
State of California
Department of Technology
Statewide Technology Procurement Division
Statement of Work (SOW) Guidelines

Statewide Information Management Manual – Section 180

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SOW GUIDELINES

Introduction

1.0 Background

The California Department of Technology (CDT) has adopted the Project Approval Lifecycle (PAL) to improve the quality, value and likelihood of success for information technology (IT) projects undertaken by the State of California. As Agencies/state entities develop a Statement of Work (SOW), keep in mind that the SOW must follow the PAL process and be consistent with the PAL deliverables. For more information on the PAL process, refer to [Statewide Information Management Manual \(SIMM\), Section 19](#).

The SOW Guidelines (Guidelines) are designed to provide Agencies/state entities with assistance in developing an SOW. The Guidelines include general information, recommendations, and headers (sections) that are commonly used for reportable IT projects.

2.0 Overview

An SOW is a formal document that captures the contractual obligations between the state and contractor. It defines a contractor's work activities to be performed, deliverables to be completed, and the timeline adhered to in the performance of specified work for the state. The SOW is the most essential document in any solicitation and/or contract. The SOW includes, but is not limited to, traceability to the detailed solution requirements, contractor requirements/responsibilities, payment milestones, and standard regulatory terms and conditions.

The SOW is read, interpreted, and used by both technical and non-technical personnel with different backgrounds. Therefore, clearly written, high quality SOWs easily understood by both technical and non-technical personnel will:

- Enable the contractor to clearly understand the requirements and needs of the state
- Allow the contractor to more accurately cost out their proposal and submit higher quality technical proposals during the solicitation
- Provide a baseline for the development of other parts of the solicitation document(s), particularly the evaluation criteria and proposal instructions
- Minimize the need for change orders during project implementation, which can increase cost and delay project completion
- Allow both the state and the contractor to assess performance
- Help to reduce claims and disputes under the contract

2.1 Types of SOWS

There are primarily three types of SOW methodologies—performance/deliverables based, design/detailed SOW, and level of effort/time and material. Depending on the level of effort for each project, the contractual obligations (i.e., requirements) will drive the procurement effort and resulting contract. The three types most commonly used SOWs include:

2.1.1 Performance/Deliverables Based

This type of SOW allows the Agency/state entity to specify the business problem to be solved, deliverables required, and timeframe for completion without identifying the specific method or detail of its execution or implementation. A performance or deliverables based SOW structures all aspects of an acquisition around the purpose of the work to be performed and does not dictate how the work is to be accomplished. It is written to ensure that bidders, and eventually contractors, are given the freedom to determine how to meet the state's performance objectives and provides for payment only when the results meet these objectives. It maximizes the contractor control of work processes and allows for innovation in approaching the various work deliverables. Performance or deliverables based SOWs emphasize performance that is contractually defined so the contractor's efforts can be measured in terms of technical and quality achievement, schedule progress, or actual tangible and measurable performance.

The goals for this type of SOW are to:

- Save money by reducing contractor costs by eliminating unnecessary effort through contractor innovation
- Enable the state to shift its emphasis from processes to measureable deliverables
- Hold contractors accountable for the end results
- Ensure contractors are given the freedom to determine how to meet the state's performance objectives

2.1.2 Design/Detailed SOW

The design/detailed SOW is the most detailed of all the SOW types. It may include precise measurements, tolerances, materials, quality control requirements, and state requirements that control the processes of the contractor. There are wide variances in the use of this type of SOW; it is as diverse as the requirements specified in them. In this type of SOW, the state (to a large degree) requires the contractor to follow the state's methods to perform tasks. This causes the performance risks to be borne by the state. For instance, if the contractor builds and/or performs a task and follows the state's requirements exactly and the product or service is faulty, then the state shoulders the blame. Absent substandard workmanship and/or performance, the contractor cannot be faulted if they adhered to the specifications and terms in the SOW. While very risky on one-hand, this type of SOW affords a greater amount of control over the product(s) or services being delivered. This type of SOW is primarily used for contracts that involve commercial off-the-shelf (COTS) products or maintenance and operations (M&O).

2.1.3 Level of Effort/Time and Material

The real deliverable under this type of SOW is "hour(s) of work" or timeframe. These SOWs are usually broad and describe the general nature, scope or complexity of the services or products procured over a given period of time. It is important to ensure that all work performed is specifically covered in the SOW. All activities outside of the SOW must be acquired through a separate procurement vehicle. This methodology is more commonly used for staff augmentation contracts, personnel services against a Leverage Procurement Agreement (LPA), or for smaller dollar amount contracts. Under this type of SOW, the state assumes 100% liability if the end product does not work as designed by the state. The state is strictly buying resource hours to "build" the product, as we designed it, under our management.

Table 1 below shows how these three SOW types differ from one another:

Table 1

SOW Type	Overview	Scope	Requirement	Objective	Result
<i>Performance/ Deliverables Based</i>	Describes performance attributes to the contractor and allows the contractor to revise approach to achieve the end product or design.	Deliverables describe the performance sought or end product to be achieved.	A statement of fact concerning the required deliverables from the contractor.	Attributes are specified but method to attain is not defined.	Able to verify and test to ensure performance criteria are met.
<i>Design/ Detailed</i>	Describes both method and design, but does not specify performance.	Technical requirements form the parameters of the design.	Describes the design of the equipment or layout.	Must build to specification or design.	Able to validate “as built” against deliverable.
<i>Level of Effort/Time and Material</i>	Describes the work to be performed (e.g., training, consulting), means to a product or material (e.g., develop a training curriculum, input data), and hours or timeframe to completion. Does not detail an end product and allows work to proceed within the limits of the hours or timeframe specified.	Skill of the contractor helps frame the effort and time requirements.	Describes the means, materials, and the hours or timeframe.	Not specified as to a final or finished product if end cannot be met. (However, there should be an end product in mind.)	Allows for phasing and peer review on the work performed.

3.0 Development Considerations

In the development of an SOW, Agencies/state entities should consider the following:

- A Work Breakdown Structure (WBS) (as defined in *A Guide to the Project Management Body of Knowledge [PMBOK Guide]*). A WBS may include components, such as:
 - Phases with product and project deliverables
 - Major deliverables with verifiable products, services, or results

The WBS is useful in formulating the SOW, functional and non-functional requirements, and other applicable planning documents. A WBS is used to develop the contents in the SOW and will provide a measure to validate the work scope, project deliverables, and estimated cost and activity durations.

- The SOW should include, as applicable, a high level description of the system, system subcomponents, and interfaces/integrations (to existing systems) while referencing/pointing to the detailed functional and non-functional requirements.
 - Cost worksheets may be used to trace the SOW requirements and deliverables
- A requirement is generally a documented representation of a condition or capability needed by a user to solve a problem or achieve an objective. A requirement can be a condition or capability or work product that must be met or possessed by a system or system component to satisfy a contract, standard, specification, or other formally imposed documents. Solution requirements written for inclusion in the contract should be:
 - Complete
 - Valid
 - Unambiguous
 - Testable
 - Traceable

For purposes of the PAL process, requirements may be expressed from various perspectives—from abstract stakeholder needs to well drilled down functional, non-functional and project/contract requirements that will be captured at various stages of the PAL. The level of detail for each type of requirement will depend on the purpose, project type, and stage of the PAL. Refer to SIMM Section 170A General Requirements Guidelines and Section 170B Project Requirements Development Instructions for guidance on requirements development for PAL.

3.1 SOW Development

This document provides an Agency/state entity with recommendations on areas to consider during SOW development. Depending on the type of SOW, some sections in 3.1.1 will not be applicable. The Agency/state entity must use their knowledge of the business objectives to ensure the necessary sections and appropriate text specific to the type of SOW considered are applicable to the SOW.

A preliminary step in developing an SOW addresses the following questions:

- **Who** needs the services?
- **What** services are needed?
- **Why** are the services needed?
- **When** are the services needed?
- **Where** will services be provided?
- **How** will the services provided be verified and validated?
- In some cases, “**How**” will the services be done?

3.1.1 SOW List of Sections

The SOW list below is not all-inclusive of the sections addressed in an SOW; however, the following list contains the sections that need to be considered during the SOW development. Refer to Table 2 for details on each section, as follows:

1. Background and Purpose
2. Description of Proposed New System or Service
3. Term of the Contract
4. Contract Contacts
5. Solution Requirements
6. State Data Center or Contractor Hosted Facility Environment
7. State's Roles and Responsibilities
8. Contractor's Roles and Responsibilities
9. Key Staff Qualifications and Skills
10. Key Personnel Changes
11. Escalation Process
12. Change Control Procedures
13. Project (Contractor) Tasks and Deliverable Requirements
14. Deliverable Acceptance/Rejection Process
15. Data Handling and Ownership
16. Reporting
17. Security
18. Disaster Recovery
19. Delivery (Hardware and Software)
20. Hardware and Software Needs
21. Escrow Source Code
22. Compatibility and Interface
23. System Installation
24. System Implementation or Integration
25. Technology Refresh
26. System Testing and Acceptance Procedures
27. Transition of Operation to New Contractor or to State
28. Knowledge Transfer and/or Training
29. Maintenance and Operations (M&O)
30. Help Desk/Call Center
31. Insurance Requirements
32. Warranty
33. Service Level Agreements (SLAs)
34. Liquidated Damages

- 35. Unanticipated Tasks
- 36. Budget Detail and Payment Provisions
- 37. GSPD-401IT General Provisions – Information Technology
- 38. Miscellaneous
- 39. Glossary of Terms

Regardless of the relevant sections included in an SOW, all SOWs need to follow the guidelines below when preparing an SOW:

- Establish a scope statement identifying the project objective or purpose that includes a description of the type of work being performed with any boundaries associated with performance and duties
- List all tasks performed and indicate any performance requirements and all project requirements the contractor must comply with during contract performance
- Group similar or related tasks together and organize them in a logical order
- Identify resources (including state resources) necessary to complete each task, specifying labor, equipment, or material
- Identify project deliverables required for the project completion
- Identify time-sensitive milestones or deliverables
- Describe quality expectations and applicable deadlines in terms of quality, quantity, time, and appearance. Performance deliverables must be realistic, objective, and measurable
- Determine method to monitor, validate, and approve deliverables
- Develop all SOW areas for clarity and understandability
- Structure requirements so they do not lead to assumptions
- Structure requirements that are accurate, clear, concise, and complete.

Table 2, below, provides a basis to develop the SOW content. Note: This list is not all-inclusive of the sections addressed in an SOW, but supports an overall SOW order—general contract information, solution requirements, typical contractual language, and budget information. The “Section” column represents an SOW section header. The “What to Consider” column represents the areas that an Agency/state entity must define/develop as it relates to the SOW section header and the specific project.

Table 2

Section		What to Consider
1.	Background and Purpose	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> • The Agency/state entity’s core business • The business need for the project must be in sufficient detail to provide the contractor with an understanding of the business needs • All critical partners involved (local agencies, federal government, etc.) and how these partners are the involved in the project

Section		What to Consider
2.	Description of Proposed New System or Service	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> • Product or service to be provided • Project design, development, and/or integration of a new system or system upgrade • Define whether the purchase of commercially available hardware is required • Define whether the state is seeking a COTS software solution • Define acceptable percentage level of COTS modification • Define if the solution will be a custom developed software <p>Note: The description of the system and/or service must be clearly defined in terms that a non-technical person reading this section can understand what is being requested.</p>
3.	Term of the Contract	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> • Define the term of the base contract • Define the term of any optional year(s) extensions • Define the purpose of the optional year(s) (M&O, knowledge transfer, etc.) • Provide contract terms that are clearly defined with specific start and end dates, not open-ended
4.	Contract Contacts	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> • Name of the state's and contractor's project manager(s) • State and contractor's address • State and contractor's contact information <ul style="list-style-type: none"> ○ Phone number(s) ○ Email address(es)

Section		What to Consider
5.	Solution Requirements	<p><u>The following should be included:</u></p> <ul style="list-style-type: none"> • Functional requirements • Non-Functional requirements • Project/Transition requirements <p>These requirements are typically included as an attachment to the SOW rather than embedding them in the body of the SOW.</p> <p>Refer to SIMM Sections 19C.1, 170A, and 170B for the definitions and detailed information regarding requirements.</p> <p>Refer to SIMM Section 19C.5 Stage 3 Solution Requirements Template tool for documenting requirements.</p>
6.	State Data Center or Contractor Hosted Facility Environment	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> • Define whether the solution is to be hosted at a state data center or a contractor hosted facility <p><u>Contractor Hosted:</u></p> <ul style="list-style-type: none"> • Define the requirements of where the data center can be housed (may preclude out-of-country) • Define the security requirements and conditions of the data center <p><u>State Hosted:</u></p> <ul style="list-style-type: none"> • Define the necessary components (hardware/software) for the solution operation at the state data center. Identify: <ul style="list-style-type: none"> ○ If a physical hardware environment is required, include: <ul style="list-style-type: none"> ▪ Server quantity ○ If environment is a virtual environment, include: <ul style="list-style-type: none"> ▪ Processor quantity per environment ▪ Memory requirements per environment ▪ Storage requirement per environment ○ Licenses or licensing, per environment or processor/core ○ Operating system ○ Bandwidth requirements <p><u>General Hosting:</u></p> <ul style="list-style-type: none"> • Define whether a help desk or hot line for questions and problems is required. Identify: <ul style="list-style-type: none"> ○ The services and tasks provided by the contractor ○ Escalation process

Section		What to Consider
		<ul style="list-style-type: none"> ○ Process for fixes ○ Levels of severity ● Define the outputs (reports). Identify: <ul style="list-style-type: none"> ○ Types of issues reported ○ How often each output is required ○ Who receives the output ○ What the format (e.g., electronic) is for the output ● Define the operations schedule. Identify: <ul style="list-style-type: none"> ○ If 24 hour schedule ○ If business days/hours ○ If other ● Define the data center’s scalability to meet the state’s future needs <p>Note: The Agency/state entity must adhere to CDT’s “Cloud First” policy (State Administrative Manual Section 4983) prior to considering a contractor hosted facility.</p>
7.	State’s Roles and Responsibilities	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> ● Define the state’s tasks, roles and responsibilities as it relates to each area in the contract ● Define the number of state resources, percentage of commitment and expertise, for each area in the contract, as this is used by the contractor to determine project schedule and cost for the state’s resources allocated, their expertise, and percentage of commitment
8.	Contractor’s Roles and Responsibilities	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> ● Define the contractor’s tasks, roles and responsibilities as it relates to each area in the contract ● All contractor deliverables must be clearly identified and defined ● Contractor requirements must be clear, understandable, and verifiable

Section		What to Consider
9.	Key Staff Qualifications and Skills	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> • Define the minimum roles and responsibilities of the contractor’s key staff, as determined by the state • Define the minimum qualifications and skills of the contractor’s key staff • Define the staff qualifications and skill requirements needed to meet the project scope • Define if there is an anticipated timeframe or plan when key staff resources will be required (e.g., during design, development and implementation [DD&I] and/or M&O) • Define if multiple roles can be fulfilled by one person <p>Note: The staff qualifications, skills, and experience must be consistent with the requirements of the solicitation.</p>
10.	Key Personnel Changes	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> • Define the process for “Key Personnel Changes” • Define the conditions when the contractor may request staff and/or subcontractor replacements • Define the conditions when and process to use for the state to dismiss contractor staff • Define the conditions when and process to use for the state to replace contractor staff • Define the timeframe for contractor to replace personnel • Define the state’s approval process for key personnel replacements • Define the criteria to evaluate personnel replacements. Must use the same criteria and form used during the solicitation • Define how the contractor will manage their staff • Define the escalation and dispute procedures for key personnel changes

Section		What to Consider
11.	Escalation Process	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> • Define the state and contractor’s roles and responsibilities in the escalation process • Clearly define the escalation process • All expectations must be clear and understandable • Describe the contract performance corrective action plan process • Describe the “Cure Notice” process
12.	Change Control Procedures	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> • Define the process for changes. Identify and detail: <ul style="list-style-type: none"> ○ The basis for approving changes ○ Governance process (who does what and when) <ul style="list-style-type: none"> ▪ The membership of the Change Control Board(s) ○ The process, procedures, tools, forms, etc. ○ The protocols and levels of authority for changes (e.g., what types of changes can be approved via a contract amendment, NCB, work authorization) ○ Other management procedures (e.g., issue management process, configuration management) that have a role in the change control procedures ○ The tools that will be used to support and manage the process ○ How you will communicate and promote the process and its importance to all participants • Define the review process, which may include details, such as: <ul style="list-style-type: none"> ○ Minor changes within scope can be approved by the project manager or designee ○ Changes to scope and contract amendments require the approval of the Steering Committee (or Change Control Board)

Section		What to Consider
13.	Project (Contractor) Tasks and Deliverable Requirements	<ul style="list-style-type: none"> • The following areas should be addressed: • Define the transitional requirements and deliverables (project management plan that may include a scope management plan, requirements management plan, schedule management plan, cost management plan, quality management plan, process improvement plan, human resources and staff management plan, communication management plan, risk management plan, M&O transition management plan for the transition phase, procurement management plan, training plan, etc.) • Deliverables should be listed in the order they are due • Deliverables must be clearly defined and measurable • Due dates and milestones for each deliverable must be identified • Due dates for deliverables must be reasonable for both the contractor and the state • SOW tasks should tie to deliverables • Deliverables should tie to requirements • SOW tasks and/or deliverables should tie to cost/payment milestones in the cost worksheets • Define all Deliverable Expectation Documents (DED) requirements • For every DED, there must be a contractor requirement in the SOW which defines the minimum output/responsibility or task(s) of the contractor • Ensure that the state has access to all deliverable and electronic project repositories when contract is complete. The contractor should not own the vendor library • Throughout the SOW, each responsibility and/or deliverable must clearly define: <ul style="list-style-type: none"> • Who is responsible • What are they responsible for • When due • What process is to be used • What criteria is used to evaluate completion

Section		What to Consider
14.	Deliverable Acceptance/Rejection Process	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> • Describe how the deliverable will be sent to the state (e.g., format, number of copies) • Identify the state staff who will review and approve the deliverable(s) • Define the state’s process and timeframe to review, respond, accept or reject each deliverable • Define the process including the next steps to follow if the deliverable is rejected • Define the process and timeframes for the contractor to respond to state’s acceptance or rejection of the deliverable(s) • Define a corrective action plan which includes a rejection process, steps to correct deficiencies, the number of review cycles before a cure notice is written, and the escalation process to resolve disputes • Do not bind the state to unrealistic expectations
15.	Data Handling and Ownership	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> • Define who is responsible for data conversion, data cleansing, data migration and/or data handling • Defined scope and timing for data conversion, data cleansing, data migration and/or data handling • Provide a matrix that defines current and projected capacity with respect to the data and its users • Define requirements for current volume/capacity and future growth for data storage • Define data entry requirements • Define the frequency of data modification or updates • Define whether real-time access to the data is required • Define the response time for: <ul style="list-style-type: none"> ○ Accessing data ○ Entering data ○ Maintaining data • Define types of and roles for database access • Define requirements for data access, such as: <ul style="list-style-type: none"> ○ From multiple locations ○ By multiple agencies • Define the security requirements for the data

Section		What to Consider
16.	Reporting	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> • Define the data types and/or fields to be system generated • Define the requirements of the system generated report(s) and data to be provided: <ul style="list-style-type: none"> ○ Describe the standard form or format ○ Who receives the report(s) ○ Define report due dates ○ Define whether ad hoc reporting is required • Define any project reporting requirements <ul style="list-style-type: none"> ○ Project status reports <ul style="list-style-type: none"> ▪ Frequency ▪ Content ○ Weekly, monthly meetings ○ Performance meetings and their frequency
17.	Security	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> • Define the security issues, such as: <ul style="list-style-type: none"> ○ Preventative measures to prevent laptops from “walking off” ○ Measures to protect sensitive information • Define potential threats • Define the level of security required (must comply with Health Insurance Portability and Accountability Act, federal guidelines, etc.) • Define whether the pre-employment criminal background Investigations law applies, in accordance with Government Code Section 11546.6. • Define whether other Agency/state entity background checks policies apply • Define the security risk assessment plan actions with milestones for the proposed system • Define all applicable security standards, which may be referenced as an attachment to the SOW. Identify and detail: <ul style="list-style-type: none"> ○ Access (public, internal state staff, external state staff, etc.) information ○ Type of information (personal, health, tax, financial, legal, confidential, etc.) ○ Protective measures (technical security, physical security, identity authorization and authentication, backup and recovery, etc.) • Refer to the State Administrative Manual (SAM) 5305.5, Information Asset Management, and SIMM Section 5305-A and detail the information assets:

Section		What to Consider
		<ul style="list-style-type: none"> ○ Categorization and protection level needed (low, moderate, or high) ○ Owner ○ Custodian ○ Users ○ Information classification (public or confidential, whether it contains personal and/or sensitive data) ○ List references to any applicable policies, government code, State Contracting Manual (SCM), contract code, general provisions and/or special provisions that may be impacted by the information asset. <p>Note: Security requirements must be reviewed and approved by the Department of Technology California Information Security Office (CISO).</p>
18.	Disaster Recovery	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> ● Define timeframe when the system must be back up and operational ● Define the location of the back-up site <ul style="list-style-type: none"> ○ Out of state ○ In state ○ Number of miles from the primary site
19.	Delivery (Hardware and Software)	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> ● Define when the hardware and/or software is needed ● Define the quantity(s) to be delivered (the purchase price/quantities should have been identified and evaluated in the solicitation process) ● Define the Free on Board (F.O.B.) point, destination for hardware ● Define how you want the software delivered ● Define the packing and shipping requirements for hardware and/or software ● Define who is responsible for unpacking ● Define who is responsible for assembling the hardware ● Define who is responsible for the disposal of packing material ● Define how partial shipments, back orders or staggered delivery(s) will be handled ● Define how problems or deficiencies in delivery will be handled

Section		What to Consider
		Note: Refer to GSPD-401IT General Provisions, section 16 for the defined acceptance procedures for deliveries.
20.	Hardware and Software Needs	<p><u>The following areas should be addressed:</u></p> <p>For Hardware:</p> <ul style="list-style-type: none"> • Define the system hardware needed for the system (the purchase price/quantity(s) should have been identified and evaluated in the solicitation process) • Define the physical requirements for the hardware <ul style="list-style-type: none"> ○ Space requirements ○ Operating conditions ○ Storage requirements ○ Cabling ○ Wiring • Define the system performance requirements • Define if any hardware/software system documentation will be required • Define all the necessary features of the hardware • Define any existing system hardware interfaces to the new system equipment • Define requirements for accessibility and use by handicapped users • Ensure that the specifications trace back to the requirements • Define the availability of replacement parts <p>For Software:</p> <ul style="list-style-type: none"> • Define the software required • Interface requirements • Define if software can be custom developed or COTS • Define how software upgrades will be handled • Define terms such as upgrades, enhancements, deficiencies, error corrections, and maintenance • Define the licensing requirements <ul style="list-style-type: none"> ○ Define whether the license is by machine, by site, by seat, or by agency ○ Define if license is perpetual, annual, monthly, or extended use ○ Define the rights of licensor and licensee to use, disclose, sell, or reproduce the software

Section		What to Consider
		<ul style="list-style-type: none"> • Ensure licenses (including third-party) are in state’s name and the state is not paying for transfer costs. (Costs should have been identified and evaluated in the solicitation process). Refer to GSPD-401IT #38 and other related provisions • Define whether manuals on using the software is required <ul style="list-style-type: none"> ○ Are the manuals standard or custom ○ Define whether there is a minimum requirement for content/format ○ Define the minimum number of copies required • Define whether commercial software documentation is required • Define programming tools (and if not used), define the availability of these tools for the state’s use
21.	Escrow Source Code	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> • Availability <ul style="list-style-type: none"> ○ For custom software ○ For commercial software • Define who owns the source code • Include a deliverable requirement for the source code • Define how you want the source code delivered (format) • Include “Right to sell” language • Define whether a copy of all the source codes are required versus putting the source code in an escrow account • Define how the source code will be maintained as the source is updated

Section		What to Consider
22.	Compatibility and Interface	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> • Define all interfaces • Define any incompatibility and interface requirements and/or concerns • Define the current components and/or software that are already in use and must interface with the IT components and/or software of the new system • Define the documentation requirements the contractor must provide regarding interfaces • Determine if there is a possibility that the existing files will work with new hardware/software (and if not): <ul style="list-style-type: none"> ○ Define the format of the existing files (in hard copy or electronic) ○ Define who will be responsible to clean, check for errors, and stage data for new system • Ensure timeline allocated for data conversions, data cleaning, and data verifications are achievable
23.	System Installation	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> • Define the installation requirements for equipment and/or software • Define when the contractor can inspect the installation location(s) • Define who is responsible for developing the specifications for the installation location(s) • Define the existing physical conditions and configuration at the installation location(s) • Define who is responsible for modifications to the installation location to prepare the site to receive the equipment • Define who is responsible for the architecture and engineering associated with required modifications • Define who is responsible for any construction at any facilities • Define who is responsible for specifying cabling and wiring requirements • Define who is responsible for installing cabling and wiring • Define who is responsible for communications costs: <ul style="list-style-type: none"> ○ Telephone ○ Data lines • Define who is responsible for installation of new equipment

Section		What to Consider
		<ul style="list-style-type: none"> • Define who is responsible for preparing the existing hardware to receive new software • Define who is responsible for installing new software • Define the requirement timeframes for delivery, installation, inspection and testing, and operations • The timeframe for all the necessary system installation steps must be reasonable for both the contractor and state • Define the resources for system installation for the state and the contractor <p>Note: If there is a public works component, it must have been addressed in the solicitation process.</p>
24.	System Implementation or Integration	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> • Define the system(s) to be implemented/integrated • Define the system(s) implementation or integration activities <ul style="list-style-type: none"> ○ Define how the system roll out will be conducted (regions, districts, counties, etc.) ○ Define whether a pilot will be required and determine if it will be: <ul style="list-style-type: none"> • A regional pilot • By districts, county office, etc. ○ Define who (state or contractor) is responsible for assembling, installing, testing, implementing, and making the system operational • Include Organizational Change Management (OCM) requirements, if applicable

Section		What to Consider
25.	Technology Refresh	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> • Define the requirements if the state requires the technology to be refreshed: <ul style="list-style-type: none"> ○ Before or after initial delivery ○ At same or lower cost ○ Define minimum refresh intervals ○ Define whether costs increases will be allowed if improved functionality is provided or are they included in the proposed fixed price (must be evaluated as part of the solicitation process) • Define the state resources for a technology refresh. • Define who is responsible for the disposal and removal of replaced components • Define who is responsible for the removal of packing material of new components
26.	System Testing and Acceptance Procedures	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> • Define the environments required (development, testing, production, training, etc.) • Define who is responsible for developing the test scripts, test plan, and acceptance test procedures • Define the minimum requirements for the test procedures, test plan, and test reports • Define the deliverables for each phase of testing • Define the contractor testing procedures and state acceptance criteria • Define the re testing procedures for failed test scripts • Define the exit criteria (e.g., do not go into production if high critical defects have not been fixed) for each phase (e.g., testing, production) in the project • Define the process for fixes • Define how deficiencies will be addressed, reported, and completed • Define terms, such as upgrades, enhancements, deficiencies, error corrections, and maintenance • Define exit criteria for each phase or rollout of the project • Define “go/no go” criteria and process for system rollout • Define the criteria for “final” full system acceptance

Section		What to Consider
		<ul style="list-style-type: none"> • Define required response time for deficiencies: <ul style="list-style-type: none"> ○ Criticality and severity levels ○ Contractor and the state responsibilities within the given criticality and severity level ○ Response time to communicate the issue(s) <ul style="list-style-type: none"> ▪ To whom ▪ Method (e.g., email, in writing) • Define the escalation process for high criticality problems and their resolution • Define the requirements of a traceability analysis/matrix, if applicable • The timeframe to perform all necessary testing must be reasonable for the size and complexity of the system <ul style="list-style-type: none"> ○ Allow time in schedule for any issues/fixes that may occur ○ Define the resources for each phase of testing for both the state and the contractor
27.	Transition of Operation to New Contractor or to State	<p>The following areas should be addressed:</p> <ul style="list-style-type: none"> • Define the requirements for transition of system operations from the state or previous contract to the new contractor or to the state • Define the timeframe for the transition • Define the state’s or previous contractor’s responsibilities and tasks for transition • Define the new contractor’s responsibilities and transition tasks • Describe any existing provisions in the current contract that need to be taken into consideration during the new transition of operations • Define who is responsible for providing a “Transition-in Plan” and “Transition-out Plan” and schedule • Define all roles and responsibilities for the state and the contractor for the transition of operation • Define the skill sets of personnel to take on operations • Define both the state and the contractor resources for the transition • Transition timeline must be achievable for both the contractor and state

Section		What to Consider
28.	Knowledge Transfer and/or Training	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> • Define who is responsible for providing the training • Define the requirements for training: <ul style="list-style-type: none"> ○ Who will be trained ○ When the training will occur ○ The methodology that will be used (classroom, web based, computer based, one-on-one, train the trainer, etc.) ○ The minimum/maximum number of people to be trained • Define the types of training required: <ul style="list-style-type: none"> ○ User training ○ Super user training ○ Administrator training ○ Technical/support staff training • Ensure training is on the most recent software version for those maintaining it • Define the “Transfer of Knowledge” requirements along with the method on how this will be accomplished <ul style="list-style-type: none"> ○ Who will be trained ○ When the training will occur (during DD&I or during M&O) ○ How knowledge transfer/training effectiveness will be measured • Define where the training will be conducted: <ul style="list-style-type: none"> ○ Local ○ Distant location ○ On-site in a state location ○ Contractor’s site • Define who is responsible for providing necessary training components • Define the components needed to provide training: <ul style="list-style-type: none"> ○ Hardware ○ Software ○ Connectivity ○ Audio/visual equipment • Define the required outputs from the training: <ul style="list-style-type: none"> ○ Maintenance manuals ○ User manual ○ Operator manual ○ Administrator manual ○ The minimum quantities for each output ○ Output format (hard copy, soft copy, etc.)

29.	Maintenance and Operations (M&O)	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> • Define the M&O requirements for the system <ul style="list-style-type: none"> ○ Software upgrades, patches ○ Define what is included (e.g., hardware and/or software) ○ Define when it will be performed ○ Define whether it will occur during business hours or after business hours ○ Define how long it will take • Define parameters regarding system downtime during preventive maintenance • Define the process as to how and when the state will be notified of scheduled maintenance • Define the roles and responsibilities for the state and the contractor • Define the Service Level Agreement's (SLA's) required response time from service/support call: <ul style="list-style-type: none"> ○ Define the criticality and severity levels ○ SLA response time for standby or on-call maintenance periods ○ Define whether SLAs will vary depending on the time of day and/or day of week ○ SLAs must be realistic • Define the contractor and the state responsibilities within the given response time(s) <ul style="list-style-type: none"> ○ Response time to communicate the issue(s) <ul style="list-style-type: none"> ▪ To whom ▪ How you want the communication ○ Just show up ○ Fix the problem ○ Other • Define the requirements regarding any varying maintenance periods (principal periods of maintenance versus secondary) include the different levels of required support • Define the different types of support that is required <ul style="list-style-type: none"> ○ On-site ○ Use of remote diagnostics ○ Hot line support • Define the requirements or process for issue resolution • Define who, for an in state hosted environment, is responsible for the maintenance of software and/or hardware (contractor hosting would inherently be the responsibility of the contractor)
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Section		What to Consider
30.	Help Desk/Call Center	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> • Define the resources intended to provide the customer or end user with information and support • Define customers/end users • Define who is responsible for troubleshooting problems • Define the escalation process for high criticality problems and resolution • Define how the contractor will provide help for desk support <ul style="list-style-type: none"> ○ Toll-free numbers ○ Websites ○ Instant messaging or email ○ In-house help desks designed to provide assistance to employees
31.	Insurance Requirements	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> • Define all insurance requirements as required by Department of General Services, Office of Risk and Insurance Management (ORIM) <ul style="list-style-type: none"> ○ Commercial general liability ○ Workers' Compensation Insurance/Employer's Liability ○ Coverage needs to be in force for complete term of contract ○ If expires, new certificate of coverage must be received at least ten (10) days prior to expiration • Provisions of the insurance should address: <ul style="list-style-type: none"> ○ Notification within five (5) business days of any cancellation ○ Contractor is responsible for any deductible or self-insured retention contained within the insurance program ○ Termination of the contract will result if contractor fails to keep coverage in effect at all times ○ Provision that any insurance required to be carried shall be primary, and not in addition to any other insurance carried by the state • At a minimum, the following types of insurance must be included: <ul style="list-style-type: none"> ○ Commercial General Liability ○ Workers' Compensation/Employer's Liability

Section		What to Consider
		<p>Other types of insurance include: Automobile Liability, Aircraft Liability, Pollution Liability, Professional Liability, Builder’s Risk/Installation Floater, and Fidelity Bond/Crime Insurance.</p> <p>Note: Agency/state entity must work with DGS, ORIM for assistance to determine appropriate types and amounts to include in the contract. These requirements must have been addressed during the solicitation process.</p>
32.	Warranty	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> • Define the warranty provisions and expectations for both the state and contractor • Define the warranty time period, such as: <ul style="list-style-type: none"> ○ When it begins and ends ○ If it begins after full system acceptance ○ If warranty period starts over if any defects are detected ○ If warranty period starts over based on a defined severity level • Define the escalation process for high criticality problems and their resolution • If there is a phased implementation (e.g., by county, by department) ensure that all phases are covered from defects and warranty begins after full system acceptance and not after each individual phase • Define whether the state requires a warranty for free repair for defects appearing within a given time and/or for repair of defective parts • Define whether the state wants to include liquidated damages; if so, the process must be defined • Include language that the contractor warrants it has the right to sell the software <p>Note: See General Provisions – Information Technology (GSPD-401IT), Provision 18, Warranty, and other related provisions. If there is a warranty section within the SOW, ensure that it does not conflict with the GSPD-401IT General Provisions.</p>

Section	What to Consider
33.	<p data-bbox="285 237 730 268">Service Level Agreements (SLAs)</p> <p data-bbox="756 237 1299 268"><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> <li data-bbox="776 275 1299 537">• Each service level objective must be: <ul style="list-style-type: none"> <li data-bbox="824 306 1013 338">○ Achievable <li data-bbox="824 344 1019 375">○ Repeatable <li data-bbox="824 382 1024 413">○ Measurable <li data-bbox="824 420 1078 451">○ Understandable <li data-bbox="824 457 1013 489">○ Meaningful <li data-bbox="824 495 1024 527">○ Controllable <li data-bbox="824 533 1003 564">○ Affordable <li data-bbox="776 550 1425 1108">• Ensure a standard metric is used as a basis for the performance, such as: <ul style="list-style-type: none"> <li data-bbox="824 615 1398 678">○ Abandonment Rate: Percentage of calls abandoned while waiting to be answered <li data-bbox="824 684 1419 779">○ ASA (Average Speed to Answer): Average time (usually in seconds) it takes for a call to be answered by the service desk <li data-bbox="824 785 1419 879">○ TSF (Time Service Factor): Percentage of calls answered within a definite timeframe, e.g., 80% in 20 seconds <li data-bbox="824 886 1425 1043">○ FCR (First-Call Resolution): Percentage of incoming calls that can be resolved without the use of a callback or without having the caller call back the helpdesk to finish resolving the case <li data-bbox="824 1050 1370 1108">○ TAT (Turnaround Time): Time taken to complete a certain task <li data-bbox="776 1115 1425 1178">• Define the service level priorities and criticality levels <li data-bbox="776 1184 1403 1247">• Each service level objective description must have a cause for the action taken <li data-bbox="776 1253 1425 1285">• Define escalation procedures for SLA disputes <li data-bbox="776 1291 1425 1449">• In a state hosted environment with the contractor responsible for maintaining the software application but not the platform, all state and contractor roles and responsibilities must be clearly defined <p data-bbox="756 1497 1425 1560">Note: Agency/state entity must have their legal staff review and approve.</p>

Section		What to Consider
34.	Liquidated Damages	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> • Provisions for liquidated damages and compensation must be clearly defined and reasonable • Calculation of the compensation must be clearly defined and reasonable • The compensation should not be disproportionate to the actual harm done to the state • Liquidated damages must be tied to a contractual requirement • Define the escalation dispute procedures for liquidated damages <p>Note: Agency/state entity will be required to justify how the amount of liquidated damages charged was determined/derived.</p>
35.	Unanticipated Tasks	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> • Define the percentage allocated to unanticipated tasks <ul style="list-style-type: none"> ○ The budget for unanticipated work shall not exceed 5% of the sum of the base contract (DD&I portion used during DD&I phase) • Unanticipated task language (if applicable to the project) must be defined to include, at a minimum: <ul style="list-style-type: none"> ○ The definition of unanticipated task work ○ The state's process for approving unanticipated tasks ○ As an SOW attachment, the approval document/form (e.g., Work Authorization form) that will be used to authorize each unanticipated task work item. At a minimum, the form must include the following fields: <ul style="list-style-type: none"> ▪ Task summary of work to be performed ▪ Schedule dates of work ▪ Estimated labor hours ▪ Labor hour rates ▪ Estimated total costs ▪ Contractor personnel to be assigned ▪ Job classification/skill level ▪ Completion criteria and/or deliverables ▪ Approval signature lines for the contractor and the state <p>Note: Unanticipated task amounts over 5% of the base contract must be approved by STPD.</p>

Section		What to Consider
36.	Budget Detail and Payment Provisions	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> • Cost worksheets should be an attachment to the SOW and referenced for payments • Define how the contractor will get paid, such as: <ul style="list-style-type: none"> ○ By approved deliverable, useable milestone <ul style="list-style-type: none"> ▪ Milestones and payments should represent project progress, not process execution (e.g., software in production environment versus writing test scripts) ○ Time and material ○ Defined intervals for on-going costs (e.g., monthly payments for M&O) • Payments should be based on performance or outcomes as opposed to paying for paper deliverables only. • Costs for M&O optional years must be clearly outlined <ul style="list-style-type: none"> ○ M&O costs must have been evaluated during the solicitation process • Define payment provisions for unanticipated tasks, such as: <ul style="list-style-type: none"> ○ Hourly labor rates. Note: Hourly labor rates for unanticipated tasks must have been evaluated during the solicitation process ○ The state limits the budget for unanticipated tasks not to exceed 5% of the sum of the base contract (not to include the M&O portion of the contract) • Define whether the contractor is paid for travel and identify: <ul style="list-style-type: none"> ○ If travel is built into contractor's cost ○ Travel and Per Diem provisions • Define payment schedule(s) • Payment(s) should be structured so that the percentage of the contract value is not heavily weighted early in the implementation of the project. This reduces the risk of the contractor walking away if the contract is not going well • Define whether incentive/bonus provisions are included in the payment structure; if so, they must be clearly defined, measurable, and verifiable. The incentive plan must clearly define the state's responsibilities

Section		What to Consider
		<ul style="list-style-type: none"> Contract payment withholds must be utilized in accordance with Public Contract Code, Section 12112, which states that the state will withhold from each invoiced payment amount to the contractor an amount equal to ten percent (10%)
37.	GSPD-401IT General Provisions – Information Technology	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> All IT General Provisions carve outs must be clear and understandable Ensure that none of the SOW requirements conflict with the IT General Provisions <p>Note: Any modifications to the General Provisions including carve outs and non-carve outs must be approved by the STPD Assistant Deputy Director and the California Department of Technology Legal Division. Furthermore, any changes to the GSPDs (carve outs and non-carve outs) must be listed in the Standard Agreement (STD. 213) by the modified GSPD-401IT paragraph number (i.e., non-carve outs) and the specific SOW paragraph section (number) modified forthwith (i.e., carve-outs).</p>
38.	Miscellaneous	<p><u>The following areas should be addressed:</u></p> <ul style="list-style-type: none"> Any special provisions unique the Agency/state entity (e.g., security provisions, federal terms and conditions) *Bond requirements Confidentially forms that must be signed by contractor and subcontractor GS \$mart provisions, if applicable <p>*Bond requirement(s) must have been addressed during the solicitation process. The SOW must include the requirement for delivery of the performance bond. For more information, see SCM, Volume 3, Chapter 4.B2.13, Risk Guidelines.</p>
39.	Glossary of Terms	<p>Terms/acronyms should be defined in a glossary and attached to the SOW. The glossary should encompass terms used both in the solicitation and the SOW in order to eliminate misinterpretations. Review SCM for existing terminology.</p>

4.0 Tips for Development

4.1 Do's and Do Not's

Table 3

	DO	DO NOT
1.	Do research prior purchases that are similar in nature when preparing the SOW language (however, prepare a unique SOW for each procurement.)	Do not simply cut/paste together clauses from previous procurements as they could result in inconsistencies or erroneous references to older technology.
2.	Do include cost details as part of a separate exhibit.	Do not include the dollar amount in the body of the SOW. The dollar amount will be entered on the STD. 213, contract cover page.
3.	Do include the IT General Provisions as a separate exhibit with the language, "incorporated by reference and made part of the Contract" on the STD. 213. Reference the appropriate web links.	Do not duplicate or include clauses that conflict with the IT General Provisions.
4.	Do include business requirements that are defined as the "higher-level statements of the goals, objectives, or needs of the Agency/state entity."	Do not confuse the administrative requirements and forms (required from the prospective bidders in order to be responsive to the solicitation) with the business requirements that may be included in the SOW.
5.	Do include anything that should be legally-binding upon the contractor in the SOW and Exhibits.	Do not duplicate language that is already included or is more appropriate to include in the solicitation document. One can risk contradicting language when it is duplicative in nature.
6.	Do define the resource minimum qualifications (MQs) when preparing the solicitation for services. Experience MQs should be compatible with the skill level required of the project.	Do not fail to include the contractor's key staff MQs as part of the SOW.
7.	Do determine the full range of the problem and include the narrative details as part of the solicitation.	Do not include the problem statement as part of the SOW.
8.	Do include glossary and acronyms used as a separate attachment within the solicitation document.	Do not incorporate a glossary in the body of the SOW. The glossary should be an attachment to the SOW.
9.	Do include provisions to protect the state in the event of a system failure.	Do not assume the system will function correctly all the time.

	DO	DO NOT
10.	Do reference the prospective contractor in the SOW as “Contractor.” The correct references to a “responder to the solicitation” are as follows: <ul style="list-style-type: none"> ▪ IFB = bidder submits a bid ▪ RFO = offeror submits an offer ▪ RFP = proposer or bidder submits a proposal ▪ RFQ = respondent submits a quote 	Do not include references to “vendor” or “bidder” in the SOW as this becomes the contract. The correct term is “Contractor.”
11.	Do describe the work and associated requirements as fully and clearly as possible to assume a complete understanding.	Do not use ambiguous statements or words with multiple meanings, such as “include,” “average,” “adequate,” or “equal,” etc.
12.	Do describe the extent of the need, how the extent is to be determined, and the maximum extent not-to-exceed.	Do not use “catch-all” phrases, such as “to the extent necessary,” “as required,” or “as applicable.”
13.	Do use the same descriptive terminology each time a part, component, or item is referenced.	Do not infer a requirement or state a requirement as an adjunct to another requirement. The contractor may overlook the inference or true objective.
14.	Do include illustrations, diagrams, tables, and charts if they assist in describing the work or related requirements.	Do not overlook the opportunity to include as much information as you can to aid the contractor in understanding your business, technical, and functional needs.
15.	Do have the SOW critiqued by others. Such reviews often uncover discrepancies, inconsistencies, conflicts or ambiguous descriptions.	Do not rely solely on spell check and copying information provided by business and technical teams into your SOW without a third party review.

4.2 COTS, MOTS and Custom Hints

It is important to view software from a “source code rights” perspective. An easy way to differentiate between COTS, modified off-the shelf (MOTS), and Custom is the ability to attain the rights to the source code. For example, COTS does not allow for changes to the source code and, therefore, does not provide any rights to the source code. MOTS typically provides source code rights to some of the source code, generally limited to the customized or modified code. For Custom, the state gets rights to all of the source code. When the state pays for the development of Custom code to go with the contractor developed code, the contractor will jointly share the rights to the modified code with the state. If the state pays for all new code, the state will generally share the rights of the code with the contractor. It is important to note that some previously developed software may provide source code rights (e.g., open source applications, most federally funded software).

Hint: When thinking of a state system or solution, think of it as a collection of software products and components. Rarely will a solution consist of only one software product/component. Some components are true COTS where the state gets the pre-built application, installs it, configures it, and uses it without customization (e.g., Oracle or MS SQL). Other products or components are pre-developed software modified to meet the state's needs, considered MOTS. And, other components applicable to almost all software projects are custom developed software where no existing products exist. Almost all state projects have custom components (e.g., components used to build interfaces between systems). Custom developed software may leverage the COTS and MOTS components but they consist of new source code.

A typical state project consists of all of these to some degree. The State of California's rights to the source code is extremely important in order to maintain the system in the future. Remember...COTS = no rights, MOTS = limited rights to only the new code, and Custom = full rights to the code.

5.0 Resources

It is the Agency/state entity's responsibility to comply with all established CDT policies, procedures, and methods when soliciting proposals and developing contracts for IT procurements.

- Resources for State IT Policy, Standards, Instructions and Guidelines can be found at: http://www.cio.ca.gov/Government/IT_Policy/default.asp
 - SAM
 - SIMM
 - Technology Letters
- The California Department of Technology Cloud Computing Policy can be found at: <http://www.servicecatalog.dts.ca.gov/services/cloud/calcloud/calcloudoverview.html>
 - CalCloud – Overview
- Policies, procedures and methods to promote sound business decision practices in securing necessary IT goods and services for the state can be found at: <http://www.dgs.ca.gov/pd/Resources/publications/SCM3.aspx>
 - SCM, Volume 3 (Information Technology)
- The California Department of Technology's solicitation template used for acquiring Information Technology (IT) goods and services can be found at: <http://www.cta.ca.gov/otp/>
 - Solicitation Template
- Information on requirements can be found at:
 - SIMM Section 170 Requirements Guidelines and Instructions
- The California Department of Technology Project Management Framework and templates can be found at: <http://capmf.cio.ca.gov/>

Attachment A

Glossary of Terms

Table 4: Definitions, Acronyms, and Abbreviations

Term/Acronym	Definition
Agency/state entity	Includes every state office, officer, department, division, bureau, board, and commission, including Constitutional Officers. “State entity” does not include the University of California, California State University, the State Compensation Insurance Fund, the Legislature, or the Legislative Data Center in the Legislative Counsel Bureau.
Business Requirement	Higher-level statement of the goals, objectives, or needs of the Agency/state entity. Business requirements describe the reasons why a project has been initiated, the objective that the project will achieve, and the metrics that will be used to measure its success. Business requirements describe the needs of the Agency/state entity as a whole, not the groups or stakeholders within it. For the purposes of the PAL, business requirements are the Business Problem or Opportunities and Objectives table identified in SIMM Section 19A.1, Stage 1 Business Analysis Preparation Instructions, Section 1.10 .
Commercial off-the-shelf Software (COTS)	COTS product – Typically, a ready-made computer hardware or software product for specific uses and available for sale to the general public. COTS products are designed to be installed without requiring custom development. For example, Microsoft Office is a COTS product that is a packaged software solution for businesses and individuals. The Federal Acquisition Regulation (FAR) defines the rules for COTS products.
Custom solution	Typically, computer software developed for a specific customer to accommodate the customer's particular requirements, preferences, and expectations.
Functional Requirements	Functional requirements represent the business objectives, needs and outcomes of all stakeholders. They should be organized and presented in context of and with a baseline business process/workflow that they describe. They provide a description of what an enabling solution should provide and specify essential details of a solution for stakeholders as a means to express and manage expectations. They describe actions and operations that the solution must be able to perform. They can describe services, reactions, and behaviors of the solution. They also describe information the solution will manage. The requirements should be expressed in business terms and should not include any technical references. The requirement should identify “what” is required to meet the business objective, not “how” the requirement will be implemented.
Modified off-the-shelf (MOTS)	MOTS product – Typically, a COTS product with source code made available to the purchaser to allow for modifications. The product may be customized by the purchaser, by a vendor, or by another party to meet the requirements of the customer. Since MOTS product specifications are written by external sources, purchasers may not have control of future changes to the product.

Term/Acronym	Definition
Non-functional Requirements	<p>Non-functional requirements provide criteria to evaluate the operation of an enabling solution and primarily represent qualities of (expectations and characteristics) and constraints on (e.g., governmental regulations) the solution. They capture conditions that do not directly relate to the behavior or functionality of the solution, but rather describe environmental conditions of an effective solution or productive qualities of the solution. Mid-level non-functional requirements also define quality of service requirements, such as those relating to required capacity, speed, security, privacy, availability, response time, throughput, usability, and the information architecture and presentation of the user interfaces.</p>
Open Source	<p>As defined in SAM Section 4819.2, “Software that includes distribution terms that comply with the following criteria provided by the Open Source Initiative: (The open source definition used here is from the Open Source Initiative and is licensed under a Creative Commons Attribution 2.5 License (http://creativecommons.org/licenses/by/2.5/))</p> <ol style="list-style-type: none"> 1. Free Redistribution: The software can be given as part of a package with other applications; 2. Source Code: The code must either be distributed with the software or easily accessible; 3. Derived Works: The code can be altered and distributed by the new author under the same license conditions as the product on which it is based; 4. Integrity of the author's source code: Derived works must not interfere with the original author's intent or work; 5. No discrimination against persons or groups; 6. No discrimination against fields of endeavor: Distributed software cannot be restricted in who can use it based on their intent; 7. Distribution of license: The rights of the program must apply to all to whom the program is re-distributed without need for an additional license; 8. License must not be specific to a product; Meaning that an operating system product cannot be restricted to be free only if used with another specific product; 9. License must not contaminate other software; and 10. License must be technology-neutral.”
Project/Transition Requirements	<p>Project/transition requirements describe capabilities that the solution must have in order to facilitate the transition from the current state of the enterprise to a desired future state. Mid-level project/transition requirements are differentiated from other requirement types because they are usually temporary in nature and will not be needed once the transition is complete. They typically cover process requirements imposed through the contract, such as mandating a particular design method, administrative requirements, data conversion and migration from existing systems, interfaces, skill gaps that must be addressed, and other related changes required to reach the desired future state.</p>

Term/Acronym	Definition
Solution Requirements	Describes the characteristics of a solution that will meet the business requirements. Solution requirements describe specific characteristics of the solution both in terms of functionality and quality of service. Solution requirements are sub-classified into functional requirements, non-functional requirements and project/transition requirements.
Transition/Project Requirements	See "Project/Transition Requirements" above.

Attachment B

Examples of commonly used SOW Text

The following are paragraphs that are commonly used in an SOW. If the Agency/state entity is modifying the following paragraphs or changing the intent of the text, STPD recommends that the Agency/state entity discuss with STPD. The paragraphs below are not all-inclusive.

1.0 Unanticipated Tasks

[INSTRUCTIONS: Agency state/entity information: Unless otherwise specified, the SOW shall define and authorize work on a Fixed Price basis, with a guarantee of task completion.

To the extent that additional work not foreseen at the time the Contract is executed and must be accomplished, Work Authorizations, as described in the SOW, will be the means for defining and authorizing such work on a Labor Hour basis.]

- a. In the event that additional work must be performed which was wholly unanticipated and is not specified in the SOW but which in the opinion of both parties is necessary to the successful accomplishment of the general scope of work outlined, the procedures outlined in this Section will be employed.
- b. For each item of unanticipated work not specified in the SOW, a Work Authorization will be prepared in accordance with the sample attached as *Exhibit X*. *[INSTRUCTIONS: Agency/state entity to provide and attach a sample Work Authorization (Exhibit X) to their SOW].*
- c. It is understood and agreed by both parties to this Contract that all of the terms and conditions of this Contract shall remain in force with the inclusion of any such Work Authorization. Such Work Authorization shall in no way constitute a Contract other than as provided pursuant to this Contract nor in any way amend or supersede any of the other provisions of this Contract.
- d. Each Work Authorization shall consist of a detailed statement of the purpose, objective, or goals to be undertaken by the contractor, the job classification(s) or approximate skill level(s) of the personnel to be made available by the contractor, an identification of all significant material to be developed by the contractor and delivered to the state, an identification of all significant materials to be delivered by the state to the contractor, an estimated time schedule for the provisions of these services by the contractor, completion criteria for the work to be performed, the name or identification of the contractor personnel to be assigned, the contractor's estimated work hours required to accomplish the purpose, objective or goals, the contractor's billing rates as identified in *Exhibit XX* per work hour, and the contractor's estimated total cost of the Work Authorization. *[INSTRUCTIONS: Agency/state entity should have evaluated the classification rates and the defined skill level(s) during the solicitation process and must refer to those rates as referenced in Exhibit XX.]*
- e. All Work Authorizations must be in writing prior to beginning work and signed by the Contractor and the State.

- f. The State has the right to require the Contractor to stop or suspend work on any Work Authorization pursuant to the “Stop Work” provision of the General Provisions.
- g. Personnel resources will not be expended (at a cost to the State) on task accomplishment in excess of estimated work hours required unless the procedure below is followed:
 - 1) If, in the performance of the work, the Contractor determines that a Work Authorization to be performed under this Contract cannot be accomplished within the estimated work hours, the Contractor will immediately notify the State in writing of the Contractor's estimate of the work hours which will be required to complete the Work Authorization in full. Upon receipt of such notification, the State may:
 - (a) Authorize the Contractor to expend the estimated additional work hours or service in excess of the original estimate necessary to accomplish the Work Authorization (such an authorization not unreasonably to be withheld), or
 - (b) Terminate the Work Authorization, or
 - (c) Alter the scope of the Work Authorization in order to define tasks that can be accomplished within the remaining estimated work hours.
 - 2) The State will notify the Contractor in writing of its election within seven (7) calendar days after receipt of the Contractor's notification. If notice of the election is given to proceed, the Contractor may expend the estimated additional work hours or services. The State agrees to reimburse the Contractor for such additional work hours.

1.1 Amendment

The contract may be amended, consistent with the terms and conditions of the contract and by mutual consent of both parties, subject to approval by the Statewide Technology Procurement Division under PCC 12120. No amendment or variation of the terms of this Agreement shall be valid unless made in writing, signed by the parties and approved as required. No Oral understanding not incorporated in the Agreement is binding on any of the parties.