DEPARTMENT OF THE NAVY
NAVAL SEA SYSTEMS COMMAND
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IN REPLY REFER TO
NAVSEAINST 4120.24A
Ser 05S/2021-170
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NAVSEA INSTRUCTION 4120.24A

From: Commander, Naval Sea Systems Command (SEA 05)

Subj: TECHNICAL STANDARDS POLICY

Ref: See enclosure (1)

Encl: (1) References
(2) Types of Technical Standards
(3) Technical Standards Responsibilities
(4) Qualification
(5) Data Requirements

1. Purpose

a. To provide a policy for the development, coordination, approval, implementation, and maintenance of technical standards and policies for Naval Sea Systems Command (NAVSEA) and affiliated Program Executive Offices (PEO), consistent with references (a) through (f).

b. To establish and describe the function, alignment, and responsibilities of the NAVSEA Command Standardization Officer (NCSO).

c. To define the responsibilities of technical authorities (TA) per references (d), (e), and (f) to develop technical standards and policies and collaborate with program authorities and stakeholders.

d. References (a) through (u) apply to the policy of this instruction and its enclosures.

2. Cancellation. This instruction cancels and supersedes NAVSEAINST 4120.24.

3. Scope and Applicability

a. This instruction applies to technical standards and policies, hereinafter referred to as technical standards. Enclosure (2) lists the different types of technical standards within this scope, including directives, program-unique documents, technical manuals that apply across platforms, Defense Standardization Program (DSP) documents, documents listed in the Department of Defense (DoD) Information Technology (IT) Standards Registry (DISR), Data Item Descriptions (DID), and other technical standards originated by TAs.

b. This instruction does not apply to applications under the cognizance of the Director, Naval Nuclear Propulsion (SEA 08) per 50 U.S.C. § 2406, 2511 (codifying Executive Order 12344, February 1, 1982) or to systems under the cognizance of Director, Strategic Systems Program.

c. This instruction does not apply to international standardization efforts, which are addressed in reference (g).

4. Background

a. Technical Authorities. Reference (d) defines TA as the responsibility and accountability to establish, monitor, and approve technical standards, tools, and processes in conformance with applicable DoD and Department of the Navy (DON) policies, requirements, architectures, and standards; reference (d) also assigns TA to the Naval Systems Commands (SYSCOM). References (c) through (f) define the roles and responsibilities of TAs, including the responsibility to set technical standards. The TAs include Commander, NAVSEA (COMNAVSEA); the NAVSEA Chief Engineer (CHENG); Deputy Warranting Officers (DWO) with responsibilities in broad technical domains; and Technical Warrant Holders (TWH) with responsibilities in defined technical areas. Consistent with references (c) through (f), the NAVSEA CHENG has the responsibility and authority to implement NAVSEA standards policies and procedures and to oversee compliance.

b. Program Managers (PM). As delineated in reference (h), the primary objective of defense acquisition is to acquire quality products that satisfy user needs with measurable improvements to mission capability and operational support in a timely manner and at a fair and reasonable price. PMs exercise flexibility, responsiveness, innovation, discipline, and streamlined and effective management for the development, production, and sustainment of warfighting systems. Choosing and tailoring the technical standards imposed on defense contractors and government performers to fit the particular capability requirements of a program will be determined by the PM with concurrence from the TA. This determination must be consistent with applicable laws and regulations.

c. Market Research. Per reference (b), market research is the process of collecting and analyzing information about capabilities within the market to satisfy service and agency needs. Market research is a continuous process of gathering data on business and industry trends, characteristics of products and services, suppliers' capabilities, related business practices, and associated industry standards. In addition, Federal Acquisition Regulations Part 12, Acquisition of Commercial Items, requires that market research be conducted to determine the availability of commercial or non-developmental items that could meet service or agency requirements. This regulatory guidance implements the federal government's preference for the acquisition of commercial items contained in Title VIII of the Federal Acquisition Streamlining Act of 1994 (Public Law 103 355). Additional guidance is contained in the Standardization Directory (SD-5), Market Research: Gathering Information about Commercial Products and Services.

5. Policy. Standardization efforts support PMs and the fleet with common solutions that capture knowledge and lessons learned, provide cost-effective acquisition and supply system solutions, and speed the delivery of warfighting capabilities. By leveraging standards, PMs are able to focus on the application and the fleet is able to focus on its mission. The establishment and approval of technical standards is a collaborative process led by TAs. Specific responsibilities are contained in enclosure (3). The following policy is written for technical standards within the scope of enclosure (2); applicable portions are intended as guidance for other technical standards.

a. Use. Technical standards are used throughout the lifecycle of systems and platforms, from concept through disposal. They contain best practices and lessons learned that streamline design, manufacturing, and lifecycle support so that affordable products are provided to the warfighter faster. They apply to both defense contractors and government performers. Most technical standards may be placed on contract as requirements; the primary exceptions are informational references to directives and military handbooks. Authors of ship, overhaul, and purchase specifications and contracts select and tailor technical standards for specific applications.

b. Standardization Goals and Priorities. Standardization efforts are prioritized based on customer demand signals, risk assessments, and expected improvements in the following:

(1) The relevance of standards to meet current and future DON missions.

(2) The safety of systems and individuals.

(3) The currency of our technical standards in leveraging technology changes and providing lessons learned.

(4) The total ownership costs of products delivered and sustained.

(5) The application of commonality and openness principles within and across systems and programs.

c. Planning

(1) Market Research. TAs conduct market research to define the requirement for and type of standard to be developed within their warranted technical areas. The market (e.g., who is contacted) and the scope of the query (what is asked) are tailored to reflect both government and industry users. Market research addresses the following questions:

(a) What needs to be done (e.g., requirements and demand signals)?

(b) What is available in the commercial and government marketplace, including associated standards?

(c) What is the gap between what is available and what is needed?

(d) What is the most effective way to fill the gap?

(2) Other Considerations. There are a number of legislative and policy requirements that should be considered when developing government and industry standards, as appropriate. These requirements include, but are not limited to, energy and water conservation, fossil fuel reduction, bio based products (consistent with the February 21, 2012 Presidential Memorandum, Driving Innovation and Creating Jobs in Rural America through Bio based and Sustainable Product Procurement), sustainable development, environmental compliance, hazardous materials, and accessibility.

(3) Documenting the Plan. The gap analysis and plan to fill the gap is documented consistent with the NCSO procedures of reference (i) to describe expected improvements, participants, reviewers, and resourcing. The NAVSEA CHENG has independent resources to support cross-program standardization. Those resources are supplemented by program and fleet stakeholders for standardization efforts that support one program, and for the testing needed to justify requirements changes, based on stakeholder demand signals and resourcing.

(4) Initiation Review. Standardization plans are reviewed by the NCSO to validate demand signals, requirements, resources, participants, reviewers, and prioritization.

d. Initial Drafts

(1) Writing Initial Draft. The initial draft is written by the technical document author to address identified gaps, technical requirements, and stakeholder concerns. The technical document author validates the initial draft with the cognizant TA prior to initial draft review by others.

(2) Reviewing Initial Draft. An initial review is often conducted and feedback provided by a limited number of critical-interfacing technical authorities and stakeholders to ensure key aspects of the draft are complete and accurate, and that it complies with the applicable format and content requirements (e.g., references (j) through (m)). The cognizant TA then validates resolutions and readiness to proceed with formal coordination.

e. Formal Coordination. Consistent with reference (b), a broader review is conducted by NAVSEA with industry, stakeholders, and interfacing and impacted TAs. Stakeholders often include the PMs who will be invoking the technical standard and the operational authorities who ensure that its requirements are met through the system's lifecycle. Formal coordination provides the benefits of broad perspectives on the technical requirements and their execute-ability and affordability.

f. Publication. Approval to publish a technical standard is based on the following:

(1) Approval by the cognizant TAs of the adequacy of the technical requirements and the appropriate adjudication of comments.

(2) Approval by the NCSO that the coordination is properly completed and the standard complies with the appropriate governing requirements.

(3) For technical standards that require NAVSEA CHENG approval (see enclosure (3) and reference (i) for more information), an additional formal concurrence process is required prior to NAVSEA CHENG approval.

g. DISR. The DISR contains a list of IT and data standards for equipment that permit the sharing and exchange of information across systems and platforms. Addition of standards to the DISR follows coordination and publication as described above. Standards are forwarded to Naval Information Warfare Systems Command (NAVWAR). NAVWAR coordinates listing with the Defense Information Systems Agency per reference (n).

h. Qualification. Technical standards (e.g., military specifications) sometimes include qualification requirements and associated Qualified Products Lists (QPL) and Qualified Manufacturers Lists (QML) that list qualified suppliers. Enclosure (4) describes the process.

i. Data Requirements. A Contract Data Requirements List (CDRL) is the standard form for identifying potential data requirements in a solicitation and deliverable data requirements in a contract. Subpart 215.470 of the Defense Federal Acquisition Regulation Supplement requires the use of the CDRL (DD Form 1423) in solicitations that require delivery of data in the contract. CDRLs are the vehicles for invoking DIDs on the contract. Acquisition requirements and tailoring sections (e.g., 6.2 and 6.3 of DSP documents) contain guidance on the options for ordering data. Enclosure (5) provides a more detailed discussion.

j. Use of Cancelled DSP Documents. As delineated in references (a) and (c), TA approval of waivers to use cancelled DSP documents in solicitations or contracts is required. Consistent with references (e) and (f), the TA appointed to assist the PM with leading the technical aspects of the program (e.g., the platform or system design manager or integration manager) will often coordinate with interfacing TAs and embed this approval in their procurement specifications concurrences. Approval to use cancelled technical standards must be highlighted during this concurrence process, with copies provided to the NCSO. The use of cancelled DIDs must be per reference (b).

k. Approval of Nonconformance's to Technical Standards

(1) Per reference (d), PMs are responsible for obtaining approval for and consistently implementing, technical requirements changes across weapons and IT systems, including waivers and deviations. Per references (e), (f), and (o), technical and program authorities collaborate when making technical decisions such as this and ensure risks are properly understood prior to approval.

(2) Waivers and deviations to standards mandated in the DISR, as permitted by reference (p), must be submitted to NAVWAR for approval.

l. Assessment of Existing Technical Standards. Consistent with references (e), (f), and (q), existing technical standards must be assessed periodically for risks and opportunities related to expected improvements as described above. The results must be factored into the prioritization of standardization efforts.

6. Records Management

a. Records created as a result of this instruction, regardless of format or media, must be maintained and dispositioned per the records disposition schedules located on the Department of the Navy/Assistant for Administration (DON/AA), Directives and Records Management Division (DRMD) portal page at https://portal.secnav.navy.mil/orgs/DUSNM/DONAA/DRM/Records-and-Information-Management/Approved%20Record%20Schedules/Forms/AllItems.aspx.

b. For questions concerning the management of records related to this instruction or the records disposition schedules, please contact your local records manager.

7. Review and Effective Date. Per OPNAVINST 5215.17A, SEA 05S will review this instruction annually around the anniversary of its issuance date to ensure applicability, currency, and consistency with Federal, Department of Defense, Secretary of the Navy, and Navy policy and statutory authority using OPNAV 5215/40 Review of Instruction. This instruction will be in effect for 10 years, unless revised or cancelled in the interim, and will be reissued by the 10-year anniversary date if it is still required, unless it meets one of the exceptions in OPNAVINST 5215.17A, paragraph 9. Otherwise, if the instruction is no longer required, it will be processed for cancellation as soon as the need for cancellation is known following the guidance in OPNAV Manual 5215.1 of May 2016.

J.M. LLOYD
By direction

Releasability and distribution: This instruction is cleared for public release and is available electronically only via the NAVSEA Public Website located at http://www.navsea.navy.mil/Resources/Instructions/

REFERENCES

(a) DoD Instruction 4120.24, Defense Standardization Program (DSP), of 13 July 2011
(b) DoDM 4120.24, Defense Standardization Program (DSP) Procedures, of 24 September 2014
(c) SECNAVINST 4120.24A, Implementation of the Defense Standardization Program in the Department of the Navy, of 29 March 2019
(d) SECNAVINST 5400.15D, Department of the Navy Research and Development, Acquisition, Associated Life-Cycle Management, and Sustainment Responsibilities and Accountability, of 19 January 2021
(e) NAVSEAINST 5400.97C, Virtual SYSCOM Engineering and Technical Authority Policy, of 31 January 2007
(f) NAVSEAINST 5400.111A, NAVSEA Engineering and Technical Authority Policy, of 29 December 2014
(g) OPNAVINST 5711.95F, U.S. Navy Participation in the International Standardization Process, of 19 April 2021
(h) DoD Directive 5000.01, The Defense Acquisition System, of 9 September 2020
(i) S9800-AD-PRO-080/ETAP 3.3, NAVSEA Technical Standards Procedures, of 2 August 2012
(j) MIL-STD-963C, Data Item Descriptions, of 24 September 2014
(k) MIL-STD-961E w/CHANGE 4, Defense and Program-Unique Specifications Format and Content, of 16 July 2020
(l) MIL-STD-962D w/CHANGE 2, Defense Standards Format and Content, of 9 January 2014
(m) MIL-STD-967 w/CHANGE 2, Defense Handbooks Format and Content, of 9 January 2014
(n) DoD Instruction 8330.01, Interoperability of Information Technology (IT) Including National, Security Systems (NSS), of 21 May 2014
(o) NAVSEAINST 5400.95G, Waterfront Engineering and Technical Authority Policy, of 12 August 2019
(p) CJCSI 5123.01H, Charter of the Joint Requirements Oversight Council (JROC) and the Implementation of the Joint Capabilities Integration and Development System, of 31 August 2018
(q) S9800-AB-MAN-010, NAVSEA Engineering and Technical Authority Manual (ETAM), of 3 June 2011
(r) NAVSEAINST 4855.36G, Quality Management System Requirements for Submarine and Deep Submergence Systems Community at NAVSEA Headquarters of 15 Mar 2006
(s) NAVSEAINST 2319.2A, NAVSEA Advisory Process, of 6 July 2021
(t) NAVSEAINST 9070.1E, Standard Specification for Ship Repair and Alteration Committee, of 16 Nov 2017
(u) NAVSEAINST 5215.3, Naval Sea Systems Command Directives Management Business Rules, of 8 March 2017

TYPES OF TECHNICAL STANDARDS

This enclosure describes the different types of technical standards prepared and used by NAVSEA and affiliated PEOs. Reference (i) describes the tailored process for each.

1. Directives. Per reference (u), directives are instructions, notices, and instruction manuals issued to define responsibilities and provide direction and guidance to our government workforce. NAVSEA TAs author directives within their technical areas. Most are NAVSEA instructions, but NAVSEA also authors directives published by others based on the intended audience (e.g., an OPNAVINST that provides technical direction to sailors).

2. Program-Unique Documents. Ship specifications, project peculiar documents, and contract and contract guidance drawings are program-unique documents as defined in reference (b) for products being delivered by PMs. Program-unique documents normally invoke other technical standards and tailor those as needed for the application. Consistent with reference (i), the review process for program-unique documents only includes program stakeholders, associated TAs, and user representatives.

3. Command-Unique Documents. Command-unique documents include technical manuals, publications, handbooks, and drawings that apply across systems and platforms. Examples include the following:

a. Design Practice and Criteria (DPC) Manuals. DPC manuals provide NAVSEA CHENG direction and guidance for designing new or modernized systems and platforms. DPC manuals maintain NAVSEA's knowledge of ship design from concept development through inactivation.

b. Standard and Type Drawings. The purpose of Standard and Type drawings is to illustrate uniform criteria for the construction and arrangement of naval ships' systems, equipment, and components. S&T drawings are used for situations in which an illustration is either the easiest way or the only way to communicate the necessary requirements.

c. Overhaul Specifications. Overhaul specifications include the General Specifications for Overhaul of Surface Ships and the General Overhaul Specification for Deep Diving SSN/SSBN Submarines. They are invoked for depot-level availabilities and do not apply to ships at sea.

d. NAVSEA Standard Items (NSI). Per reference (t), NSIs are standard specifications applicable to maintenance, repair and modernization work contracted to private shipyards, contractors and Alteration Installation Teams (AIT). NSIs establish uniform methods and standards for routine requirements normally invoked in ship maintenance work, NSIs do not normally apply to nuclear propulsion plant or SUBSAFE work.

e. Naval Ship Technical Manual (NSTM) Chapters. NSTM chapters provide NAVSEA technical authority direction and guidance for operating and maintaining systems and platforms. They are vital to ship's force effectiveness, efficiency, and safety. NSTM chapters also provide lessons learned to maintainers on the extent to which system degradation over the lifecycle is acceptable or must be corrected.

f. Special Emphasis Program. Technical standards and policies for special emphasis programs are described in reference (r).

4. Defense Standardization Program (DSP) Documents. References (a) and (b) require that the DoD maintain a unified DSP to define a common set of standards and specifications, developed in conjunction with industry, to standardize like products and technologies. Reference (c) implements references (a) and (b) throughout the DON. DSP documents are listed in the Acquisition Streamlining and Standardization Information System (ASSIST); the ASSIST Quick Search database is available at https://quicksearch.dla.mil/. DSP documents are as defined in reference (b) and include the following:

a. Defense specifications and standards.

b. Federal specifications and standards.

c. Defense handbooks.

d. Commercial item descriptions.

e. DIDs.

f. Adopted Industry Standards. Per references (a) and (b), industry standards are documents developed by Standards Development Organizations (SDO) that plan, develop, establish, or coordinate standards, specifications, or related documents. Where they exist, industry standards are used in preference to developing and maintaining government (e.g., defense or federal) standards. DoD Standardization Management Activities (SMA) issue adoption notices, showing an intent to use the industry standard. Adoption notices can either be Tier I or Tier II. Tier I adoption notices show an intent by the adopting activity to participate with the SDO in the preparation of revisions and are updated for each revision. Tier II adoption notices do not need to be updated with each revision. It is not necessary to issue an adoption notice to use the industry standard.

g. Standards Listed in the DISR Consistent with Reference (n). The DISR contains a list of IT and data standards for equipment that permit the sharing and exchange of information across systems and platforms. Standard interfaces and performance requirements support systems designed for rapid, cost-effective insertion of innovative hardware and software technologies. The DISR lists IT standards and standards profiles that are mandatory for use in developing

interoperable and net-centric national security and business IT systems, consistent with reference (a). This includes industry, international, federal, and military standards. These standards are collaboratively developed, selected, and maintained in DISR and managed by the DoD Information Technology Standards Committee (ITSC) led by the Executive Agent, Defense Information Systems Agency. The Navy and the Marine Corps each have representation at the ITSC and the Joint Enterprise Standards Committee, which oversees the DISR and coordinates as necessary regarding IT standards. Consistent with references (c) and (d), NAVWAR (in conjunction with Assistant Secretary of the Navy [Research, Development and Acquisition] and DON Chief Information Officer) is the SYSCOM lead for ensuring these standards meet Navy requirements and participates in the development and review of related standards and guidance. Marine Corps Systems Command is the Marine Corps' lead regarding DISR activities and ensures collaboration and participation in the DISR-related working groups.

TECHNICAL STANDARDS RESPONSIBILITIES

1. NAVSEA CHENG

a. Appoint the NCSO and TWHs.

b. Provide guidance and direction on prioritization of standardization efforts.

c. Approve the most significant technical standards, including directives and DPC manuals.

2. DWOs or Their Designated Representative

a. Approve standardization effort project plans.

b. Prior to publication, verify the technical standard is complete, technically adequate, and meets the objectives of the effort.

c. Prioritize standardization efforts based on the reference (c) standardization goals, customer demand signals, risk assessment results, and age of the technical standard.

d. Participate in the Standards Review Board (SRB).

e. Ensure proper assignment of technical standards to TWHs and other technical standards owners.

3. TWHs. Per references (e) and (f), TWHs and other technical leaders are SYSCOM experts in their assigned technical areas. Within those areas, TWHs and other technical leaders perform the following:

a. Act as the technical standard author or assign and oversee an agent (e.g., engineering agent, engineering manager, or lead engineer) to act as the author for each standard and assist with the responsibilities described below.

b. Develop and maintain technical standards. Update technical standards prior to the overage requirements of reference (i), normally 5 or 10 years.

c. Collaborate with appropriate TAs and stakeholders.

d. Identify, with appropriate technical rationale, qualification requirements associated with technical standards and evaluate qualification requests.

e. Clarify technical requirements as needed and address deviations and waivers from requirements throughout system lifecycles.

f. Issue interim changes (or advisories per reference (s)) to resolve emergent technical issues and follow up with formally-coordinated revisions within the time constraints required by the governing document for that type of technical standard. Normally, coordinated revisions are issued within 2 years.

g. Conduct risk assessments of technical standards per the standardization goals in this instruction to identify and prioritize standardization efforts to mitigate the risks.

h. Ensure appropriate participation in SDO technical committees and appropriate review and adoption of industry standards. This policy does not dictate participation in the SDO committees.

i. Conduct technical standards projects as follows:

(1) Perform gap analyses and prepare plans for standardization efforts. Per references (b) and (c), conduct market research to determine if industry standards are available to meet the identified demand signal.

(2) Propose standardization efforts to meet the requirements of this instruction.

(3) Prepare technically adequate technical standards and revisions, including developing technical standards per the governing document, such as references (j) through (m) and (u).

(4) Through formal coordination, obtain appropriate input and concurrences from the technical community (e.g., TWHs and subject matter experts [SME] at NAVSEA and other Naval SYSCOMs), programs, operational authorities, and other stakeholders.

(5) Verify the proposed technical standards will not impede the procurement, availability, or performance of systems or components, or justify otherwise.

(6) Maintain detailed requirements history with rationale for all revisions.

4. NCSO

a. Chair the SRB as described below.

b. Implement references (a) through (c) and this instruction, including issuing supporting guidance and procedures (reference (i)) for the collaborative review and publishing of technical standards.

c. Collaborate with TAs to align ownership of technical standards to their areas of responsibility. Manage orphan technical standards to assign to the appropriate owner, or cancel.

d. Manage prioritization of standardization efforts for the NAVSEA CHENG.

e. Collaborate with and assist TAs as needed with the preparation and maintenance of technical standards.

f. Represent NAVSEA on DON Standardization Working Group meetings with representatives of other DON SMAs.

g. For documents within the scope of the SRB, perform the following:

(1) Review initiation of new standardization efforts to ensure the effort is aligned with NAVSEA CHENG priorities, the document type (e.g., references (j) through (m) and (u)) is consistent with the goals of the effort, and planning complies with this instruction.

(2) Monitor standardization effort progress against plans.

(3) Ensure technical standards are properly coordinated with interfacing TAs, SMEs, other Naval SYSCOMs, other SMAs, program and fleet stakeholders, and individuals showing an interest in reviewing it, consistent with the approved distribution or classification statements.

(4) Review technical standards prior to publication to verify the adequacy and completeness of the coordinated review, and that the content, format, and approvals comply with governing requirements.

h. Collaborate with TAs in the development, implementation, and execution of qualification programs and approve supplier qualifications.

i. Resolve standardization issues within NAVSEA and work with other DON SMAs to resolve cross-organizational standardization issues. When appropriate, elevate issues to the DON SO when conflicts cannot be resolved at the command level.

j. Serve as entry point to initiate NAVSEA review of technical standards developed by other DoD and DON SMAs.

5. SRB. The SRB executes the standards coordination process for technical standards prepared by NAVSEA, as well as those prepared by other SMAs. The SRB reviews technical standards that require coordination across technical domains and DSP documents per reference (b). The scope of the SRB is defined by reference (i). Governance of program-unique documents is often addressed in the Systems Engineering Technical Review processes, which have equivalent controls. SRB members participate in a consensus review of technical standards, policies, guidance, and procedures that affect their DWO's technical domain to perform the following:

a. Ensure technical standards specify requirements that are technically adequate, complete, affordable, and achievable. Verify standardization plans identify all interfacing and impacted TAs and stakeholders. Identify affected SMEs and facilitate their participation in the coordination. Provide formal concurrence when required (e.g., prior to NAVSEA CHENG approval of directives and DPC manuals).

b. Review technical standards prepared by other SMAs for impacts on current and future acquisitions, supportability, integration, and interoperability and overall system (or system of systems) performance. The NCSO then provides consolidated comments to the cognizant SMA.

QUALIFICATION

Per 10 U.S.C. § 2319, qualification is a requirement for testing or other quality assurance demonstration that must be completed by the offeror (supplier) before award of the government contract. Qualification requirements may be delineated for processes and materials used to qualify suppliers and the performance of manufactured, repaired, or supplied systems and components. Technical standards (e.g., military specifications) sometimes include a qualification requirement with associated QPLs or QMLs. Guidance for parts, manufacturers, and suppliers on the qualification process is found in reference (b) and SD-6, Provisions Governing Qualification.

1. Reasons to Invoke Qualification. The reasons for invoking qualification requirements are varied. For example, reference (b) states qualification could be invoked to do the following:

a. Obtain products of required performance, quality, and reliability by applying special techniques (including testing of actual products or representative sample specimens using specific technology processes and materials that will be used in subsequent products) or applying special criteria (including testing of a product for compliance with the specification).

b. Establish and standardize the requirements for evidence of manufacturer's capability in advance of acquisition.

c. Reduce acquisition lead time.

d. Reduce test costs by eliminating the need for repetitive first article testing and minimizing redundant, long, expensive test requirements and tests.

e. Provide an additional tool for optimizing the relationship between engineering risk and quality assurance cost.

f. Improve readiness through ensured continuous availability of quality and reliable products from viable suppliers.

g. Establish a long-term relationship with the supplier to ensure continuous conformance to requirements and continuous product quality improvements.

2. Examples of Qualification Include:

a. QPL. A QPL is a list of products or families of products that have successfully completed the formal qualification process (including all specified periodic tests) that examines test results and verifies product design meets applicable specification requirements.

b. QML. A QML is a list of manufacturers' qualified processes and materials at each facility that have been successfully subjected to a defined set of qualification and periodic tests using processes, worst case designs, or materials to verify the end product's design, performance, quality, and reliability meet all specification requirements.

3. Qualification Steps. In general, the qualification processes include the following steps:

a. Requirements. The technical standard delineates appropriate qualification requirements for the provider (manufacturer, supplier, or repair activity), or the product and potential end-use applications. Qualification requirements include design, manufacturing processes, material, workmanship, testing, quality, performance, and environmental. The costs of tests will normally be borne by the applicant.

b. Requests. Manufacturers and suppliers submit qualification requests to the qualification activity. In DON, the qualification activity should be the SMA that is the preparing activity.

c. Evaluation. Evaluation of qualification requests include TA review of objective quality evidence that documents qualification requirement compliance, government and industry data on the company history producing the product, and similar items. During the qualification process, the TA may determine that a site visit is required. A site visit may include a supplier audit with checklists, a capability survey, or other oversight deemed appropriate to determine the ability to manufacture or supply the part in question, as documented in the SMA's procedures.

d. Approval. Qualification is based on the TA evaluation and NCSO approval.

e. Lists. The final step in the process is the SMA updating the appropriate database, such as the Qualified Products Database, to reflect the approved QPL and QML.

DATA REQUIREMENTS

1. DIDs

a. Development. DIDs are standardization documents that define the data required from contractors. DIDs specifically define the data content, format, and intended use information for a single data deliverable resulting from work tasks described in the solicitation or other governing source document (see references (b) and (j)). DIDs may be tailored to delete requirements not applicable to the specific acquisition. In cases where an existing DID from the ASSIST database cannot be used to define the data deliverable, even if tailored, a new DID can be initiated by TAs.

b. Approval. DID preparation is coordinated by SEA 05. Upon completion of the coordination requirements, requests to publish DIDs are sent to Naval Supply Systems Command (NAVSUP) Weapon Systems Support Code N21, the designated DON DID approval authority, per references (b), (c), and (j).

c. Revisions or Cancellation. DIDs must be revised or cancelled in conjunction with revision or cancellation of the associated source document.

2. CDRLs. CDRLs are the standard form for identifying potential data requirements in a solicitation and deliverable data requirements in a contract. Subpart 215.470 of the Defense Federal Acquisition Regulation Supplement requires the use of the CDRL (DD Form 1423) in solicitations that require delivery of data in the contract. CDRLs are the vehicles for invoking DIDs on the contract. As the CDRLs are prepared, the programmatic authorities and TAs select an existing DID from the ASSIST database for application (either in total or tailored) or develop a new DID as indicated above. The DID describes the characteristics of the data required from the contractor and is invoked in Block 4 of the CDRL; tailoring of the DID (deletion of requirements only) is identified in Block 16. The completed CDRL, statement of work, contract provisions, and contract clauses collectively specify the contractual delivery of technical data and data rights essential to meet the program requirements and identify the system configuration. This is the data required to identify and manage the configuration of the system as it is designed, manufactured, and sustained, as well as support re-competition for production, sustainment, or upgrades.

3. Data Ordering Options. Acquisition requirements and tailoring sections (e.g., 6.2 and 6.3 of DSP documents) contain guidance on the options for ordering data. Programmatic authorities, TAs, and contracting officers depend on those notes to ensure items are procured consistent with the author's intent and meeting system requirements while avoiding unnecessary costs or duplicate data. Technical document authors must craft the wording correctly to ensure the intent is clearly stated for each of the potential applications.