

GUIDE TO PREPARING A STATEMENT OF WORK

**State of Arizona
State Procurement Office**

ABBREVIATED GUIDELINE FOR PREPARING A STATEMENT OF WORK

A statement of work (SOW) is a narrative description of a contract's goals/agenda. It is also a valuable project management tool. The SOW is the key in the evaluation of proposals received and contractor selection. After award of a contract, the SOW becomes the standard against which the State of Arizona (State) will measure a contractor's performance. It should set measurable limits as to what the State can demand and what a contractor must perform in order to be compensated. An SOW should include the following sections:

- I. Introduction/Background
- II. Objectives
- III. Scope
- IV. Task Identification
- V. Time Frames and Deliverables

The statement of work (SOW) describes the framework within which a contractor is expected to operate – that is, the work to be performed and/or the results to be achieved). The SOW normally consists of six sections:

- I. Introduction/Background
- II. Objectives
- III. Scope
- IV. Task Identification
- V. Time Frames and Deliverables

INTRODUCTION/BACKGROUND

__ This section identifies the need for this particular work, cites the contract's goals, describes the location of the work, and identifies how the contract work fits into the State's mission and goals.

__ This section should consist of no more than three to four paragraphs.

OBJECTIVES

- __ These are well-defined statements of the results to be achieved in order for the overall mission of the work to be accomplished.
- __ The objectives should be quantifiable criteria that must be met for the work to be considered successful.

SCOPE OF WORK

- __ This section briefly states what the scope of work does and does not cover. The scope of work paragraph should be limited to what is necessary to convey the intent of the contract.
- __ It includes an outline of the extent of the work, a brief overview of the steps of the project, a brief description of the methodology to be used, and a description of the location of the work.

TASK IDENTIFICATION

- __ Tasks are activities and milestones that need to be completed to accomplish the contract objectives. Tasks can be structured by milestones, deliverables, or processes.
- __ Include the following in this section:
 - __ A clear delineation of responsibilities
 - __ A detailed description of each work element
 - __ The approach or methodology
 - __ Timelines and deliverable requirements with each task description
 - __ State support in terms of equipment, staffing, computers, software, or subcontractors, as applicable
 - __ A clear description of any specific equipment or software compatibility requirements
 - __ Identification of documentation that must be followed or used as guidelines
 - __ Clear instruction of contract phasing or sequencing, if necessary

TIME FRAMES AND DELIVERABLES

__Specify time frames as they apply to completion of tasks, milestones, and/or completion of the entire contract.

__State what the contractor is responsible for delivering during the course of the work and at the end of the project, as applicable.

__Deliverables should:

__Be specific

__Have clear instructions regarding their submission

__Clearly define the manner in which the State will determine if they are acceptable

PREPARING A STATEMENT OF WORK

The SOW describes the basic framework within which a contractor is expected to operate, that is, the work to be performed and/or the results to be achieved. It should include information on the relationship to the program it supports and a summary of the statutory and regulatory requirements that pertain to the work. The SOW is intended to act as a baseline for resolving questions of interpretation about the scope of the work in the final, negotiated contract. It is intended to supplement, rather than to duplicate a contract. An SOW should clearly reflect what the State expects the contractor to accomplish. The more specifically tasks are delineated; the more accurately the cost of a proposed contract can be estimated. Poorly drafted SOWs can lead to confusion about expected performance, unnecessary disputes or litigation, cost overruns, delays, or deteriorating relations between the public and private sectors.

The objectives of a well-defined SOW will

1. Provide precise and clear definition of all deliverable items
2. Employ cost-effective contracting measures
3. Establish contract requirements
4. Provide clear guidelines for both the State and the contractor
5. Provide criteria by which to inspect and accept deliverables
6. Develop performance standards for the contracting parties
7. Provide for uniform technical requirements
8. Ensure consistent quality output
9. Provide for and promote safety
10. Assure that the contractor can be compensated on time and fully for acceptable deliverables

11. Develop realistic time frames, tasks, and deliverables

The components of an SOW are described in the next section. In general, a well-prepared SOW should provide answers to the following summary questions:

__*Why* – (Introduction/Background)

__*Where, What If* – (Scope of Work)

__*How* – (Tasks Identification)

__*Who* – Responsibilities of the parties (Task Identification)

__*When* – Time frames, deadlines (Timeframes and Deliverables)

__*What* – Outputs, deliverables (Timeframes and Deliverables)

I. INTRODUCTION/BACKGROUND

The introduction explains how this contract fits into the State's mission and goals and describes the location of the work. The introduction provides a brief historical description of events leading to the current need(s) and sets the stage for the subsequent explanation of what the State requires in terms of performance. The background section defines why the contract is being pursued and the particular need of the State.

The introduction should be no more than three or four paragraphs and should provide the following information:

- ___The need for this particular work, including a description of events leading to this need – that is, why the contract is being pursued and the particular need of the State – and a description of how the work relates to other on-going or future work at the State or in conjunction with other governmental entities or non-profit organizations.

- ___The contract's goals and the relationship of the contract goals as they relate to the State's project/program goals.

- ___A description of how the work relates to the State's missions and priorities.

- ___The legal basis for the statement of work – referencing legislation, legal requirements, or State policy.

- ___Key terms that will be referenced throughout the statement of work, e.g., minimum flows and levels, Indian River Lagoon, and surface water improvement and management, as well as a general description of the work location.

- ___Include any additional background information that would be useful in understanding the nature of the proposed contract.

II. OBJECTIVES

Objectives are well-defined statements of the results to be achieved in order for the overall mission of the work to be accomplished. In other words, work objectives are the quantifiable criteria that must be met for the work to be considered successful. This section must communicate a concise description of work objectives and how those objectives interrelate.

The following acronym can be used to remember the essentials that characterize a statement of objectives. A work objective must be **SMART**:

Specific

Measurable

Attainable

Realistic

Time-limited

Following are examples of contract objectives:

- 1. The objective of this study is to obtain information defining the relationship between parameters X, Y, and Z.*
- 2. The objective is to develop and implement a cost-effective project control system that would track and measure the performance of projects with respect to their schedule and budget, by December 31, 2001.*
- 3. The objective of this work is to develop training materials in the area of Managing Teams and to train supervisory personnel by December 30, 2001.*
- 4. The objective of this contract is to procure 120 10-mile-range radio units for use in government vehicles.*
- 5. The purpose of this work is to develop, mail, analyze, and interpret the results from a questionnaire/survey to 10,000 residences to measure the residents' perception regarding the quality of the water in the city of Palatka.*
- 6. The objective of this work is to undertake a feasibility study to determine the technical and economical feasibility of a 4-day workweek by December 31, 2001.*

III. SCOPE OF WORK

Since the amount of work involved is directly connected to the contract's scope, scope management is arguably the single most important contract management activity in terms of achieving time and cost targets.

The scope of work is a small part of the overall SOW. The scope section briefly states what the SOW does and does not cover. The scope paragraph defines the breadth and limitations of the work to be performed – not how to do it. The information contained in the scope should be limited to only what is necessary to convey the intent of the contract. For instance; the following elements should be in the Task section and not in the Scope section:

- 1. Directions to the contractor to perform work tasks*
- 2. Contract specifications or data requirements*
- 3. Detailed description of deliverable products*

Consideration of the contract's scope is an important step in developing the contract documents. The scope section of the SOW will be used to determine whether additional work is "in or out" of scope. Out-of-scope requirements require a separate contract action. The scope section should include the following:

- An outline of the extent of the work envisioned
- A brief overview of the steps, tasks, and/or phases of the project
- A brief description of the approach or methodology to be used
- A brief description of the location of the work. A detailed legal description of the property may be required and, in some cases, it will be necessary to include a map showing more detailed site location(s)
- Any pivotal decision points following completion of a task or phase (e.g., 'stop/go.' Is it cost effective? Was the result of the initial study successful? Does the State have the appropriate authority, e.g. permits, easements?).
- Identification of work that is not encompassed in the scope and which may need clarification. Examples of this are:
 - 1. Contractor provides sample collection; State provides lab.*
 - 2. State provides pumps; contractor installs pumps.*
 - 3. Should contractor encounter hazardous waste on the project site, the State will be responsible for removal and any remediation necessary.*

IV. TASK IDENTIFICATION

Tasks are the activities and milestones that need to be completed to accomplish the contract objectives. Tasks are a narrative description of the spectrum of services to be rendered or work to be performed. Tasks can be structured by milestones, deliverables, or processes. Clear definition of the tasks is a must in order to reduce scope creep. Following are some specific guidelines and examples:

__ Define the range of contractor activities, beginning the following tasks with the phrase "All work required to ...":

1. *Design, sample and test*
2. *Develop, manufacture, and field test*
3. *Test and evaluate*
4. *Collect and analyze*

__ Define all detailed technical requirements that are required in the delivered product or service.

__ Categorize requirements (reporting, documentation, survey, design, etc.):

1. *The survey shall include a minimum of 10,000 households.*
2. *Analysis shall be made to determine the statistical relationship between X, Y, and Z, etc.*
3. *The radio shall operate in the temperature range of -20 to +60 degrees centigrade.*

__ Use a standard formatting system, for example, Construction Specifications Institute (CSI), Engineers Joint Contract Documents Committee (EJCDC), etc., if applicable. If not, the following items should be considered in preparing this section:

1. *Tasks (subtasks/project specific details, define the major tasks in such a way that the sequence allows for progress measurement and easily measured task costs)*
2. *Design Details, permits, etc.*
3. *Quality Assurance/ Control (e.g., QAPP, CIAP, EPA study)*

1. *A growth or change in your project which happens while you're developing the statement of work. It typically involves adding or modifying features as the design evolves.*
2. *The migration of a project from a budget, schedule, or defined plan to a slowly expanding source of conflict, confusion, and additional costs.*

3. *A term architects and engineers use for the tendency of projects to grow, expand, or swell beyond the original intent.*

__Scope Creep

In summary, the Task Section should include the following:

- ___A clear delineation of the responsibility of the parties
- ___A detailed description of each element (step, task, and/or phase), including specifics, as necessary, about how the tasks interrelate or build upon one another
- ___An approach or methodology to be used to reach the objectives outlined in the scope and ultimate end product
- ___Timelines and deliverable requirements with each task description
- ___Information on contractor and State support in terms of equipment, staffing, computers, software, subcontractors, as applicable
- ___A clear description of any specific equipment or software compatibility requirements
- ___Identification of any reports, research papers, reference material, or other State documentation that must be followed or used as guidance in proposal preparation or project performance
- ___Clear instructions if contract phasing is necessary.

V. TIME FRAMES AND DELIVERABLES

Time Frames

An SOW must describe not only what needs to be done, but also when each task or part of the contract must be completed. Many contracts are unsuccessful not because contractors fail to meet their objectives, but because they fail to do so in a timely manner, or within the agreed upon deadline. Time schedules in any contract are as important as deliverables or payments.

Time frames will be used as a measure of both ongoing performance and satisfactory completion of the work. The performance period shall be broken down by task and include the specific number of days, week, or months from contract execution or a detailed time frame for submission of deliverables. Timing is also critical for State review, testing, and/or feedback. Delays in completion may occur when the project manager fails to closely monitor the gradual completion of tasks within the stated time frames. Appropriate time frames are essential for tracking the contractor's performance so that corrective action may be taken when delays occur, rather than making adjustments at the end. Examples of time frames are

1. *Three weeks after contract execution*
2. *Within five working days after the end of every month*
3. *Ten days after receipt of State recommendations*
4. *Specific date*
5. *Permit application completed within 45 days of execution*
6. *Work completed within one year from receipt of permit*

Deliverables

Deliverables are the "outputs" or the "end products" of the scope and are evidence of a contractor's performance in meeting the contract requirements. Most deliverables take the form of a tangible product (hardware, software, data, written report, completed well, etc.), but some can also be less tangible (meeting facilitator or custodial services). Deliverables also serve as a measure of the contractor's adherence to, or deviation from, the requirements of the SOW. It is extremely important that the required deliverables

Are specific

Have clear instructions regarding their submission

Clearly define the manner and standards by which the State will determine whether they are acceptable

Summary

There is a close relationship between deliverables, tasks, and payments. Both the completion of tasks and the submission of deliverables must occur within stated time frames. To ensure timeliness, the SOW must include criteria by which the State will accept or reject deliverables within a reasonable, clearly specified time. Criteria for acceptance must be clear to the contractor and reasons for time extensions must be clearly articulated. A. Adjacent to each deliverable, list the time period required for delivery after contract award. Examples include the following:

1. *Progress reports, draft final report*
2. *Meetings required with the State, the public, and other interested parties, e.g., FDEP*
3. *Draft survey questionnaire*
4. *Training sessions necessary to implement project successfully*

B. Examples for rejection of deliverables include the following:

1. *Does not meet specification – different size, capacity, or type specified by contract*
2. *Does not meet quality specified by contract*
3. *Does not meet time requirements – prior to deliverable due date, contractor must request and provide adequate justification for extension*
4. *Contractor proceeded with task that required specific State approval before starting*

OTHER FACTORS TO CONSIDER IN SOW PREPARATION

Statement of Work Contents

The following descriptions are provided as more detailed background for areas covered in the Statement of Work Guidelines previously presented and/or as sections that may need to be specifically highlighted in the statement of work, depending on the complexity of the contract.

Contract Location

- Services or tasks which need to be performed at a particular location and must be specified in some detail in the statement of work
- Identification of the area, region, county, and municipality
- Legal description and/or detailed map of the precise site(s), attached to the statement of work
- Concise information regarding legal access to non-State owned property and the party responsible for securing such access (easements/right-of-way records), as in lease agreements

State Responsibilities

- Resources that will be provided by the State to the contractor to ensure successful completion of the project, including staffing expertise, documentation, data, office space, drawings, maps, computer equipment, software
- All resource commitments must be approved through the appropriate level of internal division/department approvals
- Identification of historical or environmentally sensitive areas
- Particularly important in cost-sharing arrangements or other situations in which it is more cost effective to utilize available State resources
- Special permits

Contractor Responsibilities

- Permits or license requirements (e.g., construction projects)
- Required equipment (e.g., hardware or construction related projects)
- Site preparation – removal of debris, grading, vegetation restoration, etc.
- Quality control/quality assurance requirements (e.g., research projects)

OSHA requirements, safety standards

Environmental impact requirements

Security requirements, site protection

Time Schedule and Deliverables

Specific type of deliverable (hardware, software, data, draft/final reports, workshops, documentation, contract orientation meetings, progress review meetings, training, presentations, research papers, publications, etc.)

Explicit instructions on how the deliverable is to be submitted – both in format and quantity of deliverables and number of days, weeks, or months from contract execution or specified time frame

Items and timing for State review, testing, and/or feedback

Standards or criteria for acceptance by the State

Budgetary Responsibilities

The project manager must clearly explain all budgetary needs so that appropriate language can be included in the contract. Other budgetary and compensation factors to consider are

Retainage (10% or none)

Bonding and insurance requirements

Renewals with escalation clause, if applicable

Source and any conditions for expenditure of outside funding, specifically state or federal

Matching funds for cost-share agreements, including in-kind services

Phasing – over two or more fiscal year periods

Availability and approval of future fiscal year funding

Acceptance Testing

Applicable to software/hardware, engineering products, structural mechanisms, models, design/build projects, etc.

___ Identification of specific procedures or criteria that need to be applied to test the end product or ensure that it functions in accordance with established design specifications or technical requirements or verify the integrity of the deliverable

___ Can be set up as a joint effort by the contractor and the State, by the State alone, or by the contractor with State staff present

Proposed Contractor Options/Alternatives

___ For projects that may lend themselves to adopting alternate methods or technologies, the solicitation statement of work may contain a section that requests all respondents to propose viable options for State consideration.

___ Requires the respondent to critique the methodology (one or more) envisioned by the State, identify the benefits that the State would derive from any option alternative, and provide separate cost information that would be subject to negotiation.

___ Requires respondents to address tasks as separately priced options that the State may or may not exercise during the term of the contract.

Stop/Go Decisions

___ Appropriate for research and development projects or studies whenever there is a significant level of uncertainty and allows the opportunity to review progress or obtain documentation (e.g., permitting) that is critical to ensure technical viability.

___ The solicitation and resulting contract includes the point at which a stop/go decision will be made to allow the contractor to proceed as originally planned, take a different course, or terminate the contract.

___ Limits the State's liability, both financially and technically.

Cost/Benefit Analysis and Implementation Recommendations

___ Appropriate for study projects in which the contractor is required to make recommendations on which the State may subsequently take action. These include organizational studies, feasibility studies, or studies that address structural changes

___ Requires the contractor to provide a cost/benefit analysis with a justification for the recommendation

___ Allows the State the option of pursuing the recommendation(s) and the right to determine whether or not it is most cost effective and efficient to continue with outside resource(s) or use of State staff

Solicitation Statements of Work

- ___ In Invitation for Bids, the statement of work must be as specific and comprehensive as possible since award will be made on the basis of the lowest evaluated price by both a responsive and responsible bidder. Since the IFB is not subject to negotiation, the statement of work is incorporated as part of the contract without further changes.

- ___ In negotiated procurements (Request for Proposals), the solicitation statement of work is, by necessity, less specific since the State will determine, in conjunction with the selected contractor, the most appropriate approach and timing for achieving the desired objective.

- ___ The final, *negotiated* statement of work in the RFP is a combination of the State's solicited statement of work and the selected contractor's proposed statement of work. The finalized version clearly identifies all responsibilities of the parties and includes language (use of the word 'shall') to impose a duty that must be enforced.