#### **4.4.4. Configuration Management**

Configuration Management (CM) includes both the configuration of the technology (hardware, software, and network) and the configuration of the documentation (plans, policies, reports, and guides). Management and maintenance of the documentation is controlled and facilitated through the Program Dashboard. This section defines the CM process for the technology and addresses the tools, reports, and guidelines for making changes in a measured and controlled fashion.

### **Objectives**

From a broad perspective, CM has four objectives as defined in by ITIL:

- CM tracks all configuration items (CIs) at an appropriate level of detail in the organization.
- CM provides accurate information to other process areas.
- CM supports incident, problem, and Change Management Processes.
- CM routinely verifies environment specific configurations against stored configurations and works to correct discrepancies.

### **Scope**

Configuration Management describes and manages the elements of the controlled environment, details of those elements, and their technical relationship in order to support the needs of the business.

Configuration Management establishes the scope (what the CM process will be applied to), the Configuration Item level, and the key attributes. Configuration Items are entered and maintained in a single, centrally managed, trusted source of record, the Configuration Management Database (CMDB).

- Configuration scope delineates the services critical to the business and their component systems, specifically those services that would have a negative or detrimental impact on the business due to an outage, degradation or risk of degradation to a service.
- Configuration Item level delineates the hierarchical relationships of the CIs, as mandated by business need (gathering only those details that contribute to value add within the Configuration Management process).

- Key attributes define the level and type of detail that will be collected to manage CIs to meet business needs, whether in troubleshooting, deployment or decommissioning.

## Production Processes

The production Texas.gov CMDB and Definitive Software Library (DSL) are updated at the completion of each normal, maintenance, or emergency change activity. This information becomes available to problem resolution groups as needed to help assess risk and impact when problems or incidents are reported. Updates are also made to the Texas.gov CMDB and DSL when the Data Center Services (DCS) support staff makes updates or changes to the environments that are supported by the DCS vendor. Since the Vendor participates in the DCS change control process, updates that occur outside the Texas.gov processes are captured in the Texas.gov CMDB and DSL once completed.

On a quarterly basis, a discovery sweep of the environment is conducted and a “true up” to the current CMDB is completed. All variations are reported to Vendor’s Director of Technology and a root case analysis is conducted to identify and resolve the discrepancies.

## Roles and Responsibilities

Figure 28 describes the roles involved in the Configuration Management functions. Low-level CM activities, such as check-in/check-out of artifacts within the version control tools, are not defined as it is assumed to be the responsibility of all team members.

Figure 28. **CM Roles and Responsibilities**

Role	Responsibility
<b>CM Librarian</b>	<ul style="list-style-type: none"> <li>• Ensures that engineering documentation is base-lined and under version control</li> <li>• Ensures that Project engineering artifacts are under version control</li> <li>• Administers the CM library.</li> </ul>
<b>Software Developer</b>	<ul style="list-style-type: none"> <li>• Ensures that development artifacts, i.e., source code, are under version control</li> <li>• Ensures the integrity of the software version control</li> </ul>
<b>Quality Assurance Tester</b>	<ul style="list-style-type: none"> <li>• Ensures that quality assurance (testing artifacts are under version control</li> <li>• Coordinates regression testing of software release.</li> <li>• Verify Requests for Change implemented in release.</li> </ul>
<b>Development Manager</b>	<ul style="list-style-type: none"> <li>• Authorizes builds to development environments</li> <li>• Establishes/maintains any required infrastructure for software development activities</li> <li>• Interfaces with team leads to rollout and monitor software development activities</li> <li>• Monitors version control and baseline management</li> <li>• Ensures the integrity of internal release configurations</li> <li>• Maintains build and release plan</li> </ul>
<b>CM Administrator</b>	<ul style="list-style-type: none"> <li>• Authors backup and restore procedures for project library (documents, code)</li> <li>• Configures backup software and ensure the integrity of backups</li> <li>• Restores project library from backup, as needed</li> </ul>

Role	Responsibility
Release Manager	<ul style="list-style-type: none"> <li>• Authorizes builds to operations controlled environments</li> <li>• Ensures the integrity of release configurations into operations controlled environments</li> <li>• Conducts physical configuration audits of releases to environments</li> </ul>

## Configuration Audits

The objective of a configuration audit is to monitor, manage, and update the configuration items within the document/artifact library. Consistent audits reduce errors and incidents. The Vendor's audit process for the Texas.gov Program consists of the following steps:

- Reviewing recorded changes to all configuration items and documenting discrepancies with the artifact and document versions.
- Referencing reports from the Change Management and Problem Management Processes with the audit procedures.
- Verifying the completeness and accuracy of both the current and historical configurations to report, resolve, and correct all errors.

Audits are conducted using automated tools, where possible, and through physical/manual checks and verification. The CM Librarian conducts a configuration audit each time a baseline is established to ensure that the baseline consists of the same set of files and versions described in the documentation. The Release Manager conducts a configuration audit for each release to an environment that is managed by technical operations.

### 4.4.5. Training and Communications

The Change Manager maintains training materials and makes training available to all resources (including any subcontractors) engaged in or impacted by the change control process. Training topics include:

- Explanation of the full set of components, processes, and activities which are under change management control.
- The full lifecycle of the Change Control Process including, change documentation, impact analysis, change prioritization, and other change-related activities.
- Change management tools such as, the Change Register, RFC documentation, and available reports.
- The roles and responsibilities of the resources involved in all aspects of change management.

The key objective of communications activities is to actively engage all team members and stakeholders to help them prepare for assessment and execution of a change. The specific objectives of these activities include:

- Create or leverage opportunities for people to have input.
- Engage stakeholders to promote ownership in the process.
- Implement a plan that will ensure appropriate development of the required knowledge to support new or changed Application and system functionality.

**4.4.6. Protocols, Feedback and Coordination of Activities**

Coordination between the State, other vendors, subcontractors, stakeholders, and users is key to successfully plan, manage, and implement changes to the Texas.gov Program. The relationships are defined in the Governance section in *Attachment H-1 Policies and Procedures Manual* and the defined governance principles shape and guide the interactions between the parties involved in or impacted by changes.

Figure 29. Coordination of Activities

Coordination Point	Description	Participation
<b>Change Control Board communication</b>	Ensures controlled changes are put into the environment with proper approvals and authority. (The detailed description of the functions, authority, responsibilities, members, report deliverables and meeting frequency for the CCB can be found in <i>Attachment H-1 Policies and Procedures Manual</i> )	Vendor, DIR, other vendors (DCS, TEX-AN), and Customers, as appropriate
<b>Change Management Process</b>	Documented in this section. Defines how changes are submitted, assessed, review/approved, implemented, released, verified and reported. Also defines Configuration Management for Texas.gov.	Vendor, DIR, Customers, other vendors (DCS, TEX-AN)

## **4.5. IT Infrastructure Management**

Infrastructure management is a critical component of Texas.gov Program operations and the policies and procedures controlling infrastructure management are detailed in this section. Infrastructure Management is defined as the management of essential operation components that make up the hardware platform, including policies, processes, and equipment, for overall effectiveness. Many of the activities for the infrastructure components detailed below are provided through Data Center Services (DCS) and TEX-AN contracts.

Among other purposes, Infrastructure Management aims to reduce complexity in the environment by adherence to standards, promote adaptability necessary for a changeable environment, and maintain effective change management policies and procedures.

The primary activities of infrastructure management are performance and availability monitoring, and patch management.

### **4.5.1. Performance Monitoring**

Performance monitoring includes the tools, routines and processes that ensure system and application functions are performing within normal parameters. Keeping the infrastructure in the Texas.gov environment available and responsive requires the coordinated efforts of the Vendor and DCS. The Vendor works closely with DCS Service Providers' resources to ensure access to its monitoring tools network is available and that monitoring is performed according to contractual requirements with the least amount of risk possible.

Monitoring tools are managed by authorized Vendor and DCS personnel and are configured to provide the data and information needed to monitor the environment to comply with contractual thresholds and expectations.

### **4.5.2. Performance Monitoring Procedures**

Performance monitoring provides alerts when the performance of a specific function, system or process falls outside normal parameters. Performance monitoring uses automated tools and routines together with manual checks to track and report on system performance, including but not limited to physical processes related to CPU, memory, and disk I/O. For more information on Performance monitoring, reference *Exhibit D Performance Criteria, Section 2.04 Performance*.

### **4.5.3. Availability Monitoring**

Availability monitoring includes the tools, routines and processes that ensure system and application functions are up and actively responding to requests. Keeping the infrastructure in the Texas.gov environment available and responsive requires the coordinated efforts of the Vendor and DCS. The Vendor works closely with DCS Service Providers' resources to ensure access to its monitoring tools network is available and that monitoring is performed according to contractual requirements with the least amount of risk possible.

Monitoring tools are managed by authorized Vendor and DCS personnel and are configured to provide the data and information needed to monitor the environment to comply with contractual thresholds and expectations.

#### **4.5.4. Availability Monitoring Procedures**

Availability monitoring tracks system and application availability according to defined service level goals and Texas.gov Program objectives. Availability monitoring uses automated tools and routines together with manual checks to track and report on system and application availability. The results of these activities are reported in a monthly basis and are further defined in *Exhibit F Reporting*.

#### **4.5.5. Patch Management**

Keeping the infrastructure in the Texas.gov environment up-to-date and secure requires the coordinated efforts of the Vendor and DCS. The Vendor works closely with DCS Service Providers' resources to ensure patching is performed according to contractual requirements with the least amount of risk possible.

Patch Management includes several distinct steps to be effective, including:

- Awareness of patches
- Testing of patches
- Deployment of patches, both normal and emergency

#### **4.5.6. Patch Awareness**

The Vendor uses a host of activities to enable us to remain up to date and ensure that users, including Operations and Development staff, are aware of the patch releases. This is done through email notifications, third party subscriptions, review of suppliers' web sites and support stages, and other information generally available to system support staff.

#### **4.5.7. Patch Testing**

New patches are applied to the test environment allowing Vendor staff to verify the installation and validate the patches perform as expected. After a period of time in the test environment without incident, the patch is applied into the stage environment. This environment is "near-production" and allows an opportunity for quality assurance staff to test performance and other system and application functionality. Once all testing is complete, the patching is installed in the production environment.

#### **4.5.8. Patch Deployment**

All patches are released into the production environment in a controlled manner to ensure visibility, proper approval and review, and risk management. Deployment of the patches into the

production environment follow the change management process documented in *Section 4.4 Change Management*.

#### **4.5.9. Strategic Planning**

Strategic planning defines and documents the strategic technology roadmap for the Texas.gov Program. Strategic planning provides a reference for daily tactical activities and is used to establish capacity, performance, and availability thresholds for future initiatives. The Architecture and Standards Board (ASB) is the governance committee that advises the Vendor in the development of strategic technology plans for the Texas.gov Program.

### **4.6. Problem Management**

Problem Management includes the comprehensive strategy and methodology for identifying, assessing, reporting, managing, and resolving problems. Problem Management differs from Incident Management, where the goal is an immediate response to minimize the adverse effects of any interruption to an application or service.

Where Incident Management is focused on resolving the issue as quickly as possible, Problem Management is designed to look at the bigger picture to try and define the source of those Incidents and deal with that root cause; thus preventing future, repetitive Incidents. Problem Management is a process that looks to increase program quality by managing all problems through their lifecycle with the primary goal of preventing future incidents from occurring and minimizing the impact of any that cannot be prevented. Preventing Incidents through root cause resolutions promotes strong application performance and customer satisfaction.

The objectives of Problem Management include:

- Reducing the number and impact of service failures
- Reducing the number of repetitive Incidents
- Reducing the frequency and cost of service problems
- Improving the quality of Change and Release Management

Problem Management is an iterative process to consistently and reliably identify, track and resolve problems in a timely and efficient manner. Problems are frequently identified through Incident Management (see *Attachment H-1 Policies and Procedures*).

Upon identification of Incidents, Problem Management is focused on identifying the root causes that may lead to repeated Incidents which in turn may negatively impact timelines, resources, security, or customer satisfaction.

This section focuses on the Vendor's Problem Management strategy for the Texas.gov Program's production environment. Any issues identified in pre-production environments are to follow the strategies outlined in the Program, Risk, and Change Management sections.

#### **4.6.1. Desired Outcomes**

The purpose of Problem Management is to minimize the impact of incidents by identifying root causes, logging known errors, providing and communicating workarounds, finding permanent solutions, and preventing recurrence of Incidents related to these errors. This process incorporates protocols and processes that provide clear instructions for handling problems to maintain and protect the stability and integrity of the Texas.gov Program.

The Vendor's Problem Management for the Texas.gov Program aims to ensure:

- Clear roles,
- Defined process flows,
- Strong communications protocols,
- Complete tracking of Problems to resolution,
- Full Reporting of Problems, and
- Continual Process improvement.

#### **4.6.2. Roles and Responsibilities**

The following outlines the individual and group roles and responsibilities within the Vendor's Problem Management approach.

##### **Level 1 / Service Desk**

The Service Desk is the primary support channel for the Texas.gov Program's Customers and Businesses. Additionally, the Service Desk acts as an escalation point from the Help Desk to assist Constituents and other end-users with issues that could not be resolved by the Help Desk. Other Service Desk duties include Incident and Help Desk Management, and specific responsibilities include:

- Providing the first and single point of contact for Texas.gov service and application related issues for Customers and Businesses throughout the entire lifecycle of an Incident, with the primary goal of restoring normal service as quickly as possible.
- Responding to incoming Incidents via phone, email, and Help Desk escalation; perform troubleshooting, mitigation and root cause in an effort to resolve, and providing workarounds or escalation to Level 2 / Support Teams according to defined procedures.
- Recording, categorizing, prioritizing, and closing Problem tickets, Incident tickets, and Service Requests using the ticket tracking system, while keeping users informed of progress.
- Communicating Outages and Impairments with various groups, internally and externally, at the onset of, during, and at the conclusion of an Incident.
- Creating, maintaining, and documenting updates for applications or services.

- Performing continuous Incident analysis, classification, and trending of Incidents and seeking to proactively resolve Incidents.
- Identifying recurring Incidents and recording them in the Problem Management system.

### **Level 2 / Support Staff:**

The Vendor's Level 2 support staff are subject matter experts, typically Technical Operations staff including System Administrators, Database Administrators, Developers, etc.

Responsibilities include:

- Investigating and diagnosing Incidents.
- Providing periodic updates to Level 1 / Service Desk on progress of Incident closure.
- Resolving Incident, or escalating to lateral support team (e.g. Internal SysAdmin to Network) and/or Level 3.
- Providing steps taken to resolve Incident in the Incident Management ticketing system and moving Incident tickets to "Resolved".

### **Level 3 / Vendor Services:**

Level 3 support is made up of external vendor support teams. These are typically third party vendors and/or cross-organizational support team (e.g., DCS, ATOS, Oracle). Responsibilities include:

- Receiving escalations from Level 1 and Level 2 support.
- Providing last-level support to the Customer and/or Vendor – duties and responsibilities based on type of Incident classification (e.g., hardware Incidents are routed to a hardware 3rd party vendor).
- Communicating progress, results, and resolution to the Customer and Vendor.

### **Continual Service Improvement (CSI) Operations:**

The Vendor's Continual Service Improvement (CSI) Operations team helps achieve the goals of project delivery and operational maturity. Working closely with Development, Operations, and Security teams, the CSI Operations team builds expertise and documentation around the application architecture, database model, system architecture, and security infrastructure. CSI Operations is responsible for aiding with short-term and mid-term solutions as well as delivering the long-term solutions to problems that are identified through the Problem Management process.

Responsibilities include:

- Automation scripts
- Deep production support for newly deployed applications
- Troubleshooting for reported issues and problem resolution
- Escalation/crisis technical leadership

- Building, monitoring and metric collection capabilities
- Expanding on the documented production support manuals/run books

### **Service Desk Manager**

The Vendor's Service Desk Manager is responsible for the day-to-day operations of the Service Desk and the Service Desk staff, including monitoring, managing, and reporting on the performance, availability, and reliability of services to Texas.gov Program Customers. Ensuring Service Level Agreements (SLAs) are achieved in accordance with Customer Agreements and Texas.gov Master Agreement contracts is fundamental.

The Service Desk Manager oversees incident and problem management, and service request fulfillment. Responsibilities include:

- Managing day-to-day Service Desk operations and supervision of Service Desk staff.
- Managing and collaborating with third party Help Desk Vendors and ensuring their performance and provision of services and quality is in line with or exceeds Texas.gov Program expectations and contractual obligations. This includes:
  - Maintaining updated escalation policies and procedures
  - Providing new and updated training manuals, FAQs and coordinating application demonstrations for new or major rewrite applications and services
  - Conducting quarterly in-person meetings
  - Providing feedback on an as-needed basis to Help Desk Vendor managers on positive and negative trouble ticket examples
  - Conducting random audits of Help Desk processes by phone and e-mail
- Being accountable for the overall management of Incident, Service Requests, and Problem Management, including logging, tracking, categorizing, escalation and resolution of issues in line with defined SLAs.
- Building service relationships with Texas.gov Customers; conducting and/or attending service reviews for Customers on demand to review Incident and Problem reports, and opportunities to improve service, quality and processes.
- Developing and maintaining Incident Management Process, in accordance with Texas.gov Master Agreement.
- Ensuring that documented and standardized methods and processes are developed and used for efficient and permanent resolution of problems identified by the Problem Management Process and ensuring there is a balance among the key components of a good service management environment – people, process, and tools.
- Serving as a Member of the Change Control Board and ensuring Customer concerns are represented.

- Assuming responsibility of the Problem Manager role: identification and prioritization of issues classified as Problems.

### 4.6.3. Process

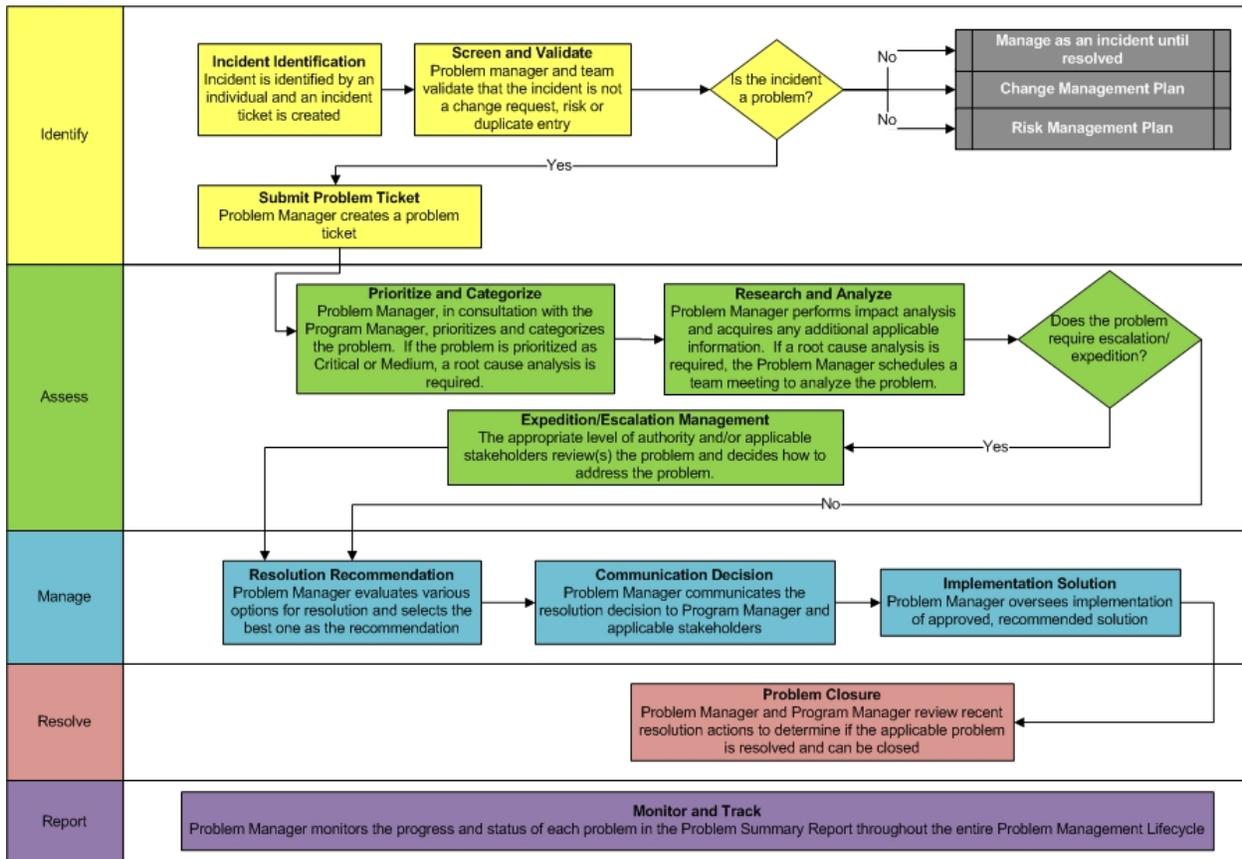
This section defines the five phases of Problem Management, as well as the activities associated with each phase that will drive the definition, identification, categorization, prioritization, logging, communication, resolution, and closing of problems, as well as detailed Problem Management procedures, such as escalation management.

Problem Management for the Texas.gov Program aims to ensure clarity of roles, define process flows, establish communications protocols, track problems to resolution, and process improvement in a continuous feedback loop. The processes and standards that apply to five distinct steps that structure the Problem Management process are defined in detail below:

- **Identifying Problems** – The first step in Problem Management identification generally happens through the occurrence of an Incident as identified through Incident Management and Level 1/Service Desk.
- **Assessing Problems** – The assessment phase takes place through the root cause analysis and evaluation of the underlying problem that caused the incident to happen.
- **Managing Problems** – Managing the problem includes making the best decisions based on assessment and overseeing communication and implementation of the solution.
- **Resolving Problems** – Resolving the problem is accomplished through executing a detailed list of preventable measures to avoid future occurrences.
- **Reporting Problems** – The reporting process is key to ensuring that all preventative measures identified during the resolution process are fully documented and completed in a timely manner.

The flow diagram in Figure 30 provides a high-level overview of the Problem Management process and identifies the five process steps and associated activities.

Figure 30. Problem Management Process Flow



For each of the steps provided in the above illustration, a number of associated tasks and activities must be completed within the Problem Management process. This process ensures accurate communication among the project team and ensures compliance with standards and policies.

#### 4.6.4. Activities

The Vendor’s Problem Management approach is both proactive and reactive. Proactive Problem Management identifies and solves problems and known errors before they occur. Reactive Problem Management processes address solving problems in response to one or more active or closed Incidents.

A problem is defined as the unknown, underlying cause of one or more Incidents. A known error is a subset of a problem for which the root cause is known and a work-around has been identified.

Problem Management applies to problem control, error control, and proactive problem management, with specific attention and detail applied to major problems. ServiceNow is the tool that the Vendor uses to manage the processes for problems and incidents. It features initial

Problem capture, tracking, and logging throughout the [problem lifecycle to resolution and closure. Figure 31 displays screen shot of ServiceNow's Problem ticket.

Figure 31. ServiceNow Problem Management

The screenshot shows the ServiceNow Problem Management form for ticket PRB0001083. The form is organized into several sections:

- Header:** Number (PRB0001083), Opened (12-31-2015 09:24 AM), Opened by (Calvin Thornton), Problem state (Open).
- Configuration:** Configuration Item, Business Service, Severity (4 - Low), Category, Subcategory, Environment, Data Center(s), Top 10 Problem, Proactive Problem, Reactive Problem, Short Description.
- Assignment:** Assignment group, Assigned to, Known error, Create Knowledge, Watch list, Work notes list.
- Description:** A large text area for the problem description.
- Workaround:** A text area for the workaround.
- Work notes:** A large yellow-highlighted area for work notes.
- Tenant:** Enterprise.
- Activity:** Activity (tab), Activity (list).
- Buttons:** Save and Return, Save.

The primary activities for Problem Management are described in the following sections.

## Problem Detection

Problem detection occurs within Incident Management where incidents are reported. The Service Desk Manager is responsible for assessing reported incidents on an ongoing basis. This practice can be in a reactive or proactive manner, involve various Vendor support teams, external support teams (e.g. CDC, Data Center Service Providers), or third-party suppliers. Not all incidents migrate to the Problem Management process, however incidents that have a widespread or significant impact or occur frequently (whether that be daily or over time) are evaluated within Problem Management.

## Logging

The purpose of logging a problem is to track details associated with the problem. This includes timestamps, assignees, lateral escalations, categorizations, and impact and urgency of the problem. Logging is also important to track how the problem was resolved and if a subsequent known error or workaround is associated in the Problem Management ticketing system.

## Categorization

The Problem Management ticketing system provides a categorization mechanism for problem classification. The Incident or Problem Manager entering the problem ticket defines the impact and urgency of the problem and the ticketing system will calculate the priority.

During the lifecycle of the problem, the impact and/or urgency may be updated to reflect status of the problem. The Incident or Problem Manager, support group leads, and managers are authorized to view and update problem tickets. Only the Incident/Problem Manager is authorized to enter problem tickets.

### Prioritization

Prioritization is an algorithm that is automatically generated by the Problem Management ticketing system. This calculation is based on two inputs: urgency and Impact (see Categorization). Urgency is the assessment of how quickly a solution is required. Impact is a measure of the effect of an incident, problem, or change on business processes. Impact is often based on how service levels will be affected. Figure 32 shows the Prioritization scale.

Figure 32. Problem Prioritization Definition

Problem Priority	Description	Actions
<b>Critical</b>	An Incident that results in total or substantial functionality loss to a Texas.gov application or service.	<ul style="list-style-type: none"> <li>• <b>Notification to DIR and Customer (see Incident Management)</b></li> <li>• <b>Conduct Root Cause Analysis</b></li> <li>• <b>Identify Preventative Actions</b></li> <li>• <b>Develop Corrective Actions</b></li> </ul>
<b>High</b>	The problem causes partial impairment to an application in the Production environment, but does not inhibit overall functionality.	<ul style="list-style-type: none"> <li>• <b>Perform Impact Analysis</b></li> <li>• <b>Notification to DIR and Customer, if Impact is Extensive or Significant</b></li> <li>• <b>Log Problem Ticket</b></li> <li>• <b>Root Cause is performed at the discretion of Texas.gov Senior Leadership</b></li> <li>• <b>Identify Preventative Actions</b></li> <li>• <b>Develop Corrective Actions</b></li> </ul>
<b>Medium</b>	The problem causes repetitive and proactive resolution activities or cosmetic impairment, but no loss of functionality.	<ul style="list-style-type: none"> <li>• <b>Perform Trend Analysis (frequency of Incident, mitigate risks associated with resolution)</b></li> <li>• <b>Perform Impact Analysis, but not a Root Cause</b></li> <li>• <b>Evaluate workaround as permanent solution or pursue Change Control process for permanent resolution</b></li> </ul>
<b>Low</b>	<b>The problem is deemed to be a risk only.</b>	<ul style="list-style-type: none"> <li>• <b>Problem tracked through Problem Management</b></li> <li>• <b>Appropriate Problem Solving team informed/consulted</b></li> </ul>

## Investigation and Diagnosis

Investigation and diagnosis is fundamentally the analysis of the root cause(s) of the problem. The Problem Manager, in collaboration with other Vendor stakeholders or other team members, work together to identify the best resolution path. This stage often utilizes tools and problem solving techniques such as the Ishikawa or “Fish Bone” diagram, internal Incident briefings, and formal root cause analysis with Vendor team members.

The goal is to develop a permanent resolution, but oftentimes a temporary solution or workaround is essential to restore immediate business functionality. The problem ticket is not closed unless the workaround is deemed an appropriate permanent solution. In cases where a workaround is developed, a “Known Error Record” is created within the Problem Management ticketing system to track and utilize for potential future events.

## Resolution

The Incident and/or Problem Manager oversees the resolution of the problem and changes the status of the applicable ticket to “resolved” state with the proper resolution category identified in the ServiceNow system. Resolutions of problems are defined as either the workaround or a submission of a permanent change within the Change Management process.

## Closure

A Problem is closed under two (2) conditions:

- The workaround is an acceptable method of resolving the problem and therefore, the ticket can be closed.
- Invocation of the Change Control process and subsequent changes to resolve the problem have been approved, implemented, tested, and verified through the Change Control process.

### 4.6.5. Root Cause Analysis

The Service Desk Manager performs an in depth review of the problem based on a formal process known as “Root Cause Analysis”. This process begins after a workaround is established or a permanent solution to the Incident is implemented. The focus of Root Cause Analysis is on continuous improvement by identifying corrective actions and developing a preventative action plan. A Root Cause Analysis is conducted when:

- The incident involves downtime to a Texas.gov service or application
- Requested by senior Vendor leadership team member
- Significant process or communication failures lead to service degradation

The Root Cause Analysis is an internal Vendor process used as a staff developmental and gap analysis tool. Root Cause Analysis details are shared with DIR through the Root Cause Analysis Executive Summary Report and quarterly reviews.

## Preventative Actions

The Service Desk Manager, along with key stakeholders and support team members engaged in the resolution of a problem, collectively develop preventative actions during the Root Cause Analysis. Identifying preventative actions is a proactive process to identify opportunities for improvement and prevent a recurrence of incidents.

Preventative actions often lead to action plans in which the resultant opportunities for improvement are prioritized, assigned, and tracked to completion. If the preventative action requires a change at the system or application level, then standard Change Control processes would apply. The Service Desk Manager engages with the Change Manager and Program Manager to ensure the Change Control process is followed.

## Corrective Actions

In the same manner that preventative actions are identified, prioritized, and logged, the Service Desk Manager oversees corrective actions with appropriate support team members, outside support groups, or third party suppliers. Corrective actions are a change implemented to address a weakness identified as part of the standard Root Cause Analysis process. If the corrective action requires a change at the system or application level, then standard Change Control processes would apply.

### 4.6.6. Problem Management Policies

#### Communication

Problem Management communication originates with the Incident Management communication plan (see *Attachment H-1 Policies and Procedures Manual*). Incidents that involve impairments or outages are communicated immediately as quickly as possible to DIR, the Customer, and/or specific agencies. Agency personnel have the ability to self-subscribe to incident communication lists.

Level 1/ Service Desk coordinates incident communication. Additional updates may be requested by the Customer or by Vendor management at any time during the incident lifecycle. The initial notification is provided at the diagnosis phase when information on the incident may not be fully available. The initial notification includes the current known description of the issue and impact to the portal, applications, or payment system.

Ongoing communication is provided by the Level 1/ Service Desk in the form of progress updates. The progress reports are based upon information provided to Level 1 / Service Desk by either the Level 2 / Technical Team (who will also represent communications for vendors and suppliers) or an external support team (e.g., Data Center Service Providers, NIC Corporate).

When the Incident reaches the resolution and recovery stage, the Level 1 / Service Desk will provide a final incident resolution notification.

Level 1 / Service Desk coordinates incident communication. Additional updates may be requested by the Customer or by Vendor management at any time during the Incident lifecycle. A 24-hour initial incident report is provided for Incidents that result in downtime, and, if root

cause is not identified or additional information needs to be disseminated, a full report is provided in seven (7) calendar days following the incident.

Problems are identified via internal ticket analysis collected from agency and partner requests, as well as through repeat incidents or escalations. Identified problems are tracked and reviewed regularly during reoccurring problem management meetings. The evaluations made in these meetings lead to change requests where solutions are implemented and released in maintenance windows. The communication of these problems, which later become changes, is provided in *Attachment H-1 Policies and Procedures Manual* and *Section 4.4 Change Management*.

### **Problem Response**

“Problem response”, as defined in *Exhibit D – Performance Criteria*, is the acknowledgement by the Vendor of a severity ‘X’ problem assigned by the Help Desk. In accordance with Help Desk management, the Help Desk escalates incidents that are not resolved at the Help Desk level or incidents that are generating a higher than normal Customer call volume.

The escalation path is from the Help Desk to the Vendor’s Level 1 / Service Desk. The Level 1 / Service Desk escalates issues that are unable to be solved at that level to the Vendor’s Level 2 / Support Teams.

Problem tickets are created by the Service Desk Manager or other authorized person to track multiple incidents or incidents with a Critical Severity Level.

Severity Levels definitions, as documented in the *Defect Levels Severity Table*, are:

- Severity 1 (Critical): 15 Minutes
- Severity 2 (High): 30 Minutes
- Severity 3 (Medium): 60 Minutes
- Severity 4 (Low): 240 Minutes

### **Incident Report**

The Vendor reports incidents to DIR that result in downtime or impairment as soon as the incident is detected. The initial Incident report is submitted to DIR within 24 hours of the Incident. Detailed incident reports are provided to DIR per *Exhibit D – Performance Criteria*.

### **Availability and Reliability**

The Vendor gathers information collected as part of the overall Problem Management process for the use of availability and reliability reporting.

### **Executive Summary**

The Vendor provides a summary to DIR of incidents and problems that result in downtime to DIR in the form of an executive summary. These summaries may be reviewed during quarterly reviews on the progress and performance of the Texas.gov Program.

## **4.7. Help Desk Management**

The Help Desk seeks to increase Texas.gov Program quality by acting as a point of entry for inquiries and issues with the primary goal of responding to these inquiries and providing guidance and application support and assistance for Constituents and Customers of Texas.gov.

The purpose of this section is to provide an overview for the Vendor's Help Desks and define the Help Desk relationship to the Service Desk. The Service Desk Manager manages third-party Help Desk Vendors utilizing multiple methods and strategies to ensure service for constituents utilizing Texas.gov services is in line with or exceeds expectations. A few of these strategies are discussed in the upcoming Help Desk Management sections, including:

- Incident coordination between contracted Help Desks and Service Desk (4.7.1)
- Help Desk support features (4.7.2)
- Help Desk performance and measurement (4.7.2)
- Help Desk escalation process (4.7.4)
- Vendor communication strategies to ensure operational alignment (4.7.4)

### **4.7.1. Help Desk Roles and Responsibilities**

The following outlines the individual and group roles and responsibilities within the Vendor's Help Desk management processes.

#### **Help Desks**

Help Desks are the initial contact for Constituents that require assistance with the Texas.gov portal and applications. Incidents resolved at this level are frequent in nature, such as general questions, navigation related, or request based queries (e.g., request for receipt, DPS password reset). Responsibilities include:

- Providing technical support for hardware and software by telephone, e-mail, chat and remote utilities for resolution of user issues to ensure quality support and professional standards on each contact.
- Managing time effectively in order to obtain performance criteria objectives while creating a strong and efficient user experience.
- Analyzing computer software and system configurations to identify user-reported issues and recommend corrective actions.
- Maintaining accurate records of user information to track user history and reporting recurring problems to the Vendor Service Desk.
- Escalating complex issues to appropriate team following user-specific escalation procedures.
- Performing and completing related tasks and projects as assigned.

- Researching, preparing, and distributing Incident reports following service interruptions.

### **Level 1 / Service Desk**

The Service Desk is the main support channel for Customers and Businesses who utilize the Texas.gov Program. The Level 1 / Service Desk is staffed with highly skilled personnel who are familiar with the wide range of Texas.gov applications and services. They strive to provide professional, knowledgeable, and expedient assistance to Customers and Constituents at all times.

Escalation to Level 1 / Service Desk occurs when the Help Desk is unable to resolve the incident and/or service request, and/or if an incident is deemed “high impact/high urgency” in nature. Other duties include incident and problem management. See *Section 4.6 Problem Management* above for detailed description of the Level 1 / Service Desk.

### **Service Desk Manager**

The Vendor’s Service Desk Manager is responsible for the day-to-day operations of the Service Desk and the Service Desk staff, including monitoring, managing, and reporting on the performance, availability, and reliability of services to Texas.gov Customers. Ensuring Service Level Agreements (SLAs) are achieved in accordance with Customer Agreements and Texas.gov Master Agreement contracts is fundamental.

The Service Desk Manager oversees incident and problem management, as well as service request fulfillment. Additionally, the Service Desk Manager manages third-party Help Desk Vendors to ensure service for Constituents utilizing Texas.gov services is in line with or exceeds expectations. See *Section 4.6 Problem Management* for a detailed description of the Service Desk Manager

## **4.7.2. Support Features and Policies**

The Vendor’s Help Desk support is designed to provide welcoming, prompt, and effective solutions to the diverse group of Customers and Constituents served by the Texas.gov Program.

### **Multilingual Support**

Help Desk services are offered in both English and Spanish along with access to voice translation in 72 languages. Translation services are provided within one (1) minute via a conference call to ensure users that contact the Help Desk have minimal wait times.

### **Dedicated Agents**

The Vendor ensures that Help Desk personnel maintain a high level of professionalism, as they are acting as representatives of the Texas.gov Program. Quality assurance scores and overall job performance are used to determine which agents are qualified to staff the Help Desk as dedicated agents.

## **24x7 Call Center**

A live call center agent handles user phone calls, emails, and live chats 24 hours a day, 7 days a week. This ensures that service is prompt, responsive and tailored to the request.

## **Live Chat**

The Vendor's Help Desk responds to live chat requests via a published link on the main page of the Texas.gov portal.

## **Email Support**

Vendor responds to email inquiries via published Help Desk email addresses.

## **Webmaster Emails**

Vendor Help Desk accepts and responds to webmaster emails when they are received from Constituents or Customers. If the Help Desk is unable to adequately address an email inquiry, it is escalated to the Service Desk and addressed promptly. Emails that are escalated are tracked using an incident ticketing system.

## **Disaster Recovery and Business Continuity**

The Help Desk manages disaster recovery and business continuity through geographically disparate sites and proper business continuity procedures.

## **Call Overflow**

If the system predicts a Call Answer Time of more than five (5) seconds for the Help Desk, the call is routed to one of the redundant facilities in Austin, Texas or San Marcos, Texas.

## **Interactive Voice Response (IVR)**

A key component of the Help Desk is the automated interactive voice response (IVR) system. As the system handles hundreds of simultaneous calls, the IVR system allows Constituents and Customers to obtain real-time information pertaining to an application and/or service status.

IVR is used for pre-recorded or dynamically generated audio to provide information or further direct callers on how to proceed. The IVR menu is designed and implemented based on top call drivers. For example, for the Texas Department of Criminal Justice's eCommDirect application, the caller is advised of the following agency business rule:

*"Please note: The online commissary is closed daily from 8:30 PM – 4:00 AM Central Standard Time. Individual items can be purchased up to a maximum of \$50 per quarter."*

IVR is also used for recorded announcements when an application is experiencing an outage or an impairment to provide critical information to callers. This proactive approach reduces hold time and abandon rates, and increases customer satisfaction by setting expectations of application availability.

The IVR system gathers statistics on every automated call. This information is gathered and utilized, along with live agent processing information, to continuously improve the system, identify bottlenecks, and improve the overall operational efficiency.

Use of outage and impairment IVR recorded announcements must be authorized by the Service Desk Manager. The Service Desk Manager validates the impact of an incident resulting impairment or outage and makes the determination to post an IVR recorded announcement (see *Escalation Process*).

## **Hardware and Field Services Support**

For specific Texas.gov Program-related requirements, the Help Desk provides value-added services for the delivery of new or refurbished hardware, reclamation of hardware no longer used, and enhanced troubleshooting of hardware issues. The Help Desk coordinates with hardware and field services subcontractors to provide the following Hardware Support services:

### ***New Hardware***

In such cases where new hardware is required, Hardware Support delivers the required hardware to a Customer site and assists personnel at the site with the setup of the new hardware.

### ***Level 2 End User Support***

In such cases when Level 1 Help Desk cannot resolve a hardware-related incident, Help Desk escalates the incident to Level 2 End User Support for enhanced troubleshooting.

### ***Hot Swap***

In such cases that Level 2 End User Support is unable to resolve an incident, a Hot Swap is executed. Level 2 End User Support delivers new or refurbished hardware to a Customer site and includes instructions for the return of the damaged or non-working hardware. The Customer is responsible for returning the defective hardware according to the supplied instructions. When the defective hardware is received, it is either marked as defective or repaired per warranty instructions and placed in inventory.

### ***Reclamation***

For hardware no longer used, Hardware Support coordinates the return of the hardware with the Customer site.

### ***Field Services***

In such cases when the Service Desk Manager believes it is advantageous to perform a service as described above using an on-site visit, Hardware and Field Services personnel are dispatched to the site to perform the service.

## **Reporting and Performance**

In accordance with reporting requirements within *Exhibit F* and *Attachment H-1 Policies and Procedures Manual, Section 5.4* the Help Desk Vendor provides regular, scheduled reports, including Help Desk Process Improvement. The Help Desk Vendor also compiles and reports on statistics of Help Desk contacts and resolutions for the month, by Customer and application; Help Desk usage, metrics, and contact drivers.

## Performance Criteria

In accordance with *Exhibit D Performance Criteria, Section 2.02 (d)* - Vendor provides continuous improvement of the performance criteria over the life of the Master Agreement. Once baseline performance criteria were mutually accepted, DIR and the Vendor reviewed all of the service levels beginning March 1, 2011 and on a continuing annual basis.

Modifications to the expected service level and remedy units are based on the following methodology:

2.02 (d) i - Each modified expected service level will be reset to the average of the six highest reported actual results (for example, the average of 99.60% is higher than the average of 99.40%). If fewer than six reported actual results exceeded the existing expected service level, the modified expected service level will be reset by taking the six highest monthly actual results, replacing each such actual result that is below the existing expected service level with the existing expected service level, and dividing the sum of the resulting six numbers by six.

2.02 (d) ii - In no Event shall any single increase in an expected service level exceed ten percent (10%).

2.02 (d) iii - In some cases, as the expected service level is increased, the Parties can agree to modify the remedy unit as well.

## Service Level Metrics

Service level metrics are located in *Exhibit D Performance Criteria, Section 2.10*. Help Desk metrics include:

- Average Call Answer Time – The elapsed time between when a person selects a service option (initiates live chat or selects option from IVR menu) and the time the phone call is answered by a live support technician ready to start working the request.
- Abandon Rate – The percentage of phone calls to the Help Desk that are abandoned by the person after that person selected a service option and prior to a live support technician answering the phone call.

## Expected Service Level

Expected Service Levels are detailed in *Exhibit D Performance Criteria, Section 2.10* which describe inclusions, exclusions, coverage times, the algorithm used to determine the service level, and the reporting tool used to deliver the monthly reports for the following metrics:

- The Average Call Answer Time will not exceed 6.5 seconds.
- The Abandon Rate will not exceed 1.5% of phone calls to the Help Desk in a given month.

## Help Desk Performance

The Help Desk Vendor provides monthly metrics as described in *Exhibit D Performance Criteria*. If the Help Desk Vendor fails to meet predefined criteria, the Service Desk Manager and Contracts and Compliance Team prepare a Corrective Action Plan. The Service Desk Manager works directly with the Help Desk Operation Manager to ensure identified actionable items are addressed accordingly.

## Continuous Improvement Efforts

As part of the continual process improvement efforts required by Exhibit D, the Vendor has adopted an industry-proven Information Technology Infrastructure Library (ITIL) methodology and uses this approach to manage all incidents through their lifecycle. The goal of Incident Management is to minimize the adverse effects of any interruption to a Texas.gov application or service. Details on the ITIL process can be found in the *Attachment H-1 Policies and Procedures Manual, Section 8 Incident Management Process*.

### 4.7.3. Tools and Procedures

#### Incident Ticketing Integration

The ticketing system integration ensures Incident tickets, originating at the Help Desk, are escalated in an automated and timely fashion to the Service Desk. This ensures ticket escalations are consistent with the overall Incident Management process as outlined in the *Addition to Attachment H-1 Policies and Procedures Manual, Incident Management Procedure*.

Incident tickets are generated with agency and application information, user details, and description of the issue. Tickets requiring agency intervention are routed to the appropriate contacts in accordance with standard policies and procedures with a given agency.

#### Call Analytics

In order to identify opportunities to drive down call volume, the Vendor can assess the call outcomes and look for patterns. The Vendor uses this data to assess opportunities for improvement within applications such as functionality or content (i.e. text) changes.

Real-time reports of call volumes are constantly monitored and run manually by Help Desk personnel. Daily reports are broken down for each time of day and call volume is assessed in fifteen minute increments.

#### Help Desk Training

The Vendor's Service Desk provides training, training materials, and process documentation to the Help Desks, and the Help Desks participate in a standard training session, which includes Vendor personnel, to ensure a smooth hand-off prior to new application launches.

Training includes:

- Up-to-date Escalation policies and procedures
- Contact information for Vendor Service Desk and Escalation personnel

- Application User Guides
- Application FAQs
- Application demonstrations (for new applications and major application re-writes)
- Process documents pertaining to Help Desk, Service Desk, and Incident Management
- Agency policy changes

### **Quarterly Reviews**

The Vendor's Service Desk and Help Desk Vendor meet quarterly to review Help Desk activities. One or more Vendor teams may be involved in these quarterly reviews including but not limited to Contracts and Compliance, Marketing, Project Management, and Product Management. The review includes:

- Example reported issues/calls for quality assurance
- Upcoming releases
- Significant application changes
- Project pipeline for staffing projections
- FAQs and agent training material review
- Performance Plan
- Vendor or Customer marketing initiatives (if known) that have the potential to drive call volume

### **Quality Assurance Measures**

The Service Desk ensures that the Help Desk is providing exceptional service at all times. Measures taken to continually and randomly assess services provided to Customers and Constituents of Texas.gov include:

- Routine audits of service offerings by calling the Help Desk, initiating a chat, and sending an email. Support is measured by time to respond, agent knowledge, and Customer service abilities.
- Regular discussions with Help Desk Operations Manager to address day-to-day operational concerns and questions.
- Random review of recorded Customer calls to identify service weaknesses and opportunities for improvement.

The Service Desk Manager and Help Desk Operations Managers communicate regularly and frequently to address day-to-day operational issues and concerns. This communication encompasses Help Desk notifications of broken links, application behavior inconsistent with user guides, and customer relations, in addition to strategy discussions and escalations. This relationship ensures that the highest level of support is in place.

## Change and Release Management

The Service Desk Manager participates in Change and Release activities as described in the *Attachment H-1 Policies and Procedures Manual* and *Section 4.4 Change Management*. The Service Desk Manager is a non-voting member of the Change Control Board and assists during the evaluation process of proposed change requests. Incidents that require a Change follow the standard Change process.

All pertinent information pertaining to release schedules and downtime of applications and services are provided to the Help Desk in advance. Emergency maintenance is communicated to the Help Desk at the time that it is communicated to impacted Customers.

### 4.7.4. Help Desk Escalation Process

#### Severity 1 Escalation Process

The Help Desk Escalation Plan establishes the structure, policies, and procedures for the Service Desk and Help Desk for communicating and responding to severity 1 Incidents. Escalations and associated processes can flow bilaterally:

##### ***Incidents Identified by Service Desk***

Issues that involve impairments or outages, validated by Service Desk, are communicated immediately to the Help Desk by phone, text, and/or email. The Service Desk may request an IVR recorded announcement for incidents with a critical impact and advises Help Desk of impacted applications and services.

Individual Agencies may also request specific independent escalation measures. The Texas Department of Public Safety (DPS) Over-the-Counter (OTC) Communication Plan is an example of the Vendor's cooperation in developing an application specific incident response process to best serve the needs of the Customer.

##### ***Incidents Identified by Help Desk***

Issues that are detected by the Help Desk channel via common threads (e.g. multiple calls regarding the same issue within a 30 minute timeframe) require immediate notification to the Service Desk. A comprehensive list of contacts is provided to the Help Desk for after-hours notifications. The Service Desk begins investigating immediately and follows up with the Help Desk to validate initial reports. During the validation call, the Service Desk may request an IVR recorded announcement.

#### After-Hours Escalation Process

To ensure timely and successful resolution of Incident, the Help Desk Escalation Plan includes an after-hours process and comprehensive list of Vendor contact information in the event of an incident after hours. The list includes the following resources, in the order they are to be called:

- Service Desk After-Hours cell phone
- Service Desk Manager cell phone

- Directory of Quality and Service cell phone

### Incident Management Notifications

The Vendor’s Service Desk communicates incident information to Texas.gov Customers utilizing the communication process detailed in Figure 33 and in the form of the incident communication templates which are available in *Appendix A: Customer Communication Plan*).

The Help Desk is included on all formal incident communications throughout the incident lifecycle. Details and timeline of events (i.e. impacted applications, start time, end time, etc.) listed in Incident Notifications are subject to change following a root cause analysis (RCA) of the event. RCA and preventative actions are provided in the 7-Day Incident Report.

Figure 33. **Incident Notifications: Communication Process**

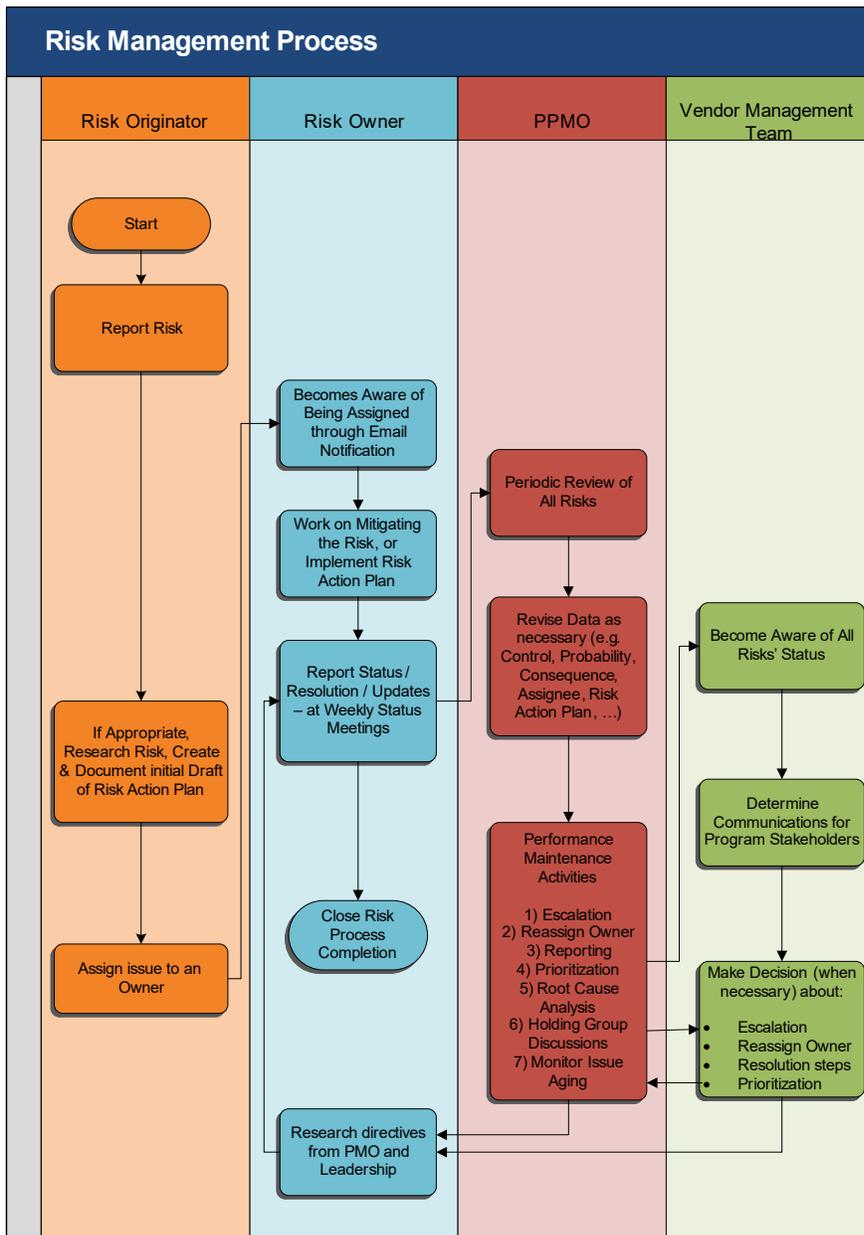
TACTIC	DESCRIPTION	RECIPIENT	SENDER	METHOD	SCHEDULE
Initial Incident Notification	<ul style="list-style-type: none"> <li>• Current known description of Incident</li> <li>• Impacted services and/or applications</li> <li>• Estimated resolution timeline (if available)</li> </ul>	TO: Self Subscribed Customers impacted by Incident, including Help Desk, Vendor Internal Staff, and DIR	Service Desk	Email from Service Desk functional mailbox	As soon as the non-performance issue is detected
Incident Notification Status	<ul style="list-style-type: none"> <li>• Updates to Incident description</li> <li>• Impacted services and/or applications</li> <li>• Estimated resolution timeline (if available)</li> </ul>	TO: Self Subscribed Customers impacted by Incident, including Help Desk, Vendor Internal Staff, and DIR	Service Desk	Email from Service Desk functional mailbox	At a minimum, every 2 hours for prolonged events, or as appropriate.
Incident Notification Resolution	<ul style="list-style-type: none"> <li>• Notification that Incident has been resolved</li> </ul>	TO: Self Subscribed Customers impacted by Incident, including Help Desk, Vendor Internal Staff, and DIR	Service Desk	Email from Service Desk functional mailbox	Immediately following Incident resolution

### 4.8. Risk Management

The purpose of Risk Management is to identify, avoid, manage, and mitigate program and project uncertainties that may adversely affect individual projects and/or the Texas.gov Program as a whole. The Vendor’s risk management plan aims to minimize uncertainties and adverse outcomes in order to promote application quality, customer satisfaction, and achievement of the program’s goals.

The Vendor’s methodology is comprised of a six-step approach illustrated by Figure 34 below:

Figure 34. Risk Management Process Flow



### 4.8.1. Managing Risk at the Project and Program Level

The Risk Management cycle of activities illustrated in the figure above is performed throughout the life cycle of a project and the Texas.gov Program. The methodology includes the means to document, track, and report risks to be assessed for their overall impact on the Texas.gov Program. The resulting tools and processes enable stakeholders to make informed decisions that mitigate risks, which may become barriers to the overall success of the Texas.gov Program.

#### Governing Risk

Governance is a central element to the success of the Texas.gov Program. As such, it is expected that the Vendor's governance entities will engage in project and program risk review and management as needed. *Attachment H-1, Policies and Procedures Manual (PPM)* defines the Texas.gov governance entities and their function, authority, and key responsibilities. In addition, the PPM describes a compliance policy to ensure the long-term success of the Texas.gov Program by appropriately managing the risks.

### 4.8.2. Identifying and Tracking Risks

#### Identifying Risks

Risks may be identified by any Texas.gov stakeholder at either the program or project level. DIR and Customers are expected to communicate any risk that should be tracked to the Vendor's Project Portfolio Management Office (PPMO) for program level risks and to the project manager for project-specific risks. Note that the Vendor's leadership team and project managers remain responsible for the management of a Texas.gov Program or project risk throughout its life cycle.

Once a risk is identified, the Vendor then logs and tracks risks using a Risk Register to report and discuss the list of identified risks. The Risk Register lists the elements that support a comprehensive view of and status for each risk.

Each risk identified is recorded as a "Risk statement" in the Risk Register. All risks identified with a risk statement comprise the Risk Register, which provides the detail for discussion and assessment at project meetings or by the project manager, leadership team and assigned risk owners.

#### Creating a New Risk Item in the Risk Register

When capturing a new risk item for the Risk Register, not only symptoms but also results must be considered. Therefore, the risk statement in the risk description includes what is causing the situation to arise (the condition) and the expected result (the potential problem or consequence). The format of a Risk statement is: condition, consequence.

#### Risk Statement Example

- Since the project sponsor will retire mid-way through the development process, we are likely to lose one of our chief decision-makers.

Since risks can occur at any time of the project, the Risk Management process is iterative. Therefore, Risk Management will continue throughout project and program life cycles as a distinct agenda item as needed to address key risks during regular project status meetings.

Program risks are qualified and tracked by the Vendor's leadership team; whereas project risk identification and tracking is the responsibility of the project manager and assigned risk owners, following the finalization of the project schedule.

### **Defining Risks**

During the risk identification process, only those potential events that could negatively impact program and project cost, scope, schedule, resource consumption, or quality may rate as risks.

#### **Examples of Risks**

- Because the team is using an early beta version of a new operating system, the project may be stopped by defects in the beta software.
- Because new Customers are added at least monthly, new requirements may be identified at any time.

#### **4.8.3. Assessing Risks**

Once identified and recorded, a risk goes through the risk assessment process for categorization, which is a prerequisite step for prioritizing risks. Categorizing risks is based on a risk's likelihood of occurrence as well as the potential impact on the project or program as a whole. The result of risk analysis is an understanding of which risks are significant enough to manage actively as a team and to track throughout a risk's life cycle.

With the help of a Risk Register, risks will be categorized by type. Examples may include:

- Budget/Financial
- Facilities
- Organizational and Change Management
- Other
- Performance (project, technical/operational, SLA)
- Requirement (new or regulatory)
- Resource (financial, human, or technical)
- Schedule
- Scope Change
- Stakeholder
- Technology and Technology Integration

Risk categorization is a key step in the risk assessment process. Categorization requires the owner or identifier to carefully analyze the identified or potential risk and validate associated

impacts based on this categorization. It also supports resolution by targeting those impacted by the Risk and requiring their inclusion in assessment, monitoring and mitigation activities.

Next, risks are analyzed on probability of the risk occurring; they are as follows:

- High
- Medium
- Low

Finally, risks are assessed on the likely severity of impact should the risk occur; a preferred technique to represent the magnitude of total loss is to use time (work hours or percentage of entire hours budgeted) to quantify total loss. Wherever possible, a monetary value is associated with each risk:

- Critical – Risk that would incur an effort impact of 91-120 hours or above or 16-20% or more of budgeted hours; it has the potential to prevent meeting project cost, schedule, or performance goals.
- High – Risk that would incur an effort impact of 61-90 hours or 11-15% of budgeted hours; it has the potential to prevent meeting project cost, schedule, or performance goals but at a lesser rate than a Risk of critical impact.
- Medium – Risk that would incur an effort impact of 31-60 hours or 6-10% of budgeted hours; it has the potential to delay meeting project cost, schedule, or performance goals.
- Low – Risk that would incur an effort impact of 30 or less hours or 5% or less of budgeted hours; it has relatively little impact on cost, schedule or performance goals.

Calculation of risk exposure is the last step in the process. Risk exposure is calculated in the Risk Register by multiplying the quantitative values for probability with those of impact that were mapped to each risk. Figure 35 illustrates the computation and the expected values that are then again summarized in Figure 36.

Figure 35. Calculating Risk Exposure

		Impact				
		Low	Medium	High	Critical	
Probability	Low	Multiply: 10% or 0.1 for Probability with 5% or 0.05 for Impact to obtain: Exposure 0.0050	Multiply: 10% or 0.1 for Probability with 6% or 0.06 for Impact to obtain: Exposure 0.0060	Multiply: 10% or 0.1 for Probability with 11% or 0.11 for Impact to obtain: Exposure 0.0110	Multiply: 10% or 0.1 for Probability with 16% or 0.16 for Impact to obtain: Exposure 0.0160	Exposure
	Medium	Multiply: 30% or 0.3 for Probability with 5% or 0.05 for Impact to obtain: Exposure 0.0150	Multiply: 30% or 0.3 for Probability with 6% or 0.06 for Impact to obtain: Exposure 0.0180	Multiply: 30% or 0.3 for Probability with 11% or 0.11 for Impact to obtain: Exposure 0.0330	Multiply: 30% or 0.3 for Probability with 16% or 0.16 for Impact to obtain: Exposure 0.0480	
	High	Multiply: 70% or 0.7 for Probability with 5% or 0.05 for Impact to obtain: Exposure 0.0350	Multiply: 70% or 0.7 for Probability with 6% or 0.06 for Impact to obtain: Exposure 0.0420	Multiply: 70% or 0.7 for Probability with 11% or 0.11 for Impact to obtain: Exposure 0.0770	Multiply: 70% or 0.7 for Probability with 16% or 0.16 for Impact to obtain: Exposure 0.1120	

Figure 36. Risk Exposure Values

		Impact				
		Low	Medium	High	Critical	
Probability	Low	0.0005	0.0060	0.0110	0.0160	Exposure
	Medium	0.0150	0.0180	0.0330	0.0480	
	High	0.0350	0.0420	0.0770	0.1120	

Based on the exposure values, risks can be prioritized as discussed in *Section 4.8.4* below.

#### 4.8.4. Prioritizing Risks

Risks are reviewed periodically based on their priority as part of regular project team and leadership team meetings. The following review schedule applies to project teams and governance bodies:

- Critical "**Purple**" Risks require the highest attention and focus and are reviewed daily.
- High-priority "**Red**" Risks require stepped-up attention and focus and are reviewed weekly.

- **“Yellow”** Risks receive a moderate level of focus and are reviewed bi-weekly.
- **“Green”** Risks are reviewed monthly.

The categorization, probability, and severity of risks may determine the stakeholder groups targeted to review those risks. These reviews are documented in versioned copies of the Risk Register; the full life cycle of a given risk and its ultimate disposition is thus maintained together with program and project documentation and becomes part of the record.

#### 4.8.5. Developing Risk Responses

The Vendor’s project teams use the risk assessment process to monitor high exposure risks and to develop risk responses, and subsequently the Vendor’s leadership team and project managers choose one or more of the following response strategies:

- **Avoidance** – actions to keep the Risk from occurring
- **Transference** – actions to move the impact of the Risk outside the project
- **Mitigation** – actions to reduce the likelihood or impact of the Risk
- **Contingency Planning** – actions to respond to the Risk if it materializes
- **Acceptance** – actions to maintain awareness of the Risk and monitor status

A risk response is agreed upon by risk owners, the project manager, and/or the leadership team and is based upon the assessed impact of the risk, the ability to accept the risk, and the feasibility of mitigating the risk. The Vendor’s leadership team, project managers, and risk owners formulate action plans based on the risk response strategies above that may reduce the impact of the Risk or minimize actual loss.

Contingency plans go into effect when a risk becomes an issue. In many cases, the corrective action consists only of continued close monitoring. In extreme cases, the corrective action may be that the project or program is suspended until the risk factors are remedied or mitigated to an acceptable level. If possible, advance actions are taken to reduce the effect of a risk.

Planned mitigation strategies are recorded in the Risk Register and updated as appropriate during the review of risks that is part of the regularly scheduled project team and leadership team meetings.

Additionally, for each action item that constitutes a risk response or action plan, the Vendor designates a responsible individual (“Risk owner”), assigns a due date, and allocates resources to execute the plan and define the means to measure progress. The risk owner or his/her delegate watches for triggers and executes on the planned Risk response as needed. If the effort to create a risk response plan could impact the project schedule, scope or budget, the risk owner submits a Request for Change (RFC) as defined in *Section 4.4 Change Management* and must receive approval for the additional work from the Change Control Board (CCB) before creating that plan.

#### **4.8.6. Managing and Mitigating Risk**

Managing and mitigating risk is an iterative process of identifying, analyzing and tracking risks and reviewing risk response plans. The Risk Management and control process includes reviewing roles and responsibilities covering the Risk Register, approved Requests for Change, and work performance. The objective of this process is to verify that risks are actively managed and controlled to avoid negative impacts on the project schedule or quality and, in turn, the overall health of the program. This helps ensure that the mitigation strategies are successful or adjusted, that risks that were successfully mitigated are closed, and that any significant new or growing risks are identified for the cycle to begin again.

If a risk event occurs despite prevention measures being executed, the risk status is changed to "issue." An issue, in turn, is managed outside of the Risk Management process. Risk events that have become issues will be tracked and assessed to determine if they are the result of a deeper-lying problem and if so, will be analyzed and may be resolved following the *Section 4.6 Problem Management*. This plan describes processes for investigating system, application or process problems and drivers, which may have ultimately caused the risk event to occur. This information will be fed back into the Risk Management process, if appropriate, for consideration during risk identification for future projects.

The final status a risk can be assigned is "closed." To close a risk, it must meet one of the following criteria:

- The risk event was successfully prevented from occurring
- The condition for the risk event did not occur
- The risk event occurred and has become an issue to be managed outside of the Risk Management process

#### **4.8.7. Reporting Risks**

Risks are reported to various groups as the project moves from proposal to planning through development and implementation, at regular intervals in the life of the program or as requested for governance board meetings with reasonable notice. Figure 37 specifies when risk reports are provided to whom and when.

Figure 37. Risk Reporting Matrix

Timing	Recipients	Report
<b>Proposed Project</b>	Project Review Board (PRB) Customer Vendor Management Team	Business Case Template
<b>Project Planning</b>	PRB Project Team Customer Vendor Management Team	Initial Risk Register
<b>Project Lifecycle</b>	Project Team PRB Customer Vendor Management Team	Updated Risk Register, weekly project meetings
<b>Operational</b>	Customer Vendor Management Team DIR	Vendor / DIR Status meeting notes, verbal / written updates as needed, Agency reviews including the TPE User Group
<b>Program Level</b>	Vendor Management Team DIR	PRB, executive meetings

#### 4.8.8. Roles and Responsibilities

The Vendor has analyzed the roles and responsibilities to be performed in routine Risk Management as they relate to DIR, Vendor, and additional stakeholders. This information was used to complete a RACI diagram that describes the roles and responsibilities of the various stakeholders in delivering the defined functional services at the program and project level.

This diagram is intended to represent the most routine and common risk scenarios. There may, however, be instances where governance bodies, stakeholders, DIR, or others will be responsible, accountable, or consulted on Risk Management activities.

Figure 38. Risk Management Roles and Responsibilities

		Stakeholders	Vendor Executive Management	Vendor's Directors Operating Committee	Vendor Program Manager	Vendor Project Manager	Vendor Team Leads	Vendor Project Team Members
<b>Risk Management Tasks</b>								
<b>PROGRAM</b>	Maintain Risk Register				A			
	Identify Risks	I	I	R	A	R	R	R
	Assess Risks	I	I	R	A	C	C	
	Assign Risk Owners				A	C	C	
	Define Mitigation Strategies	I	I	R	A	C	C	
	Review Planned Risk Responses	I			A			
	Assess Mitigation Effectiveness and Report	I			A			
<b>PROJECT</b>	Maintain Risk Register				A	R		
	Identify Risks	I	I	C	R	A	R	R
	Assess Risks				A	R	C	C
	Assign Risk Owners				A	R	C	
	Define Mitigation Strategies				A	R	C	C
	Review Planned Risk Responses	I			A	R	C	C
	Assess Mitigation Effectiveness and Report	I			A	R		

### 4.9. Issue Management

Issues are barriers to success that require decisions and/or actions. The Vendor is committed to an efficient issue management plan to insure prompt identification, escalation, and resolution of issues. Successful issue management reduces the occurrence of incidents and problems, promoting application quality and strong program performance.

Issues may be recorded by anyone and are then validated by the Vendor’s project manager and/or the Project Portfolio Management Office (PPMO). Upon validation, the PPMO assigns the issue for resolution along with the expected finish date. The assigned person can delegate

or escalate the issue, as required. The PPMO tracks all issues and reports any issues that are not handled in any appropriate or timely manner.

The Vendor maintains a project portal and governance system used to log, manage, and report issues for projects and the Texas.gov Program in general. Figure 39 identifies the resources engaged in issue management for the Texas.gov Program and projects.

**Figure 39. Resources for Issue Management**

Task/Process	Responsible Individual
<b>Reporting issues</b>	Anyone (Issue Originator)
<b>Initial Issue validation</b>	PPMO, project manager
<b>Initial issue assignment</b>	Project manager
<b>Confirmed assignment</b>	PPMO
<b>Issue resolution</b>	Assigned owner, including ability to delegate and escalate
<b>Issue tracking</b>	PPMO, project manager
<b>Tool Maintenance</b>	Tool subject matter experts

Methods for managing issues may include:

- Vendor team status meetings with a standing agenda item to review issues
- Vendor team status reports, and management discussions based on these reports
- Assigned tasks and reminders from issue management tool
- PPMO review of open program issues: ,determination of progress, review of need for escalation, opportunity to re-assign issue owner, capturing progress and obstacles, as well as to prioritize issues as necessary
- Project team review of open issues: determination of progress, review of need for escalation, opportunity to re-assign issue owner, capturing progress and obstacles, as well as to prioritize issues as necessary

DIR accesses and references issues within the Texas.gov Program management tool as well as through participation in the various Texas.gov governance committees, project status meetings, and other scheduled integration opportunities. Stakeholders do not have access to the program management tool, but participate in project status meetings and appropriate governance committees where both issues and risks are reviewed.

## 4.10. Technical Coordination

Ensuring technological compatibility among hardware, software, systems and interfaces and telecommunications is essential for the successful operation of the Texas.gov Program. This requires coordination with Vendor Corporate Data Centers (CDC) in Virginia and Texas, as well as with external stakeholders such as DIR, Subcontractors, and Customers.

Technical coordination may be required for changes or proposed projects. Refer to *Section 4.4 Change Management* for more information on the change management process, *Section 3.4 Portfolio Management* for portfolio management process and *Attachment Section 4.3 Project Quality Management* for requirements management process.

This plan defines system integration activities among:

- Hardware
- Software
- System interfaces
- Telecommunications infrastructures

To accomplish the technical integration with the Vendor's corporate data centers (including the Allen, Texas disaster recovery site), the Vendor and Vendor CDC follow an integration strategy that maintains visibility into Texas and corporate environments as well as any activities planned and underway. Visibility into multiple environments coupled with the ability to discover in real-time the current state of each environment provides the baseline(s) needed to improve risk and impact analysis as well as conduct capacity, infrastructure, and deployment planning.

### 4.10.1. Hardware

Hardware requirements may be coordinated for an individual project, if that project is expected to require a change to the existing infrastructure.

Long-term planning for hardware is developed by the Vendor and included in *Attachment G-10, Technology Management Plan*. Coordination of specific hardware requirements are handled through the CCB or PRB depending on the scope involved.

Figure 40. Ongoing Hardware-related Activities and Participants

Coordination Point	Description	Participation
<b>Hardware Platforms (as needed)</b>	Submissions to the Change Control Board and Project Review Board to review existing and new hardware needs for Texas.gov. Implementation coordinated through data center providers.	DIR, Vendor, DCS. Vendor Data Center
<b>DCS Support Ticketing system</b>	System used to report issues and initiate change control for DIR's DCS.	Vendor, DCS

Coordination Point	Description	Participation
<b>Weekly status meetings</b>	Data center status and short-term planning meetings.	DIR, Vendor, DCS

#### 4.10.2. Software Systems and Interfaces

Texas.gov Program-wide coordination is an ongoing activity for the Vendor. In addition to overall program coordination, each project or application change has its own set of coordination activities, tailored to the size and complexity of the individual project. Vendor teams meet on a regular basis to ensure coordination in software updates. Regularly occurring internal Vendor meetings are detailed in Figure 40.

Figure 41. Regular Activities and Participants

Coordination Point	Description	Participation
<b>System Interfaces (as needed)</b>	Submissions to the Change Control Board and Project Review Board to review existing and new System Interface needs for Texas.gov.	DIR, Vendor
<b>Software platforms (as needed)</b>	Submissions to the Project Review Board to review existing and new software needs for Texas.gov.	DIR, Vendor
<b>Texas.gov Weekly Planning Meeting</b>	Operations, Service Desk, Quality Assurance and Project Managers meet to review status of open incidents and change requests.	Vendor (internal)
<b>Texas.gov Cross-Team Resource Allocation</b>	PPMO, Development, Architecture, Operations, Quality Assurance and Marketing meet to review upcoming projects and resource requirements.	Vendor (internal)
<b>Weekly payment planning meeting</b>	Internal planning meeting.	Vendor (internal)
<b>Maintenance Window Objectives</b>	There is a 10-day tracking meeting and a 3-day planning meeting to confirm the contents of each scheduled release.	Vendor (internal)
<b>Bi-Monthly TPE steering committee</b>	Discuss TPE issues and enhancements.	Vendor (internal)

#### 4.10.3. Telecommunications

Vendor and TEX-AN coordination is both ongoing and project-related. If a project's expected use is likely to affect bandwidth requirements then coordination occurs during the project's normal planning and communication.

For ongoing requirements, the Vendor monitors capacity and coordinates with TEX-AN if new circuits or expanded bandwidth is required for overall Texas.gov growth. The Vendor coordinates directly with TEX-AN for break/fix issues.

**Figure 42. Telecommunication Activities and Participants**

Coordination Point	Description	Participation
<b>Capacity planning (as needed)</b>	Meet to plan additional capacity or new circuit requirements as growth projections merit additions.	Vendor, DIR, TEX-AN

## 5. Consolidated Key Terms and Definitions

The Vendor utilizes a variety of standards to provide structure, process, and methodology to the Texas.gov Program. Figure 43 details the key terms relevant to the Texas.gov Program.

Figure 43. **Key Terms and Definitions**

Term/Acronym	Definition
<b>Constituent</b>	Constituent refers to Citizens, Businesses, and other end users of Texas.gov.
<b>Availability</b>	The proportion of time that a Customer is able to access a particular service.
<b>Availability Management</b>	Ensures the level of service availability delivered matches or exceeds the current and future agreed needs of the business in a cost effective manner.
<b>Capacity Planner</b>	Resource planning tool that provides an overview of existing projects, project requests, and associated resource requirements over time.
<b>Change Control Board (CCB)</b>	The Change Control Board is comprised of representatives from DIR, Vendor, and third-party vendors. The CCB has governance authority over and participates at key phases in the Change Management Process.
<b>Continual Improvement</b>	The ongoing improvement of products, services or processes through incremental and breakthrough improvements. Continual improvement is an ongoing effort to improve products, services or processes. Continual improvement differs from continuous improvement as it refers to general processes of improvement and encompassing “discontinuous” improvements—that is, many different approaches, covering different areas.
<b>Continual Service Improvement (CSI)</b>	The ITIL process for aligning and realigning IT services to changing business needs and implementing improvements to IT services that support the business.
<b>Escalation</b>	A process when the skill set of the Help Desk or the Service Desk is insufficient to handle a Service Request or Incident. Escalation can occur in two ways:  1. Functional: Move the Incident further through support chain based on technical expertise. 2. Hierarchical: Moves the Incident further up the Management chain for informational purposes, decision making or to request additional resources.
<b>Event</b>	A detectable occurrence or change of state that has significance for IT Infrastructure Management or service delivery. An event may also mean an alert or notification created by a monitoring tool based on an exceeded threshold.  Examples of Events: <ul style="list-style-type: none"> <li>• Environmental conditions (temperature, CPU exceeds threshold)</li> <li>• Security Intrusion Detection</li> <li>• Failed web page load on 1st attempt</li> </ul>

Term/Acronym	Definition
<b>Event Management</b>	The process that manages events through their lifecycle
<b>Failure</b>	Loss of ability to operate to specification, or to deliver the required output. The term Failure may be used when referring to IT Services, Processes, Activities, Configuration Items etc. A Failure often causes an Incident.
<b>Help Desk</b>	The term Help Desk will be used to describe any 3 <sup>rd</sup> party entities contracted to provide specific Customer support services on behalf of the Vendor (also defined as Vendor Help Desk).
<b>Hot Swap</b>	Typically referred to as Depot Service Incident, involves the dispatch of replacement hardware upon receipt of an escalated Incident from Level 1 support. New or refurbished hardware is delivered to a Customer site and includes instructions for the return of the damaged or non-working hardware.
<b>Impact</b>	A measure of the effect of an Incident, Problem, Risk or Change on business processes. Impact is often based on how Service Levels will be affected. Impact and Urgency are used to assign Priority.
<b>Impairment</b>	A symptom of reduced quality or strength within a service or application.
<b>Incident</b>	An unplanned interruption to an IT service or a reduction in the quality of an IT service. An Incident may be either an Impairment or a Failure.
<b>Incident Management</b>	Restoring service to all users as quickly as possible; minimize the adverse impact of failure on the business operations and ensure the best possible level of service quality and availability are maintained.
<b>Known Error</b>	A problem that has a documented root cause and workaround.
<b>Issue</b>	A barrier to success that requires decision(s) and/or action(s) to resolve.
<b>Lessons Learned</b>	A process of reflection and evaluation after completion of a project that allows the participants to identify and document the best experiences, tools and processes.
<b>Major Incident</b>	A critical or high Priority Incident.
<b>Outage</b>	A synonym for Failure.
<b>Priority</b>	A level of classification assessed on the basis of impact (effect on the business) and urgency (time criticality of the event to the business).
<b>Problem</b>	An unknown root cause of one or more existing or potential incidents.
<b>Problem Management</b>	The process that manages all problems through their lifecycle with the aim of preventing future incidents from occurring and minimizing the impact of any that cannot be prevented.

Term/Acronym	Definition
<b>Process</b>	A set of interrelated or interacting activities that transforms inputs into outputs. Inputs to a process are generally outputs of other processes.
<b>Project</b>	A set of deliverables documented in a Statement of Work delivered in accordance with the Master Agreement.
<b>Project Deliverable</b>	A document that requires Customer acceptance to move forward with the project.
<b>Project Management Body of Knowledge</b>	Also referred to as "PMBOK", this reference guide contains widely accepted project management standards and practices and delineates a project management methodology.
<b>Project Review Board (PRB)</b>	The Project Review Board is comprised of representatives from DIR, Vendor, and Customers. The PRB has governance authority over and participates at key phases in the Business Case process.
<b>Quality</b>	The totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs. Not to be mistaken for "degree of excellence" or "fitness for use" which meet only part of the definition.
<b>Quality Assurance</b>	The preventative steps taken to increase the likelihood of delivering a deliverable and achieving the quality targets set. The planned and systematic activities implemented in a quality system so that quality requirements for a product or service will be fulfilled
<b>Quality Control</b>	The curative steps taken to identify the quality of the actual deliverable delivered and eliminate any variances from the quality targets set. To simplify, quality control is used to verify that the deliverables are of acceptable quality and that they are complete and correct.
<b>Quality Management Process</b>	A method by which the quality of deliverables and processes is assured and controlled. This process entails planning, executing, completing a variety of review techniques and implementing a set of corrective actions to address any deficiencies and raise the quality levels.
<b>Quality Manager</b>	The Quality Manager is responsible for overseeing program quality metrics and adhering to reporting requirements/best practices.
<b>Quality Planning</b>	Quality Planning is the process for identifying which quality standards are relevant and determining how to satisfy them: Quality planning means planning how to fulfill process and product (deliverable) quality requirements. Quality planning provides guidance from concept to delivery. During the planning process, steps to measure and maintain quality are inserted at every level, from setting objectives to establishing policies and procedures.

Term/Acronym	Definition
<b>Request for Change (RFC)</b>	A request to modify or enhance a Project in progress or an Application/Service in production. A Request for Change will typically come from a Customer of Texas.gov and should be communicated to the assigned Project Manager for a Project in progress or will be assigned to a change analyst for an Application/Service in production.
<b>Resource Allocation</b>	A function that allows a project manager to add resource requirements based on the needs of the project.
<b>Risk</b>	A possible event that could cause harm or loss, or affect the ability to achieve objectives
<b>Risk Register</b>	A Risk Register is the tracking mechanism that, if executed, contains all attributes of a risk, documents mitigation strategies, and the execution and effectiveness of the planned mitigation.
<b>Root Cause</b>	The underlying or original cause of an Incident or Problem.
<b>Root Cause Analysis</b>	Root Cause Analysis (RCA) is an activity that identifies the Root Cause of an Incident or Problem.
<b>Scrum or SCRUM</b>	An iterative incremental framework for managing application development commonly used with an Agile software development approach.
<b>Software Development Life Cycle (SDLC)</b>	An approach to provide a structure and a clearly delineated process which reduces the reliance on specific resources and promotes consistency among projects.
<b>Statement of Work (SOW)</b>	A Statement of Work is a formal agreement or contract that defines the work, quality and timeline for how a subcontractor will deliver specific deliverables or other agreed upon services.
<b>Texas.gov Program</b>	The multiple, interdependent Projects that comprise the portfolio of Texas.gov. The Program includes the Projects deployed in accordance with the processes set forth in the PPM and delivered under the Master Agreement.
<b>Urgency</b>	Assessment of how quickly a solution is required.
<b>Work Breakdown Structure (WBS)</b>	A project management term used to define and group tasks within a project work plan.
<b>Workaround</b>	A means of reducing or eliminating the impact of an incident (or problem) for which full resolution is not yet available.

## 6. Other Referenced Documents

The following documents are referenced in the G-1.

Figure 44. Other Referenced Documents

Title	Description and Contents
<b>Appendix A: Customer Communication Plan</b>	<i>Appendix A</i> is an attachment to this document. The Customer Communication Plan establishes the structure, policies, and procedures for Texas.gov operational-based Customer communication including: Incident Notifications, Maintenance Window Notifications, Product Release Notifications, Required Customer Action Notifications, and Escalation Procedure. The Customer Communication Plan clearly defines the communication processes and associated communication tactics for each item listed above.
<b>Attachment G-2 Disentanglement Plan</b>	The <i>Disentanglement Plan</i> describes how the Vendor will assist DIR at the end of the Master Agreement in planning for an orderly exit strategy. It includes items such as; Disentanglement-related issues, Vendor and DIR roles and responsibilities, an outline of key milestones, the method of transferring assets, and procedures for managing problems or issues.
<b>Attachment G-9 Security Management Plan</b>	The <i>Security Management Plan</i> includes methods for resolving the following major security concerns for each component of the system: environmental security, physical site security, computer hardware security, computer software security, data access and storage, client/user security, telecommunications security, and network security. The plan is coordinated with the DCS Security processes.
<b>Attachment G-10 Technology Management Plan</b>	The <i>Technology Management Plan</i> documents the overarching objectives for the development of the architecture and standards that will ensure the delivery of quality, cost-effective solutions for Texas.gov that reflect new and innovative technology developments. It includes the short-term strategies, the technology roadmap, and technical architecture that will support the requirements defined in the Master Agreement.
<b>Attachment G-14 Disaster Recovery and Business Continuity Plan</b>	The <i>Disaster Recovery and Business Continuity Plan</i> provides the processes and procedures, including coordination with DCS, to provide for uninterrupted service delivery. An approach to the Disaster Recovery and Business Continuity Plan is incorporated as an attachment to this Exhibit.
<b>Attachment H-1 Policies and Procedures Manual</b>	The <i>Attachment H-1 Policies and Procedures Manual</i> captures all of the Texas.gov governance structure, roles and responsibilities, teams, policies, and procedures in a single, comprehensive point of reference.
<b>Attachment J-1 Marketing Plan</b>	The <i>Marketing Plan</i> provides a comprehensive set of principles, goals, and activities to rebrand Texas.gov, assess stakeholder needs, define outreach and marketing efforts, and determine how satisfaction with Texas.gov will be measured.

Title	Description and Contents
<b>Exhibit B Terms and Conditions</b>	The <i>Exhibit B Terms and Conditions</i> contains the general Terms and Conditions of the Master Agreement between the Department of Information Resources and Texas NICUSA, LLC (Vendor).
<b>Exhibit D Performance Criteria</b>	The <i>Exhibit D Performance Criteria</i> contains the contractual performance requirements of the Vendor under the Texas.gov Master Agreement.
<b>Exhibit F Reporting</b>	<i>Exhibit F Reporting</i> of the Master Agreement comprehensively addresses agreed-upon reporting requirements of Texas.gov including reporting contractual principles, frequency of reports, and methodology for updating reporting requirements.