

# Tips for Drafting Statement of Work (SOW) Tasks

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### Introduction

A well-written statement of work (SOW) is the key tool in managing a contract and avoiding disputes and performance problems. The SOW is the heart of the contract. At the heart of the SOW are the objectives, the tasks that perform the work to implement the objectives and the deliverables that achieve the objectives and goals of the project.

This guidance document provides tips for drafting project requirements, including objectives, tasks and deliverables defined in a contract SOW. Refer to the SOW Writing Guide for more information on organizing and drafting all SOW content areas.

## **Writing Effective SOW Requirements**

The SOW establishes the basis for managing the contract. Requirements contained in the SOW gauge contractor performance and overall project results. In defining project objectives, deliverables and tasks, the procurement team should establish criteria that will facilitate its ability to link performance to results and to assess whether the project is meeting its objectives. To accomplish this, use the SMART criteria to draft SOW elements: **Specific**, **Measurable**, **Achievable**, **Realistic**, and **Time-bound**.

#### Write an Effective Objective

An *objective* is a level of performance, or achievement used to determine if the project has met its goals for delivering the intended business value.

#### A SMART objective:

- Starts with "To..."
- Contains measurable words like "increase", "decrease", "reduce"
- Has a number, defining a desired level of performance
- Is temporally-bound, by a date or time period to achieve
- Does not include ambiguous or un-measurable words like "optimize", "maximize", "minimize", or "ongoing"

#### Write an Effective Deliverable

A project *deliverable* is the end-product or service that a contractor submits to an agency for acceptance. A deliverable must satisfy one or more SOW requirements. A documented deliverable should provide a means to trace it back to a specific SOW requirement to monitor its development and ensure its quality throughout the project.

#### A SMART deliverable:

- Is expressed as a noun and references a thing
- Does not begin with an action verb
- Can be related to a standard or a specific set of requirements by which it can be evaluated
- Can be related to a performance expectation
- Can be related to a schedule and milestones by which its development and delivery can be assessed
- Can be related to a pricing schedule
- Is discrete and does not overlap with other deliverables

#### Write an Effective Task

A project *task* is an element of work that describes what needs to be done and what needs to be produced. Tasks produce the work products that manage the project and processes as well as the project deliverables and outcomes. Each project task should correlate to at least one of these elements.

A work breakdown structure (WBS) is a tool that helps develop comprehensive descriptions of deliverables, tasks, resource requirements and assignments, and acceptance criteria. The levels of detail in each WBS will vary according to the SOW type. Tailoring the WBS tool to the contract type enables prospective contractors to develop proposals responsive to the requirements of the SOW. Refer to the section below on "Defining the Work" for more information on developing a WBS.

#### A SMART task:

- Is an action statement, beginning with a verb
- Has an estimated start date and finish date or duration.
- Includes an estimate of hours to complete
- Reflects no less and no more duration than can be reasonably managed during a reporting period (4-8 hours minimum and 40-80 hours maximum)
- Assigns responsibility and resources
- Appears in logical sequential order based on when it must be undertaken
- Relates to another task, a project milestone or a deliverable, as applicable

# **Defining the Work**

There are many ways to identify and define the work necessary to complete a project. A well-defined structure, organized around project deliverables that are labeled and traceable throughout the project life cycle, will enable the procurement team to define exactly "what" needs to be built and the acceptance criteria for each product. After identifying, defining and agreeing to the deliverables, use this same model to develop descriptions of the tasks that define "how" to build the product.

This section provides examples and methods for analyzing, documenting and organizing work, deliverables and outcomes specified in a SOW, depending on the contract type.

#### Create a Hierarchy with a WBS

A WBS is a tool used to identify and define the work necessary to complete a project. A WBS is a hierarchy organized around categories, or branches of work. Some SOWs require the contractor to submit a WBS as a component of a project work plan. For a design-based SOW, the contracting agency should have clear insight into the development process to describe the tasks necessary to fulfill the requirements of the SOW.

While it might be tempting to begin identifying all of the obvious tasks related to each branch of work, the WBS should first identify the project outcomes or deliverables. This deliverables-based approach begins with the end in mind and enables the team to visualize the project outcomes and end-products that must be delivered to deem the project a success.

Each level of the WBS reflects a more detailed representation, or decomposition, of the work. Figure 1 provides an example WBS for a website redesign project. Beginning at the top, or project level (1.0) through the third level (1.n.n) of decomposition, this example reflects the project deliverables by the project phase or work category.

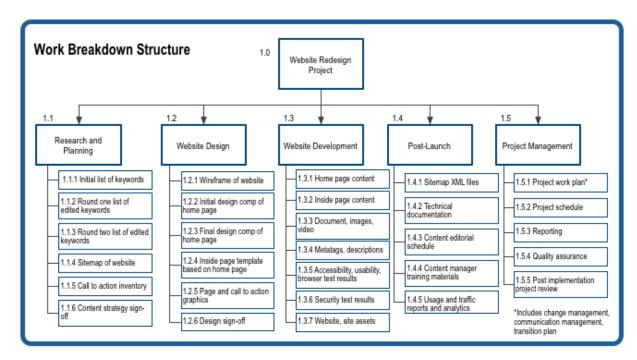


Figure 1: Deliverables-Based WBS Example

Additionally, a WBS assists in estimating the time and cost to perform the project tasks and produce the deliverables, identifying the resources needed to support project tasks and establishing quality measures as a basis to guide acceptance criteria.

#### **Document Specifications and Establish Traceability**

The WBS can also provide a means to associate performance, delivery and acceptance standards with the deliverables. The following table provides an example to use in conjunction with a WBS. The Deliverables List relates the project deliverables to their branches of work and creates a means to trace these deliverables to the standards and criteria for their review and acceptance.

For example, the project deliverables shown in Table 1 indicate which items require a Deliverable Expectation Documents (DED). A DED provides details of the form, format and content of a deliverable. The DED aligns a contractor's product and service delivery with the customer's expectation for the product or service.

**Table 1. Deliverables List** 

Project Work Category	Deliverable ID	Description	DED Required?
Project Management	BA-1	Project Kickoff Presentation	
	BA-2	Project Management Plan	Yes

	BA-3	Communication Management Plan	Yes
	BA-4	Weekly Status Report	Yes
Requirements, Design and Implementation	BA-10	System Requirements Specification	Yes
	BA-11	Batch Development Standards	Yes
	BA-12	Test Management Plan	Yes
	BA-13	Test Plan and Scripts	Yes
	BA-14	System and Performance Test Report	Yes
	BA-15	Deployment Plan	Yes

Table 1 also assigns a unique deliverable number, which provides traceability of the item throughout the project lifecycle. For example, Table 2 presents an expanded definition of the customer's expectations for BA-1, Project Kickoff Presentation and BA-2, Project Management Plan.

**Table 2. Deliverables Requirements** 

BA-1 Project Kickoff	Presentation		
Required Delivery	Within 30 days of the effective date of the contract		
Frequency	Once		
Description	This deliverable is a presentation to familiarize project team members with the project. The presentation includes the following topics:  Project Overview Project Schedule (high level) Objectives and Definitions Process Deliverables Roles and Responsibilities Resources Success Measures Next Steps Questions and Answers (Q&A)  NOTE: The kickoff presentation must be provided to the agency at least 3 working days prior to the presentation to provide sufficient time for the agency to review and provide input on the material and request revisions if necessary.		
References	N/A		

BA-2 Project Manag	ement Plan
Required Delivery	Submitted for approval within 30 calendar days of the effective date of the contract
Frequency	Once
Description	The Project Management Plan must cover the following areas at a minimum:
	Project Overview
	<ul> <li>Project Description</li> </ul>
	o Project Scope
	<ul> <li>Assumptions</li> </ul>
	o Constraints
	Project Organization
	o Project Structure
	o External Stakeholders
	<ul> <li>Roles and Responsibilities</li> </ul>
	Project Start-up
	<ul> <li>Project Life Cycle</li> </ul>
	<ul> <li>Methods, Tools and Techniques</li> </ul>
	o Work Activities
	<ul> <li>Schedule, Resource, and Budget Allocation</li> </ul>
	<ul> <li>Communication Management Plan (refer to separate BA-3</li> </ul>
	deliverable)
	Configuration Management Approach
	<ul> <li>Change Management Plan</li> </ul>
	<ul> <li>Requirements Management Plan</li> </ul>
	Performance Management
	o Project Business Metrics
	Risk Management Plan
References	The requirements listed above shall conform to IEEE Standard 1058 for Software Project Management Plans.

#### **Define Tasks for Each Deliverable**

Task analysis may involve several levels of decomposition, from high level to very specific sub-tasks. The type of SOW affects how detailed the procurement team needs to describe the tasks. For example, a design-based SOW describes tasks at a more detailed level than a performance-based SOW, which focuses more on the specificity of the outcomes or deliverables and not the tasks.

A procurement team should incorporate the following tips, tailored to the project or procurement requirements, to develop the contract SOW:

- Gather information needed to meet the contract objectives. If starting with a previous contract, copy only the task and deliverable information, not the template information.
- If using task and deliverable language from another contract, revise to meet current project requirements, expectations, and specifics that apply to the project and contract.
- Give each task, subtask, and deliverable a number and a brief name.
- For each task, briefly describe the main purpose of the task.
- Assign responsibility for activities to perform under the task.

Contractor shall... required for contractor optional for contractor Agency will... required for agency

• Identify tangible, measureable deliverables that indicate the objectives of the task. Specify requirements for acceptance.

Deliverable must...

describe requirements

- Be as detailed as reasonably possible when describing deliverables and requirements. If written standards exist, incorporate them into the contract by reference. If there are no written standards, seek to provide an example of a completed deliverable to the contractor.
- Require a draft of a deliverable to gauge quality. This allows for corrections before finalizing the deliverable.
- Be as specific as possible. Avoid using ambiguous words or phrases, such as we, they, our, assist, help, work with, acceptable, reasonable, best efforts, industry standards.
- When unable to determine specific tasks and deliverables to be completed, use a phased approach to the contract. For first phase, clearly describe the final objective of the contract and describe the process used to determine specific tasks and deliverables needed for the next phase.
- Define all acronyms in the body of the SOW, then use the acronym consistently throughout.

Contractor shall prepare an Interchange Area Management Plan (IAMP). The IAMP must...

• Avoid using multiple terms to refer to the same thing. Instead, define a term, and then use the defined term consistently throughout the SOW.

Contractor shall prepare an Implementation Project Status Report (Status Report). The Status Report must...

- For ease and consistency, when indicating a quantity use numerals. Do not write out the word. Examples: 3 copies; 15 copies, not three copies; fifteen (15) copies.
- Choose to either specify deliverable due dates within each task or list all in a single table. Placing due dates in multiple locations can create conflict when making revisions.

# Below is an example of a task statement. This example incorporates the following tips for drafting a task:

- Task number and name
- Task purpose
- Deliverable requirements
  - Use of contract writing conventions when assigning responsibility
  - Contractor responsibilities
- Agency responsibilities
- Deliverable and submittal requirements

#### **Task 7 Preparation of Reports**

Contractor shall prepare and submit a Geotechnical Report and Subsurface and Foundation Data Sheets (Geotech Report) summarizing evaluations, analyses, and recommendations.

#### Geotech Report must include:

- Site Plan and Vicinity Map showing the surveyed boring locations
- Subsurface and Foundation Data Sheets conforming to ODOT standards (refer to Task 8)
- Discussion of regional and site specific geology, seismicity, and seismic hazards
- Summary of subsurface conditions encountered
- Summary of hydraulic conditions relevant to the bridge foundation and geotechnical design considerations
- Summary of design recommendations and evaluations as outlined in Task 6
- Guidelines for earthwork and foundation construction
- Appendix items must include drill logs and color rock core photographs as provided in the engineering Geology Report, appropriate as constructed plan sheets, milestone bridge plans available at the time of the final report preparation, seismic and Lpile parameters (if not included in the body of the report) and marked up special provisions

Contractor shall prepare and submit draft Geotech Report for agency review and comment. Contractor may include graphs and illustrations in the draft Geotech Report.

Agency will review draft Geotech Report and provide written comments back to Contractor no later than 10 days after receipt.

Contractor shall incorporate or address agency's comments in the preparation of the final Geotech Report.

#### Task 7 Contractor Deliverables and Schedule

- Draft Geotech Report Submit 3 hard copies within 5 weeks after receipt of Notice to Proceed (NTP).
- Final Geotech Report Submit in electronic format and submit 10 hard copies within 14 days following receipt of agency comments. Subsurface and Foundation Data Sheets must be printed on 11x17 paper.