



**DEPARTMENT OF THE NAVY**

NAVAL SEA SYSTEMS COMMAND  
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WASHINGTON NAVY YARD DC 20376-0001

IN REPLY TO

NAVSEAINST 4121.3A  
Ser 05Q/051  
14 July 2006

NAVSEA INSTRUCTION 4121.3A

From: Commander, Naval Sea Systems Command

Subj: TECHNICAL STANDARDS POLICY

- Ref:
- (a) DOD 4120.24-M, Defense Standardization Program Policies and Procedures, 09 March 2000
  - (b) OMB Circular A-119, Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities, 10 Feb 1998
  - (c) Virtual SYSCOM Joint Instruction VS-JI-22, Virtual SYSCOM Engineering and Technical Authority Policy, 3 Jan 2005
  - (d) Federal Acquisition Regulation (FAR), Part 10, Market Research, 2005 Reissue
  - (e) Directive 5000.1, The Defense Acquisition System, 12 May 2003
  - (f) DOD Instruction 5000.2, Operation of the Defense Acquisition System, 12 May 2002
  - (g) SD-2, Buying Commercial and Nondevelopmental Items: A Handbook, 1 April 1996
  - (h) SD-5, Market Research: Gathering Information About Commercial Products and Services, July 1997

1. Purpose

a. Promulgate policy in support of the Technical Authority (TA) for development, revision, review, approval, issuance, maintenance, cancellation, and adoption of technical standards.

b. Describe the authority and responsibilities of the Command Standards Executive (CSE).

c. Establish and describe the function, organization, and responsibilities of the Standards Improvement Board (SIB).

2. Cancellation NAVSEAINST 4121.3 of 1 April 1983.

This instruction is a major revision and should be read in its entirety.

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### 3. Scope

a. This instruction applies to NAVSEA headquarters, field activities, and affiliated Program Executive Officers (PEOs) when performing actions associated with development, revision, review, approval, issuance, maintenance, cancellation, and adoption of the following technical standards:

(1) Defense Standardization Program (DSP) documents including Qualified Products Lists (QPLs) and Qualified Manufacturers Lists (QMLs).

(2) Non-Government Standards (NGSs)

(3) NAVSEA Standard and Type Drawings

(4) NAVSEA Design Data Sheets (DDSs)

(5) Ship Specifications, including boat and watercraft

(6) Other technical requirement documents invoked in ship specifications, such as technical publications that replaced military specifications and standards, and program unique technical documents used for ship, combat systems, or ship class acquisition.

(7) Other acquisition and maintenance technical documents that are applied across multiple ship classes.

b. This instruction does not apply to technical standards prepared under the cognizance of the Deputy Commander for Nuclear Propulsion.

### 4. Background

a. Technical standards are used to support ship and combat systems acquisition, and life cycle maintenance by describing the technical requirements for products, processes, practices, and methods. Technical standards that are current ensure product and material reliability, decrease cycle time, enhance operational safety, reduce production and lifecycle cost, and facilitate insertion of technology into existing systems.

b. NGS bodies have produced more than 500,000 commercial standards for use by industry. The Department of Defense (DoD), through the DSP Office, maintains more than 29,000 technical standards to support unique military requirements. NAVSEA maintains over 3000 of these technical standards in support of naval ship requirements. NAVSEA also maintains a great number of other types of technical documents and drawings that are used in

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ship design and maintenance, such as NAVSEA Standard and Type Drawings, DDSs, and the Naval Ships' Technical Manual.

c. A coordination and consensus review process is vital to the development or revision of technical standards. Coordination of technical standards ensures that new requirements are technically adequate, affordable, and achievable. Coordination also ensures that changes to technical requirements in one area of a system do not adversely affect other areas of a system or platform.

## 5. Policy

a. Technical standards shall be developed and kept current with the goal of improving military readiness, reducing total ownership costs, and reducing the acquisition cycle time of naval ships, boats and watercraft.

b. NGSSs shall be used whenever feasible, practical, and economical, and shall be adopted in accordance with reference (a). NAVSEA shall participate in the development of applicable NGSSs in accordance with references (a) and (b) to the greatest extent practicable. Government technical standards shall be utilized or developed when NGSSs do not meet the Navy requirements.

c. DSP documents shall be developed and maintained in accordance with policies and procedures set forth in reference (a), and the procedures established by the CSE.

d. Other technical standards shall be developed, revised, reviewed, approved, issued, maintained, and cancelled in accordance with the procedures established by the CSE.

e. Qualification requirements shall be incorporated into defense and federal specifications, and into adopted NGSSs only when the need for qualification has been justified as set forth in reference (a).

f. A consensus review process shall be used to develop, revise, and cancel Standard and Type Drawings, DDSs, technical requirement documents that are invoked in ship specifications, program unique documents, and other technical requirement documents used for ship acquisition and life cycle maintenance which are applied across multiple ship classes.

## 6. Responsibilities

a. Chairman, Technical Authority Board (TAB). The TAB Chairman will appoint a CSE who will be responsible for the

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implementation and maintenance of NAVSEA technical standards policy.

b. Command Standards Executive (CSE). The CSE shall:

- (1) Manage NAVSEA technical standards.
- (2) Represent NAVSEA on Navy-wide, joint service, and industry standardization efforts.
- (3) Chair the SIB.
- (4) Develop and maintain procedures for developing, revising, canceling, and adopting technical standards.
- (5) Provide policy and guidance on the implementation of references (a) and (b).
- (6) Develop procedures for the establishment of qualification requirements in defense and federal specifications and in adopted NGSSs.
- (7) Develop and maintain a single document for NAVSEA technical standards which provides the procedures for the development, revision, review, approval, issuance, maintenance, and cancellation of:
  - (a) NAVSEA Standard and Type Drawings
  - (b) NAVSEA DDSs
  - (c) Ship, Boat, and Watercraft Specifications
  - (d) Technical documents invoked in ship, boat, and watercraft specifications, including program unique documents, and combat systems specifications.
  - (e) Other technical requirement documents used for acquisition or maintenance that are applied across multiple ship, boat, or watercraft classes.
- (8) Determine whether or not technical documents proposed for development, revision, cancellation, or adoption are technical standards within the scope of this instruction and must therefore meet the requirements of this instruction.

c. Standards Improvement Board (SIB). The SIB members will be the CSE and the TAB (reference (c)), or their designated representatives. The SIB shall:

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(1) Ensure that efforts to develop or adopt new technical standards and to revise or cancel existing standards are approved in accordance with reference (a) and the procedures developed by the CSE.

(2) Ensure that final drafts of technical standards are reviewed and approved in accordance with reference (a) and the procedures developed by the CSE prior to publication.

(3) Ensure that technical standards within the scope of this instruction use a consensus review process during development, revision, cancellation, and adoption.

(4) Verify from an engineering management perspective that the technical standards are ready for issue, and that information required to support the technical standard's implementation is available by:

(a) Ensuring that technical standards utilized by multiple Navy systems are properly assessed for impact on all phases of current and future acquisitions, maintenance philosophy, training facilities, and interoperability with other systems.

(b) Ensuring development of proper implementation guidance by the Technical Warrant Holder (TWH) for technical standards submitted for release approval.

(5) Ensure that DSP documents are periodically reviewed consistent with reference (a) policy. Ensure that the review cycles of other technical standards are consistent with the procedures established by the CSE.

(6) Determine the disposition of technical standard drafts and comments when the TWH cannot resolve issues, consistent with the conflict resolution process contained in reference (c).

(7) Review and approve SIB procedures developed by the CSE.

d. Technical Warrant Holder (TWH). The TWH is a NAVSEA employee at headquarters or at a NAVSEA field activity who is warranted as a technical authority in accordance with reference (c), and is assigned technical responsibility for specific technical areas. The TWH shall:

(1) Provide leadership and ensure that technical standards within their warranted technical area are developed, revised, reviewed, issued, maintained, canceled, and adopted in

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accordance with this instruction and the procedures developed by the CSE.

(2) Ensure that technical standards specify requirements for products, processes, practices, and methods that are technically adequate, affordable, and achievable.

(3) Assign an Engineering Manager (EM), and/or a Lead Engineer (LE) to each technical standard within their warranted technical area.

(4) Ensure that technical standards within their warranted technical area are assessed in accordance with reference (c).

(5) Resolve issues and comments that cannot be adjudicated by the EM or LE.

e. Engineering Manager (EM) or Lead Engineer (LE). For assigned technical standards, either the EM or LE shall:

(1) Evaluate whether or not a technical document under development, revision, cancellation, or adoption is a technical standard within the scope of this instruction and propose to the TWH and the CSE any standardization efforts that must be put forth to meet the requirements of this instruction.

(2) Validate technical standards in accordance with the procedures established by the CSE.

(3) In accordance with reference (d), and as implemented by references (e) and (f), conduct market research to determine if commercial items or nondevelopmental items are available to meet the Government's needs using the guidance provided in references (g) and (h).

(4) Develop, revise, cancel and adopt technical standards in accordance with the procedures established by the CSE.

(5) Incorporate in technical standards lessons learned and best practices used in industry and Government.

(6) Ensure that appropriate input, reviews, and concurrences are obtained from the technical community and from the users of the technical standards.

(7) Ensure that standards are technically adequate for the applications they support.

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(8) Ensure that a proposed replacement document, Government or non-Government, is a true replacement of the superseded document from a requirements perspective, and that it will not impede procurement, availability, or performance of new parts.

(9) Provide technical justification for establishing qualification requirements in defense and federal specifications, and in adopted NGSs.

(10) Provide technical reviews of QPL and QML application packages, including but not limited to test procedures, drawings, product data sheets, and test reports.

(11) Recommend technical actions for QPLs and QMLs with regard to approval, disapproval, or removal of products or manufacturers.

(12) Issue technical advisories or interim guidance letters to resolve emergent technical issues. Ensure that technical standards impacted by technical advisories or interim guidance letters are updated by revision on a regular schedule.

(13) Issue memos canceling technical advisories or interim guidance letters once they are incorporated into the technical standard or are no longer needed.

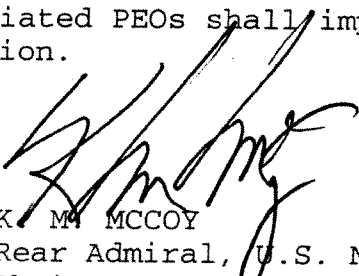
(14) Maintain detailed requirement history with rationale for all document changes.

(15) Participate in technical committees and sub-committees of NGS bodies for all documents in which the TWH has a vested interest.

(16) Provide clarification of technical requirements as needed.

#### 7. Action

All NAVSEA activities and affiliated PEOs shall implement the policies contained in this instruction.



K. M. MCCOY  
Rear Admiral, U.S. Navy  
Chairman, NAVSEA Technical  
Authority Board

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