

COMMUNICATING CONTRACT REQUIREMENTS

1. INTRODUCTION.

a. The most essential task in any acquisition is to communicate the Government's needs to potential contractors. The solicitation document, whether it is a Request for Proposal (RFP) or an Invitation for Bid (IFB), must include all of the information necessary for an offeror to determine just what the requirements of the Government are. These requirements include not only the description of the supplies and/or services needed, but also all of the terms and conditions that an offeror will have to meet if he is awarded a contract. The nature of the Government's requirements affects the method of contracting, contract type, pricing techniques, evaluation of bids or proposals, and administration of the contract.

b. Section C of an RFP or IFB contains the written description of the Government's needs. This section, entitled "Description/Specifications/Work Statement", may be complete in itself, or it may establish the general nature of the acquisition and refer to more specific descriptions included as attachments. Depending upon what the Government needs, the requirement may be described in a statement of work, specifications, standards, and/or data item descriptions.

2. OBJECTIVES. After completion of this block of instruction, the student should be able to:

a. Compare the two methods of writing requirements, performance and detail, emphasizing the use of performance requirements.

b. Define the following communication documents: Statement of Work (SOW), non-Government Standard (NGS), Commercial Item Description (CID), and military specifications (performance and detail).

3. COMMUNICATION DOCUMENT DEFINITIONS.

a. **Specification.** A document prepared to support acquisition that describes essential technical requirements for materiel and the criteria for determining whether those requirements are met.

b. **Statement of Work.** A document which defines (either directly or by reference to other documents) all non-specification requirements for contractor effort. It specifies the work to be done in developing or producing the goods to be delivered or the services to be performed by a contractor.

c. **Standard.** A document that establishes engineering and technical requirements for items, equipment, processes, procedures, practices, and methods that have been adopted as standard.

d. **Data Item Description (DID)**. A completed form (DD Form 1664) that defines the data required of a contractor. The form specifically defines the data content, preparation instructions, format, and intended use.

e. **DoD Index of Specifications and Standards (DoDISS)**. The DoD publication that lists specifications and standards approved for use by DoD. These include mandatory standards, non-Government standards, CIDs, Federal specifications, and military specifications. There are three types of listings: alphabetical; numerical; and by Federal Supply Classification. The DoDISS is published annually and kept current with bimonthly supplements. A DoD single stock point has been established at the Naval Publications and Forms Center in Philadelphia for documents listed in the DoDISS. The Acquisition Streamlining and Standardization Information System (ASSIST) provides a variety of online management information concerning the DoDISS.

f. **Tailoring**. The process by which individual requirements of the selected specifications, standards, and related documents are evaluated to determine the extent to which they are most suitable for a specific system and equipment acquisition, and the modification of these requirements to ensure that each achieves an optimal balance between operational needs and costs.

4. POLICY.

a. FAR Part 11 directs agencies to describe needs in a manner designed to promote full and open competition, with due regard to the nature of the supplies or services to be acquired. Restrictive provisions or conditions are allowed, but only to the extent necessary to satisfy the minimum needs of the Government or as authorized by law. There is particular emphasis on writing the requirements so that offerors of commercial items and non-developmental items can compete.

b. On June 29, 1994, the Secretary of Defense directed sweeping reform of the requirements documents DoD uses. Most of the changes focus on making greater use of performance and commercial requirements in the acquisition process. The intent of the ongoing reform is to ensure that DoD can integrate the military and commercial industrial production bases; reduce costs; and increase access to commercial state-of-the-art technology.

5. METHODS OF WRITING REQUIREMENTS.

a. Requirements may be stated in terms of **performance** or **detail (design)**. **Performance** requirements describe the functions of the system, machine, product, or service, the required operational capability, and criteria for verifying compliance. An example of a performance requirement is on page 6. A contract requirement written in terms of performance **focuses on end results**, function and fit, interface and interchangeability characteristics. This kind of requirement does **not state how** the contractor is to achieve the required results. For the majority of supplies and services the Government buys, a performance requirement can be used. Therefore, the preferred method of stating requirements is in terms of function and performance.

b. **Detail (Design)** requirements define dimensions, tolerances, configurations, work methods, processes, and materials. From these there can be no departure. Sufficient detail is provided in the statement of work, specifications, and/or accompanying drawings to enable a manufacturer to fabricate the item, or a service contractor to perform the tasks in a prescribed manner. An example of a detail requirement is on page 7.

6. PERFORMANCE REQUIREMENTS.

a. Performance requirements are compatible with the "**buy commercial**" policy. Potential contractors can offer items they produce for the commercial market which will satisfy the Government's needs. The manufacturer does not have to change his processes and conform to arbitrary standards with which he may be unfamiliar. In addition, performance requirements **promote competition**. Since performance specifications are not restricted to any particular methods or processes, they open the door to more offerors. Finally, performance requirements can **stimulate technological advancement**. Contractors are not bound by detailed instructions as to how to fabricate an item or perform a task, so they are free to invent and improve designs, processes, and methods.

b. A common argument used against performance requirements is that they may **impair standardization**. The issues of interchangeability and compatibility must be considered when the Government uses performance requirements. A second perceived disadvantage is that performance requirements can create **logistics support problems**. Every end item added to the supply system increases the number of repair parts that must be transported, stored, maintained, and administered. For example, one lesson learned in combat zones is that generators manufactured by a number of different contractors, each using a performance specification, cause major problems in supplying spare parts. In addition, training, shipping, and maintenance procedures will not necessarily be identical, or even similar for products submitted by different manufacturers in accordance with performance requirements. These two problems force consideration of logistical issues to the early stages of development of a new program or new approach. Finally, performance requirements may require considerable **time to determine compliance**, both during the selection/award phase of contracting and after contract award. Unlike detail requirements in which the Government warrants performance if complied with exactly, performance requirements may mandate long, expensive, and time-consuming tests. In addition, evaluations, inspections and tests must take into consideration that there may be several different approaches to solve the Government's needs.

7. STATEMENTS OF WORK.

a. Statements of Work define work requirements such as services or tasks, are unique to the circumstances of their use, and must be individually tailored to consider the period of performance, deliverable items, if any, and the desired degree of performance flexibility. MIL-HDBK-245, "Preparation of Statement of Work (SOW)" provides guidance for creating a completed contract Statement of Work applicable to any materiel acquisition life-cycle phase and to non-personal services contracts. The handbook contains detailed instructions on the specific

requirements for each type of Statement of Work tailored to specific needs. Techniques include defining task elements, organizing these elements, sample outlines, and significant DO's and DON'T's. In addition, there are several collections of templates for Statements of Work which can provide assistance.

b. The Statement of Work should contain only the work requirements with none of the requirements restated in other parts of the contract. Quantitative technical requirements should be contained in the specification(s) describing the items to be delivered. Requirements for delivery, format, and content of technical data should be in the contract data requirements list (CDRL). Statements of Work should be performance-based, focusing on results required and measurable performance standards. A well-written Statement of Work enhances the opportunity for all potential offerors to compete equally for Government contracts and serves as the standard for determining if the contractor meets the stated performance requirements.

8. TYPES OF SPECIFICATIONS AND STANDARDS. DoD uses several types of specifications and standards to describe its requirements for supplies and services. Some of these types originated with the Government and some are non-Government documents approved for use within DoD. The documents below are listed in the order of preference specified by SD-15, Performance Specification Guide. A description of specific documents follows the table.

Order of Precedence in Specifications

GROUP	TYPE OF SPECIFICATION/STANDARD	EXAMPLES
I	Documents mandated by law or regulation pursuant to law.	OSHA or EPA regulations
II	Performance documents - Non-Government standards* - Commercial item descriptions** - Federal specifications - Standard performance specifications	ASTM or SAE standards A-A- documents (see the DoD Index of Specifications and Standards (DoDISS)) MIL-PRF- documents (see DoDISS)
III	Detail documents - Non-Government standards* - Federal specifications - Detail specifications***	ASTM or SAE standards MIL-DTL- documents (see DoDISS)
IV	Standards, specifications, and related publications issued by the Government outside the military or federal series for the non-repetitive acquisition of developmental items	Purchase descriptions Product descriptions Program-peculiar or system specifications

* Non-Government standards are not necessarily performance-based. They should be examined individually to determine if they are performance documents.

** By definition a CID is a performance specification

*** The application of detail specifications and military standards requires a waiver.

a. **Non-Government standards (NGS).** Standardization documents developed by a private sector association, organization, or technical society which plans, develops, establishes, or coordinates standards, specifications, handbooks, or related documents. The term does not include standards of individual companies. Voluntary standards and industry standards are other terms for NGS.

b. **Commercial Item Descriptions (CID).** Indexed, simplified product descriptions prepared by the Government that describe by performance characteristics available, acceptable commercial products that will satisfy the Government's needs. CIDs are prepared under guidelines issued by the General Services Administration Federal Supply Service, and are listed in the DoDISS.

c. **Federal Specifications.** Indexed descriptions of materials, products, or services used by two or more Federal agencies, at least one of which is a civilian agency. They are used primarily in the acquisition of office supply, industrial, and other commercial items. The General Services Administration has administrative control over all Federal specifications.

d. **Military Performance Specifications (MIL-PRF).** Requirements for military-unique items used in multiple programs or applications. To qualify as a MIL-PRF, the specification must define the functional requirements for the item, the environment in which it must operate, and interface and interchangeability characteristics. It cannot contain any detail requirements. The content and format requirements for this specification are covered by MIL-STD-961, "Standard Practice for Defense Specifications".

e. **Military Detail Specifications (MIL-DTL).** Requirements for military-unique items used in multiple programs or applications. Designation as a MIL-DTL means the specification specifies design requirements, such as materials to be used, how a requirement is to be achieved, and how an item is to be fabricated or constructed. If the specification contains both performance and detail requirements, it is still considered a detail specification. The content and format requirements for this specification are also covered by MIL-STD-961.

9. SUMMARY. The proper communication of the Government's needs to potential contractors is critical. The communication document, whether it is a statement of work, specification, standard, and/or data item description, forms the basis for any acquisition. Poor communication will almost always result in acquisition problems, and may result in items or services that do not meet the Government's actual needs.

FIGURE 1. EXAMPLE OF PERFORMANCE REQUIREMENTS.

3. REQUIREMENTS.

3.1 First article. When specified (see 6.2), a sample shall be subjected to first article inspection in accordance with 4.3.

3.2 Materials. The contractor shall select the materials, but the materials shall be capable of meeting all of the operational and environmental requirements specified herein. The materials specified in MIL-P-11268 are recommended, but are not mandatory. Recovered materials shall be used to the maximum extent possible.

3.3. Design. The biocular eyepiece shall conform to Drawing DL5M-B-805103 to ensure proper interface with the Tank Mounted Thermal Sight.

3.4 Weight. The total weight of the biocular eyepiece shall not exceed 10 pounds.

3.5 Performance characteristics.

3.5.1 Field of view to the eye. The field of view to the eye shall be not less than 39 degrees.

3.5.2 Magnification. The on-axis magnification shall be not less than 4.5 times.

3.5.3. Field overlap. The biocular eyepiece shall provide at least 50 percent field overlap with field overlap calculated using the diameter and not the area of the overlapping images. These conditions shall be satisfied at the fixed diopter setting.

3.5.4 Biocular focus. The eyepiece shall be focused at minus 2.5 plus or minus 0.3 diopters.

3.5.5 Field flatness. The biocular eyepiece shall have a flat tangential field within plus or minus 1/2 diopter across the outer 50 percent of the 40-mm format and within plus or minus 1/4 diopter across the central 50 percent of the 40-mm format the fixed diopter setting.

3.5.6 Resolution. The visual axial resolution (central 25 percent of the field of view) of the biocular eyepiece shall be not less than 35.9 line pairs per millimeter. the remaining field of view shall resolve 17.9 line pairs per millimeter.

3.5.7 Transmission. The transmission of the biocular eyepiece shall be at least 85 percent over the entire aperture for the region of spectral output of a P-20 phosphor.

3.5.8 Effective focal length. The effective focal length shall be 1.733 plus or minus 0.017 inches.

FIGURE 2. EXAMPLE OF DETAIL REQUIREMENTS.**3. REQUIREMENTS**

3.1 First article. When specified (see 6.2), a sample shall be subjected to first article inspection in accordance with 4.3.

3.2 Materials and components. The materials and components shall conform to applicable specifications, standards, and patterns required herein. Unless otherwise specified (see 6.2), non-metallic materials used in construction of the inflation assembly shall not have been manufactured more than 24 months prior to the date of delivery, except for rubber products which shall have a cure date more than 12 months prior to the delivery date.

3.2.1 Vest. The vest shall be constructed of the following materials:

a. Aramid mesh. The back and sides shall be constructed of aramid raschel knit mesh conforming to MIL-C-43989.

b. Basic material. The base fabric shall be plain weave, aramid cloth conforming to MIL-C-83429, type II, class 1.

c. Tape, woven binding. The cloth binding for the mesh, casing, and pocket covers shall conform to MIL-T-5038, type III.

d. Fastener tapes. the hook and pile fastener tape shall conform to MIL-F-21840, type II, class 1, and shall be attached as shown on the patterns.

e. Straps and side adjustment webbing. Straps and webbing shall be nylon conforming to MIL-T-5038, type IV.

3.2.2 Inflatable bladder. The inflatable bladder shall consist of the following:

a. Coated cloth. the coated cloth shall be heat-sealable polyurethane coated nylon conforming to SAE AMS 3272, except that tear strengths shall be: 3.75 pounds for warp and 2.75 pounds for fill.

b. Bladder laces. The cord used to lace the bladder to the casing shall be nylon conforming to MIL-C-5040, type III.

c. Adhesive. The adhesive for securing the parts to the bladder shall be chloropene, 3M PN 2141PT, or equal.

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