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DATA ITEM DESCRIPTION	
1. TITLE STATEMENT OF WORK (SOW)	2. IDENTIFICATION NUMBER PPA-000953-9 23 November 2020
3. DESCRIPTION/PURPOSE OF THE STATEMENT OF WORK 3.1 The Statement of Work (SOW) specifies the work tasks to be performed by a supplier, including an organizational entity internal to an organization. The SOW may specify the methods to be used to ensure that these tasks have been performed to the specified standard. Reference herein to a “supplier” should be interpreted to include reference to any entity tasked with providing a service. 3.2 The SOW may be used in the acquisition of a service alone, or a system and associated services such as installation and testing. The SOW specifies the deliverable services. It does not specify the system - this is specified in a System Specification which may be invoked by the SOW. It does not specify any data deliverables - these are specified in a Contract Data Requirements List (CDRL) or equivalent which may be invoked by the SOW, and by associated Data Item Descriptions (DIDs) or equivalent which are invoked by the CDRL. The SOW may specify services “internal” to the contract or project in order to control, for risk reduction purposes, the way in which the tasks are performed by the supplier.	
4. APPLICATION/INTERRELATIONSHIP OF THIS DID 4.1 This Data Item Description (DID) may be cited in a contract or any other form of agreement, Statement of Requirement (SOR), Statement of Work (SOW), a Contract Data Requirements List (CDRL), or within a standard invoked by a SOR or SOW. 4.2 This DID incorporates and adopts some non-copyrighted material contained in MIL-HDBK-245E, Preparation of Statement of Work, issued by the United States Government.	
5. PREPARATION GUIDELINES 5.1 General Instructions a. Automated techniques. Use of automated techniques is encouraged. The term "document" in this DID means a collection of data regardless of its medium. b. Alternative presentation styles. Diagrams, tables, matrices, and other presentation styles are suitable substitutes for text when data required by this DID can be made more readable using these styles. <i>continued next page</i>	
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5. PREPARATION GUIDELINES *continued*

5.2 Acronyms

Acronyms used in this document shall be interpreted as follows:

ASCII	American Standard Code for Information Interchange
CALS	Computer Aided Logistics Support
CASE	Computer-Aided System
CC	Creative Commons
CDRL	Contract Data Requirements List
CWBS	Cost Work Breakdown Structure
DID	Data Item Description
SOR	Statement of Requirement
SOW	Statement of Work
WBS	Work Breakdown Structure

5.3 Abbreviations

Abbreviations used in this document shall be interpreted as follows:

SI	International System of Units
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5.4 Guidelines in the Preparation of an SOW

5.4.1 Characteristics of a Well-Prepared SOW

A well-prepared SOW has the following attributes:

- a. specifies requirements clearly to permit the acquirer and suppliers internal or external, tenderers, offerers, as applicable, to estimate the probable cost and to determine the levels of expertise, manpower and other resources needed to accomplish the scope of work;
- b. states the specific duties of the supplier in such a way that it is clear what tasks are to be performed and how well the tasks are to be performed;
- c. written so specifically that there is no uncertainty as to whether or not the supplier is obligated to perform a specific task;
- d. references only the specifications and standards pertinent to the tasks, and invokes these applicable documents only to the extent necessary to best satisfy the project success criteria, having regard to risk. Process specifications and standards invoked by the SOW should be tailored such as to optimize project benefit/cost;
- e. separates general information from direction so that background information and suggested procedures are clearly distinguishable from supplier obligations; and
- f. is structured around the specification of work tasks, each of which is able to be readily related to the service (work) elements of a Work Breakdown Structure (WBS), if used.

5.4.2 Criteria for Inclusion of Material in the SOW

The SOW should include those work requirements that contribute to the satisfaction of project success criteria, including criteria of cost-effectiveness, and requirements mandated by applicable policy or law.

The SOW should not include:

- a. supplier terms and conditions which specify matters other than the work tasks to be performed by the supplier;
- b. specifications of data deliverables. However, the work tasks which create data deliverables may be specified, making reference to the data deliverables as the required output(s) of the task(s) and unambiguously invoking the CDRL as the specification of each data deliverable; and
- c. specifications of other deliverable products. However, the SOW may specify the work tasks which create other deliverable products, making reference to the deliverables as the required output(s) of the task(s) and unambiguously invoking a specification for each deliverable.

5.4.3 Inclusion of Process Direction

SOW requirements may mandate *how* to perform required tasks where such direction is considered to be beneficial. Otherwise, SOW requirements should be stated in terms of results needed rather than "how to perform the task" procedures for achieving those results.

5.4.4 Form of Expression

After supplier selection and agreement, an SOW invoked in the agreement becomes a standard for measuring supplier performance. For contracts (legally binding agreements), the SOW writer must consider the contractual/legal implications of the SOW during its preparation. As the contracted effort progresses, the acquirer and the supplier will refer to the SOW to determine the supplier's obligations. The SOW is thus a part of the contract and is subject to the interpretations of contract law. The SOW must clearly define the work to be performed, since the language detailing the supplier's effort may be pertinent to legal questions concerning the scope of work. In a dispute concerning performance, rights or obligations, clearly defined requirements will enhance the legal enforceability of a SOW.

SOW requirements should be written in language understandable to all intended users of the SOW. Work requirements should be stated explicitly in a logical, chronological order, avoiding words which allow multiple interpretations. Technical language should be used sparingly, with simple wording predominating in concise sentences. The word "shall" should be used whenever a provision is mandatory. "Will" expresses a declaration of purpose or intent; for example, "the government will provide a list of existing sites if so requested". Active rather than passive voice should be used, for example, "The supplier shall establish a reliability growth program", not "A reliability growth program shall be established by the supplier".

Verbs that explicitly identify work and task requirements should be used. When selecting the appropriate work word which properly expresses the degree of supplier involvement, the SOW writer should explicitly define the total work requirement. Work words typically useful in a SOW are listed in table below.

This table may assist in selection of the key word that properly expresses the action to be taken by the supplier. The word list provided in this table is not complete. The list is provided to stimulate the thinking of the TS author by pointing out the critical differences in the meanings of work words. Where differences of meaning occur between the definitions below and those of a governing dictionary, the dictionary meaning should prevail.

analyze	(solve by analysis)
annotate	(provide with comments)
ascertain	(find out with certainty)
attend	(be present at)
audit	(officially examine)
build	(make by putting together)
calculate	(find out by computation)
consider	(think about, to decide)
construct	(put together, build)
control	(direct, regulate)
contribute	(give along with others)
compare	(find out likeness or differences)
create	(cause to be, make)
determine	(resolve, settle, decide)
differentiate	(make a distinction between)
develop	(bring into being or activity)
define	(make clear, settle the limits)
deliver	(hand over)
design	(perform an original act)
evolve	(develop gradually, work out)
examine	(look at closely, test quality of)
explore	(examine for discovery)
extract	(take out, deduce, select)

erect	(put together, set upright)
establish	(set up, settle, prove beyond dispute)
estimate	(approximate an opinion of)
evaluate	(find or fix the value of)
fabricate	(build, manufacture, invent)
form	(give shape to, establish)
formulate	(to put together, add, express)
generate	(produce, cause to be)
identify	(to show or to find)
implement	(to carry out, put into practice)
install	(place, put into position)
inspect	(examine carefully or officially)
institute	(set up, establish, begin)
interpret	(explain the meaning of)
inquire	(ask, make a search of)
integrate	(to add parts to make whole)
investigate	(search into, examine closely)
judge	(decide, form an estimate of)
make	(cause to come into being)
maintain	(to keep in an existing state, to continue in, carry on)
manufacture	(fabricate from raw materials)
modify	(to change, alter)
monitor	(to watch or observe)
notice	(comment upon, review)
observe	(inspect, watch)
originate	(initiate, to give rise to)
organize	(integrate, arrange in a coherent unit)
perform	(do, carry out, accomplish)
plan	(devise a scheme for arranging activities)
probe	(investigate thoroughly)
produce	(give birth or rise to)
pursue	(seek, obtain or accomplish)
reason	(think, influence another's actions)
resolve	(reduce by analysis, clear up)
record	(set down in writing or an act of electronic reproduction of communications)
recommend	(advise, attract favour of)
report	(communicate)
review	(inspection, examination or evaluation)
revise	(to correct, improve)
study	(careful examination or analysis)
seek	(try to discover, make an attempt)
search	(examine to find something)
scan	(look through hastily, examine intently)
screen	(to separate, present, or shield)
solve	(find an answer)
test	(evaluate, examine)
trace	(to copy or find by searching)
track	(observe or plot the path of)

transport	(move from one location to another)
update	(modernize, make current)

Table 5.4.4-1 Action Words

5.4.5 Degree of Detail

The degree of detail to be incorporated in specifying SOW requirements should be guided by the following principle: include those work elements and associated characteristics of the work that define results which will be visible external to the required effort; defer to supplier decision those lower-level work tasks and associated work task characteristics that the acquirer is willing to leave up to the supplier.

In determining work program characteristics to specify, the criterion to be used is the level of risk associated with satisfaction of the following ideal: "that any work program which is performed which satisfies the requirements in section 4. of the SOW will satisfy the need". The level of acceptable risk with respect to attainment of this ideal should be determined as a prerequisite to preparation of the SOW.

Where the SOW is for internal communication of work program requirements only then typically lesser rigor of specification is needed, whilst to satisfy the legal purpose in a contracting situation and address the financial implications of contracting, greater rigor is usually called for.

5.4.6 Avoidance of Duplication

If a given requirement fits into more than one paragraph, the requirement should be stated once and referenced from the other paragraph(s). Duplication of requirements should be avoided.

5.4.7 Use of Contract Data Requirements List (CDRL)

The ordering and delivery of data which the acquirer desires to retain may be defined and scheduled through the use of the Contract Data Requirements List (CDRL), in conjunction with the appropriate Data Item Description (DID). The DID is used to both specify the data content and format and to specify the delivery medium. The CDRL is used to order the data required, specify its delivery timing and location(s) and to tailor the DID. The SOW author should exercise considerable care and attention to the data delivery implications of the SOW. While data may be inherently generated by a work task, requiring that the data be delivered may increase costs and may impose administrative burdens. Requiring that data be delivered in a specific format, as distinct from content, is also a potential cost driver to be considered when preparing the SOW and CDRL. The CDRL should specify that the supplier's format is acceptable where this will produce the best outcome for the acquirer.

The timing of required data deliveries should be specified in the CDRL, not in the SOW or the DIDs. Timing specified in the CDRL should reflect the supplier's preferred program for development of non-data deliverables and performance of other work tasks, unless acquirer requirements for timing of delivery of data are inconsistent with the supplier's preferred program and are overriding.

5.5 Content Requirements

Content requirements begin on page 6. The numbers shown designate the paragraph numbers to be used in the document. Each such number is understood to have a prefix "5.5" within this DID. For example, the paragraph numbered 1.1 is understood to be paragraph 5.5.1.1 within this DID.

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1. INTRODUCTION AND SCOPE

The Scope section includes a brief statement written in present tense of what the SOW does and does not cover. The scope paragraph describes in non-specification style the breadth and limitations of the work to be performed. Separate indentures under this section may be used in SOWs to accommodate complex acquisitions requiring lengthy background information. Background information should be limited to only that information needed to acquaint the user of the SOW with the basic requirement.

This section may be divided into the following paragraphs.

1.1 Identification

This paragraph, if used, should contain a full identification of the project and contract (if applicable) to which the SOW applies, including, as applicable, identification number(s), title(s) and abbreviation(s). The paragraph should also identify the work task or group of work tasks which are the subject to the SOW.

1.2 Scope of Work Overview

This paragraph should summarize in present tense, non-specification style the scope of work required by 4. The word "shall" should not be used in this paragraph. This paragraph should also state the intended use (purpose) of the service(s) specified.

1.3 Background

This paragraph, if used, should summarize the project to which the SOW relates and place the subject matter of the SOW in the context of the overall project and of any related agreement. The paragraph should identify the major deliverables of the agreement.

1.4 Document Overview and Use

This paragraph may summarize the structure, intended users and intended use of the SOW and should describe any security or privacy considerations associated with its use.

2. APPLICABLE AND OTHER REFERENCED DOCUMENTS

This section should list the number, title, revision, and date of each document referenced in the SOW. This section shall also identify the source of each document not available through normal channels.

2.1 Applicable Documents

This paragraph should list each document which is invoked in whole or in part within 4. as containing requirements or parts thereof. The paragraph should contain any applicable rules for establishing precedence in the event of conflict of requirements between 4. and the applicable documents, and between applicable documents. The paragraph should also contain, where applicable, rules for establishing the applicable issue number of documents invoked in 4.

2.2 Other Referenced Documents

This paragraph should list each document which is referenced in the SOW but which is not invoked in whole or in part by 4. as containing requirements or parts thereof.

3. DEFINITIONS, ACRONYMS AND ABBREVIATIONS

This section should be divided into the following paragraphs.

3.1 Definitions

This paragraph should list alphabetically and define each word or term used in 4. for which reliance on dictionary definitions is not appropriate. As a guide, terms which are not likely to be in the vocabulary of the intended users of the SOW, terms which have multiple dictionary meanings but only a single SOW meaning, technical terms and terms which are used with special meanings should be defined in this paragraph.

The following definitions, or similar, should be incorporated into this section:

Shall expresses a characteristic which is to be present in the work which is the subject of the SOW, i.e. "shall" expresses a binding requirement.

Should expresses a non-binding preference or goal.

May expresses permissive guidance.

Will may be used to express a declaration of intent on the part of a party, usually the sponsoring or acquiring organization. "Will" does not express a requirement or goal. "Will" may also be used in cases where the simple future tense is required, for example, "Power for the site will be supplied by the acquirer." Any statement which employs the term "will", if used in 4., should be present as a note so as to be clearly distinguishable from a requirement.

This paragraph should also identify by name and issue the dictionary to be used in the interpretation of terms used in 4. The usual dictionaries which apply are:

Australia	Macquarie Dictionary
New Zealand	Oxford English Dictionary
United States of America	Merriam-Webster's Dictionary

3.2 Acronyms

This section should list alphabetically each acronym used in the document, together with the acronym's expanded meaning.

3.3 Abbreviations

This section should list alphabetically each abbreviation used in the document, together with the abbreviation's expanded meaning, except that abbreviations within the International System (SI) system of units should not be listed.

4. REQUIREMENTS

This section should be divided into the following paragraphs to specify the service/work requirements, that is, those characteristics of the service to be performed under the agreement that are to be satisfied by the supplier in the performance of that work. Each requirement should be assigned a project-unique identifier to support audit and traceability and should be stated in such a way that an objective, finite and cost-effective method of verification as to whether it has been satisfied can be defined for the requirement.

The service/work tasks specified at the level immediately below "4. REQUIREMENTS" should correspond one-for-one with the service elements, if any, defined in the CWBS (or simply WBS), and within the scope of the requirement followed by, at that level, by any functional tasks, e.g. software engineering, which do not correspond to WBS elements but which the SOW author determines should be specified. These latter requirements will typically be process standards included to reduce risk to the acquirer, or tasks which give rise to deliverable data for the purpose of achieving visibility by the acquirer of the supplier's conduct of and progress with the scope of work, again for reasons related to risk.

4.x (Work Task)

This paragraph should identify a required work task and should itemize the requirements associated with the work task. If the work task can be more clearly specified by dividing it into constituent work tasks, the constituent work tasks should be specified in subparagraphs. The requirements should specify required work tasks to be performed and should include, for each work task, applicable performance parameters, such as duration of performance, work rate and task outputs or results.

The requirements should include the conditions under which tasks are to be performed, and reflect, as applicable, required results under unexpected or anomalous conditions. The requirements should include any constraints on the use of external resources, such as use of the time of acquirer personnel.

Each individual work task may be specified using the applicable combination of the following subparagraphs:

- 4.x.1 Sources/Destination of Inputs and Outputs
- 4.x.2 Identification of Required States and Modes of the Work Task
- 4.x.3 Function and Performance Requirements
- 4.x.4 Specification of Required Inputs and Outputs
- 4.x.5 Environmental Requirements
- 4.x.6 Resource Constraints
- 4.x.7 Other Qualities of the Work Task

4.z Precedence of Requirements

This paragraph, if used, should state whether all paragraphs have equal precedence in the event of conflict between requirements. If all requirements are not to be of equal precedence in the event of conflict, this paragraph should state the rules of precedence. Precedence will often apply where process requirements are placed.

5. ASSURANCE REQUIREMENTS

This section, if used, should define the requirements for evidence that the requirements in 4. have been met. A table may be used to present this information. This section should define, for each requirement in 4. which is to be subject to assurance, the general scope and nature of assurance activity to be employed, within any specified method(s). Where sampling is to be used this section should define the rules for selection of samples.

Alternatively, Assurance Requirements may be placed in a separate specification for such requirements.

6. NOTES

This section should contain any general information that aids in understanding or using the SOW (e.g., background information, rationale).

This section should include the following paragraphs, as applicable.

6.1 Requirements Traceability

This paragraph, if used, should contain:

- a. data which details traceability from each requirement in the SOW to the higher-level requirement(s) which it addresses. Alternatively, this traceability may be provided by annotating each requirement in 4. Each SOW requirement should trace to one or more higher-level requirements, as applicable; or alternatively
- b. reference to the document which contains requirements traceability information.

Note: Higher-level requirements are requirements in the SOW of the higher physical-level work program of which the subject SOW is a part of the solution.

6.2 List of SOW Safety Requirements

This paragraph, if used, should list the SOW requirements, if any, specified in 4. and concerned with preventing or minimizing unintended hazards to personnel, property and the physical environment. Examples include classifying explosives for purposes of shipping, handling and storing; conducting hazards analysis and conducting safety-related testing.

Alternatively, safety requirements may be annotated as such in 4.

6.3 List of SOW Information Security Requirements

This paragraph, if used, should list the SOW requirements, if any, specified in 4. and concerned with maintaining information security, viz confidentiality and integrity of information.

Alternatively, information security requirements may be annotated as such in 4.

6.4 Criticality of SOW Requirements

This paragraph, if used, should specify the criticality, or assigned weights indicating the relative importance of the requirements in the SOW, or both. An example is identification of those SOW requirements deemed critical to mission, or to safety, or to security, for purposes of singling them out for special treatment. A second example is identification of the relative importance of SOW requirements expressed as goals, for example, the relative importance of a goal to detect at least 98 per cent of software errors through software and system testing, versus a goal to limit the number of test flight hours of a customer-supplied target aircraft to 200.

A. ANNEXES

Annexes may be used to provide information published separately for convenience in document maintenance or use (e.g., charts, databases). As applicable, each annex should be referenced in the main body of the document where the data would normally have been provided. Annexes may be bound or prepared digitally as separate documents for ease in use. Annexes should be lettered alphabetically (A, B, etc.).

Appendices may be used to annexes. Appendices should be numbered numerically (1, 2, etc.).