

DEPARTMENT OF THE NAVY IMPLEMENTATION PLAN



FOR THE DEPARTMENT OF DEFENSE JOINT TECHNICAL ARCHITECTURE

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DEPARTMENT OF NAVY IMPLEMENTATION PLAN
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APPROVAL SIGNATURE



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EXECUTIVE SUMMARY

Information dominance, through battlefield awareness and operations inside the enemy's decision cycle, is a key to success in future military operations. Achieving information dominance will require seamless and rapid information flow among the joint, allied, and coalition forces. The *Department of Defense (DoD) Joint Technical Architecture (JTA)* is a key piece of DoD's overall strategy to achieve this capability. Its open, standards-based approach offers significant opportunities for cost effective, timely fielding of interoperable systems and upgrades. The JTA provides DoD systems with the basis for needed seamless interoperability; defines the service areas, interfaces, and standards (JTA elements) applicable to all DoD systems; and is mandated for the management, development, and acquisition of all new or improved systems throughout DoD.

The JTA specifies a set of performance-based, primarily commercial, information processing, transfer, content, format, and security standards. These standards are stable, technically mature, and publicly available. The JTA standards identified are commercially supported, and off-the-shelf commercial implementations from multiple vendors are available.

Originally focusing on Command, Control, Communications, Computers, and Intelligence (C4I) only, JTA Version 2.0 broadened its scope to embrace additional functional domains including: intelligence, surveillance and reconnaissance (ISR); combat support; modeling and simulation (M&S); and weapon systems.

Current Department of the Navy (DoN) policy requires JTA compliance as an integral part of DoN Information Technology (IT) investment funding decisions. Rather than create a parallel process for DoN implementation of the JTA, DoN (in concert with the Office of the Secretary of Defense (OSD) and other Military Departments (MILDEPs)) leverages the existing Planning, Programming and Budgeting System (PPBS) as the means to select IT investments for funding, and uses the acquisition process to manage and evaluate the investments over their life cycle. The DoN plan for implementing the JTA leverages existing policy and mandates for documentation, processes, and procedures already required by: DoD acquisition regulations and DoD/DoN directives and supporting instructions to demonstrate compatibility, interoperability, and integration (CII).

In consonance with the 30 November 1998 DoD JTA memorandum, the DoN implementation of the JTA addresses applicability to all systems for traditional, and all other acquisitions not defined in DoD 5000.2-R and SECNAVINST 5000.2B. Implementation of the JTA is required for all emerging, or major changes to an existing capability that produces, uses, or exchanges information in any form electronically; crosses a functional or DoD Component boundary; and gives the warfighter or DoD decision maker an operational capability. As part of the JTA implementation, DoN requires applicable acquisitions to reflect as a minimum: intended standards approach; listing and identification of applicable interface standards; standards profiles (as applicable); and means to demonstrate and assess system CII as applicable to its respective Joint Mission Area (JMA).

In cases where JTA compliance can not be satisfied in accordance with the defined DoN applicability, compliance, and provisions stated, this plan addresses JTA waiver processes, waiver authority, and related data to justify non-use of JTA standards.

TABLE OF CONTENTS

SECTION 1 - INTRODUCTION

1.0 PURPOSE	1
1.1 SCOPE	1
1.2 OVERVIEW	1
1.3 BACKGROUND	2
1.4 TERMINOLOGY	2
1.5 APPLICABILITY.....	2
1.6 JTA WAIVERS.....	2
1.7 CONFIGURATION MANAGEMENT.....	2
1.7.1 DoN Implementation Plan Configuration Management.....	2
1.7.2 System Configuration Management	3
1.8 DoN IMPLEMENTATION PLAN STRUCTURE.....	3
1.9 REFERENCES	3
1.9.1 Applicable Documents	3

SECTION 2 - JTA COMPLIANCE AND VALIDATION

2.0 JTA COMPLIANCE/VALIDATION DETERMINATION.....	5
2.1 JTA COMPLIANCE APPROVAL FOR ACAT PROGRAMS.....	5
2.1.1 DoN Roles & Responsibilities for JTA Implementation	6
2.1.1.1 Program Managers (PMs).....	6
2.1.1.1.1 Specification.....	6
2.1.1.1.2 Test and Evaluation Master Plan (TEMP)	7
2.1.1.2 Service Acquisition Executive (SAE).....	7
2.1.1.2.1 Milestone Decision Authority (MDA).....	7
2.1.1.2.2 Systems Command (SYSCOM) Commanders.....	8
2.1.1.2.3 Program Executive Officers (PEOs)/Direct Reporting Program Managers (DRPMs) ..	8

2.1.1.3 Program/Resource Sponsor 8

2.1.1.3.1 Mission Need Statement (MNS)..... 8

2.1.1.3.2 Operational Requirements Document (ORD) 9

2.1.1.4 Chief of Naval Operations (CNO)..... 9

2.1.1.5 Commander, Operational Test and Evaluation Force (COMOPTEVFOR)..... 9

2.1.1.6 Marine Corps Operational Test and Evaluation Activity (MCOTEA) 10

2.1.1.7 Marine Corps Combat Development Command (MCCDC)..... 10

2.1.1.8 Commandant of the Marine Corps (CMC)/Assistant Commandant of the MC (ACMC) 10

2.2 JTA COMPLIANCE AND VALIDATION (ALL OTHER ACQUISITIONS/PROGRAMS) 10

2.3 JTA WAIVERS..... 11

SECTION 3 - DoN IT STRATEGY

3.0 DoN IT INVESTMENTS 13

3.1 PLANNING, PROGRAMMING, AND BUDGETING 14

3.2 DoN IT INVESTMENT CRITERIA 14

3.3 JTA COMPLIANCE AND IT INVESTMENT OVERSIGHT 14

3.4 JTA COMPLIANCE REPORTING 14

LIST OF FIGURES

Figure 1-1, DoN Implementation Plan Document Structure and Respective Contents	3
Figure 2-1, DoN Milestone Review Overview	6
Figure 2-2, MNS/ORD Process Overview	8
Figure 2-3, Non-Traditional Acquisition Process Overview	11
Figure 2-4, JTA Waiver Process Overview	12
Figure 3-1, DoN IT Strategy Focus Toward PPBS	13

LIST OF APPENDICES

APPENDIX A: ACRONYMS	A-1
APPENDIX B: SOURCE DOCUMENTATION URL LISTING	B-1
APPENDIX C: JTA VERSION 2.0 IMPLEMENTATION MEMO	C-1

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INTRODUCTION

1.0 PURPOSE

The purpose of this plan is to define the application, implementation, and DoN IT investment management and oversight of the Department of Defense (DoD) Joint Technical Architecture (JTA) (hereinafter referred to as the JTA) within the Department of Navy (DoN).

1.1 SCOPE

This plan includes requirements for JTA compliance by DoN IT investments and of all applicable systems. Leveraging the IT and National Security System (NSS) definitions provided in the Information Technology Management Reform Act (ITMRA), now the Clinger/Cohen Act, "system" refers to:

- Information Technology - Any equipment or interconnected system or subsystem of equipment, that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information...includes computers, ancillary equipment, software, firmware, and similar procedures, services (including support services), and related resources.
- National Security System - any telecommunications or information system operated by the United States Government, the function, operation, or use of which: involves intelligence activities; involves cryptologic activities related to national security; involves command and control of military forces; involves equipment that is an integral part of a weapon or weapons system; is critical to the direct fulfillment of military or intelligence missions.

Implementation of the JTA is required for all emerging, or major changes to an existing capability that produces, uses, or exchanges information in any form electronically; crosses a functional or DoD Component boundary; and gives the warfighter or DoD decision maker an operational capability. For purposes of JTA implementation, applicability includes all Acquisition Category (ACAT) programs, and all other non-traditional (systemic, non-DoD 5000 series acquisitions), and pre-acquisition programs such as Advanced Technology Demonstrations (ATD), Advanced Concept Technology Demonstrations (ACTD), Joint Warrior Interoperability Demonstrations (JWID), and Battle Lab projects.

1.2 OVERVIEW

Effective military operations require the ability to respond with a mix of forces, anywhere in the world, on a moment's notice. Interoperability is essential for these joint operations. Information must flow seamlessly and quickly among DoD's sensors, processing and command centers and shooters, to enable dominant battlefield awareness and movement inside the enemy's decision loop. The JTA is a key piece of DoD's overall strategy to achieve this capability.

The purpose of the JTA is to establish a set of standards, based on DoD consensus, that support seamless operations among JMAs. The objective is to enable Joint/Allied/Coalition force interoperability and battlespace dominance as operational needs dictate while leveraging technological advancements and DoD modernization demands for resource sharing and transparency in data format/data access. This approach is intended to promote horizontal and vertical interoperability and leverage new and improved technologies as mission and budgets dictate.

The JTA comprises the minimum set of performance-based, primarily non-governmental standards needed to maximize affordable interoperability within DoD; and therefore is entirely consistent with and supportive of DoD's Acquisition Reform principles and practices.

1.3 BACKGROUND

The Assistant Secretary of Defense, Command, Control, Communications, and Intelligence (ASD/C3I) issued a memorandum to DoD Services and Agencies, 14 November 1995, to establish a single, unifying DoD architecture that would become binding on all future DoD C4I acquisitions. As a result, the JTA Version 1.0 document was developed as part of a collaborative effort involving the Services, Joint Staff (JS), Under Secretary of Defense, Acquisition and Technology (USD (A&T)), ASD/C3I, Defense Information Systems Agency (DISA), and the Intelligence Community. Subsequent to its completion, the USD (A&T) and ASD/C3I issued a memorandum 22 August 1996 to the DoD Services and Agencies mandating the use of JTA V1.0 and applicable compliance; and also required each Service and Agency to generate their respective plan for implementing the JTA.

Commencing early 1997, the JTA Version 2.0 development was underway to reassess applicability and currency of JTA Version 1.0 identified standards, and broaden the JTA scope to embrace other functional domains to include: weapon systems; combat support; and modeling and simulation. In November 1998, USD (A&T), ASD/C3I (DoD Chief Information Officer [CIO]), and JS issued a memorandum to the secretaries of the military departments mandating the use of JTA Version 2.0 for all applicable DoD programs, and required each Service/Agency to update their existing implementation plans or submit new plans should one not exist. Further, the memorandum requires that each DoD Component and cognizant OSD authority implement the JTA. It also provides for implementation responsibilities regarding compliance assurance, programming and budgeting of resources, and scheduling.

1.4 TERMINOLOGY

Throughout this document the term "Naval" is used in reference to the DoN with its component Services: U.S. Navy and U.S. Marine Corps. When a distinction is required to address individual component Service applicability, the term "Navy" is used to reference the U.S. Navy and the term "Marine Corps" is used to reference the U.S. Marine Corps.

1.5 APPLICABILITY

This document applies to all emerging DoN systems and major upgrades to existing systems and the interfaces to such systems.

1.6 JTA WAIVERS

As delineated in the 30 November 1998 JTA memorandum, JTA waiver requests can be granted only by the Component Acquisition Executive (CAE), or cognizant OSD authority with USD (A&T) and ASD/C3I concurrence. Additional information on waivers is discussed in Section 2.3 of this document.

1.7 CONFIGURATION MANAGEMENT

DoN configuration management (CM) can be approached from two different perspectives: (1) DoN implementation plan updates and subsequent revisions to align with impacts from the JTA evolution; and (2) system CM and migration toward JTA compliance.

1.7.1 DoN Implementation Plan Configuration Management

The DoN Implementation Plan will be under configuration control of the Assistant Secretary of the Navy, Research, Development and Acquisition (ASN (RD&A) Acquisition Reform Office (ARO)). Recommended changes to this plan should be submitted to ASN RD&A (ARO) for review and coordination.

1.7.2 System Configuration Management

Program and project managers, or others who are responsible for CM of applicable systems, will provide feedback regarding JTA implementation to ASN (RD&A). For ACAT programs an assessment will be accomplished at each milestone review to determine the extent of JTA implementation.

1.8 DoN IMPLEMENTATION PLAN STRUCTURE

The document structure (as depicted in FIGURE 1-1) is intended to provide a flexible structure to accommodate JTA evolution and update.

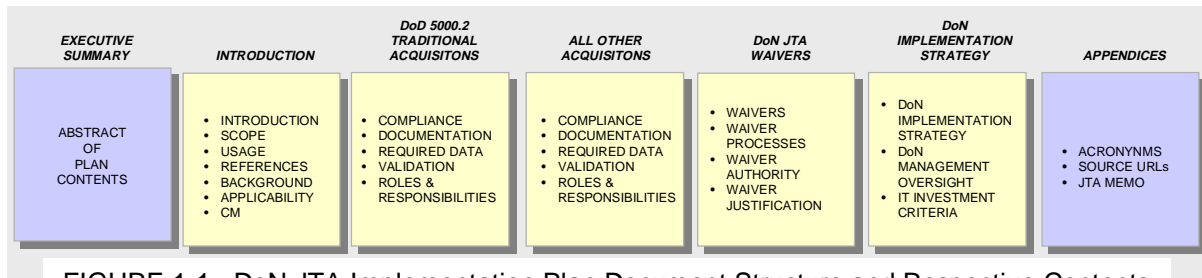


FIGURE 1-1: DoN JTA Implementation Plan Document Structure and Respective Contents

- Section 1 contains an introduction that summarizes this document's purpose, scope, and applicability; and identifies relevant reference material and background information
- Section 2 depicts the DoN's implementation approach addressing JTA compliance approval process, roles and responsibilities, and waiver approval/concurrence.
- Section 3 depicts JTA compliance as part of the overall DoN IT investment strategy to comply with current statutory legislative requirements.
- Appendix A contains acronyms used throughout the document; Appendix B provides a listing of source documentation URLs; and Appendix C contains a copy of the JTA Version 2.0 implementation memorandum

1.9 REFERENCES

This implementation plan is predicated upon existing legislation, mandates, policies, and instructions. Relevant reference material comprises the documents identified herein; a list of URLs for the reference documents available via the internet is provided in Appendix B.

1.9.1 Applicable Documents

- CJCSI 3170.01, Requirements Generation System, (Formerly MOP 77), 13 June 1997
- CJCSI 6260.01 CH-1, Joint Warrior Interoperability Demonstrations, 15 September 1998
- CJCSI 6212.01A: Compatibility, Interoperability, and Integration of Command, Control, Communications, and Intelligence (C3I) Systems, 30 June 1995
- DoDD 4630.5: Compatibility, Interoperability, Integration of C3I, 12 November 1992
- DoDI 4630.8: Procedures for Compatibility, Interoperability, and Integration of Command, Control, Communications, and Intelligence (C3I) Systems, 12 November 1992
- DoDD 5000.1: Defense Acquisition, 15 March 1996
- DoD 5000.2-R: Mandatory Procedures for Major Defense Acquisition Programs and Major Automated Information Systems, CH-3, 23 March 1998
- Executive Order 13011, Federal Information Technology, 17 July 1996
- GSA Guide to Planning, Acquiring, and Managing Information Technology Systems, Version 1, December 1998
- JIEO 9002: Requirements Assessment and Interoperability Certification of C4I and AIS Equipment and Systems, 23 January 1995

- Marine Corps Order (MCO) 3900.4D: Marine Corps Program Initiation and Operational Requirement Documents, 31 January 1991
- Memorandum, USD(A&T), ASD/C3I, JS, 30 November 1998, Subject: DoD Joint Technical Architecture (JTA) Version 2.0
- Memorandum, OASD/C3I, 17 February 1998, Subject: JTA Implementation Planning
- Technical Architecture Framework for Information Management (TAFIM), Version 3.0, 30 April 1996
- DoN Information Technology Capital Planning Guide, draft, 21 July 1998
- SECNAVINST 5000.2B: Implementation of Mandatory Procedures for Major and Non-Major Defense Acquisition Programs and Major and Non-Major Information Technology Acquisition Programs, 6 December 1996
- DoN Information Technology Standards Guidance (ITSG), Version 99-1, 5 April 1999
- Information Technology Management Reform Act (ITMRA), 1995
- Department of the Navy Information Technology Infrastructure Architecture (ITIA), Version 1.0, proposed, 16 March 1999

JTA COMPLIANCE AND VALIDATION

2.0 JTA COMPLIANCE/VALIDATION DETERMINATION

JTA compliance is determined by the adherence and implementation of those mandated standards identified in the JTA for the applicable and respective Base Service Area¹ (BSA). Non-compliance occurs when a system does not adhere to the identified JTA standard for the respective BSA. In cases where a military profile does not exist and multiple options are available, the selection of options (tailoring) is to be predicated upon system requirements and its respective interfaces.

JTA compliance and validation requires that aggregate requirements and acquisition documentation reflect as a minimum:

- The intended standards approach
- Listing and identification of interface standards
- Standards profiles
- Means to demonstrate and assess system CII as applicable to its respective JMA

Within the DoN and respective systems, the specification and application of any standards other than those identified in the JTA shall be additive, complementary, and unique to a Naval mission area requirement. Systems that have already received Milestone II approval will implement the JTA at the earliest opportunity considering cost, schedule, and performance impact. Applicable DoN policy and guidance documents will be updated as applicable to reflect JTA requisites.

For ACAT programs, the Milestone Decision Authority (MDA) will report the status of JTA implementation to ASN (RD&A). All other non-traditional acquisitions/programs will be assessed and reported on by the organization or agency responsible for program management and execution.

Current DoN policy requires IT investment funding decisions to be based on quantified mission benefits and uses the existing PPBS as a means to select IT investments for funding. The acquisition process will be used to manage and evaluate investments over their life-cycle. The DoN IT capital planning process includes a requirement to address JTA compliance and validation.

2.1 JTA COMPLIANCE APPROVAL FOR ACAT PROGRAMS

JTA compliance will be managed through the use of documentation, processes, and procedures already required by the acquisition process within DoD/DoN. FIGURE 2-1 depicts an overview of the milestone review process, responsible activities, and data requirements with respect to the approval of the Mission Need Statement (MNS), Operational Requirements Document (ORD), system specification, and Test and Evaluation Master Plan (TEMP).

For any applicable acquisition, the Director, J-6, Joint Staff, must certify the need (i.e., MNS) and operational requirements (i.e., ORD) conformance to joint policy and doctrine, interoperability, architectural integrity, and joint potential before approval.

As shown in FIGURE 2-1, JTA requirements are addressed in the program requirements and acquisition documentation and modified/updated throughout the acquisition process. The documentation will be updated to reflect changes and modifications to the baseline system requirements and reviewed at each milestone decision point. Re-certification of the JTA requirements reflected in the MNS/ORD will be accomplished as required.

¹ Per TAFIM, a BSA "is the next lower level of granularity below the Mid Level Service Area and provides the most precise description of IT functionality in any MSA." In other words, a BSA is the lowest level functional service area in which optimally a single standard can be identified.

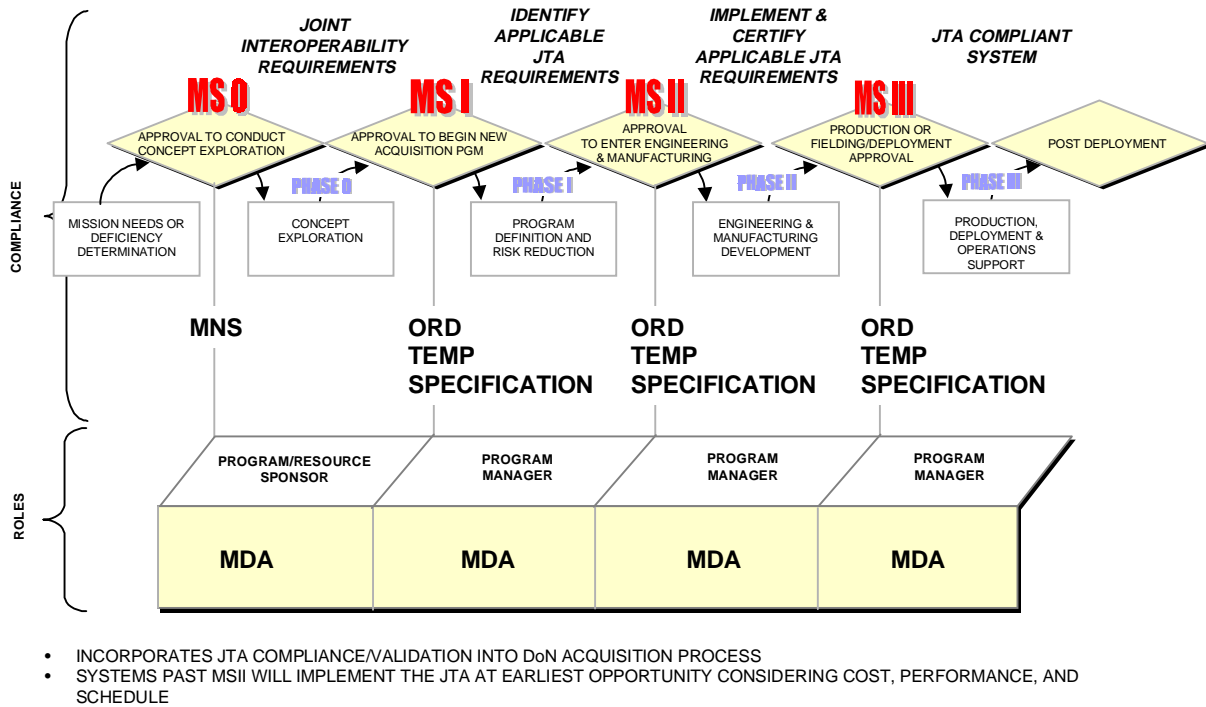


FIGURE 2-1: DoN Milestone Review Overview

2.1.1 DoN Roles & Responsibilities for JTA Implementation

Roles and responsibilities executed to ensure JTA compliance differ among the Navy and the Marine Corps and are differentiated when required in discussing uniqueness between the Services.

2.1.1.1 Program Managers (PMs)

PMs manage assigned programs in a manner consistent with the policies and principles articulated in DoD 5000.2-R and the PM Bill of Rights. PMs provide assessments of program status and risk to higher authorities and to the user or user's representative; actively manage, to the best of their abilities within approved resources, program cost, performance, and schedule; and provide assessments of contractor performance.

For JTA compliance, PMs are responsible for the identification and implementation of applicable JTA requirements for those programs which they have acquisition responsibility. PMs will identify, plan and budget the necessary resources to support the JTA implementation efforts including CII testing and evaluation of systems and equipment.

2.1.1.1.1 Specification

As part of the acquisition process, a system specification will be developed by the PM. A standards profile will be developed and included in the system specification (assistance is available from DISA Center for Standards [CFS] if needed). The standards profile is a collection of selected base standard options used together to satisfy the given functional and interoperability needs of the system. The profile also addresses the functional requirements for the item, defines the interfaces between the functional areas, identifies test requirements for the interfaces (if applicable), and defines the interchangeability characteristics. Standards profiles will be reviewed/updated by the PM/MDA as part of the acquisition process at each milestone phase as appropriate.

The specification will be reviewed for JTA compliance with respect to the following information:

- Contains standards information contained within the ORD/TEMP as well as standards profiles required by the system
- Addresses the set of JTA base standards and, where applicable, addresses the identification of chosen classes, subsets, options, and parameters of those base standards necessary for accomplishing a particular function
- Contains a list of applicable JTA compliant interfaces/standards

Where appropriate, a concept of evolution of the profiles will be identified which incorporates expected future approval of standards by committees or forums and identify changes required to existing standards that will be required to support the system being acquired. Changes may require the standards profile to be updated. The final standards profile for the system to be developed will be identified in the system specification, and will become part of the TEMP.

2.1.1.1.2 Test and Evaluation Master Plan (TEMP)

The TEMP is a key program document whose primary purpose is to describe the necessary Developmental Test & Evaluation (DT&E) and Operational Test & Evaluation (OT&E) and to relate program schedule, critical technical characteristics, required operational characteristics, evaluation criteria, and decision milestones. For multi-Service or joint programs, a single integrated TEMP is required. The TEMP is prepared by the PM/Developing Activity (DA) with Commander, Operational Test and Evaluation Force (COMOPTEVFOR) (for Navy programs; Marine Corps Operational Test and Evaluation Activity (MCOTEA) for Marine Corps programs) participation and approved in accordance with SECNAVINST 5000.2B.

The TEMP will be reviewed for JTA compliance with respect to the following information:

- Addresses JTA interfaces/standards required and indicates scope and manner in which these requirements are to be examined during testing
- Identifies compatibility, interoperability, and integration requirements to include conformance test planning to demonstrate standards compliance
- Addresses Measures of Effectiveness (MOE) and Measures of Performance (MOP) for each interoperability critical operational issue (COI)

TEMPs for applicable systems will be coordinated with DISA and Joint Interoperability Test Center (JITC) to ensure that required Joint/Combined interfaces are addressed, that CII requirements have been identified and that a test process is defined to address them. The Military Communications Electronics Board Interoperability Test Panel (MCEB ITP) will be the focal point for joint issue resolution.

2.1.1.2 Service Acquisition Executive (SAE)

The SAE for the DoN is the ASN (RD&A). SAE responsibilities include supervising the performance of the DoN acquisition system (policies and procedures established by the Navy that align with and execute the requirements of DoD 5000) and carrying out policies established by the USD (A&T). The SAE serves as the decision authority for assigned programs and ensures that DoN programs have identified and implemented applicable JTA requirements. The SAE delegates milestone decision authority to the appropriate level as applicable.

2.1.1.2.1 Milestone Decision Authority (MDA)

Per SECNAVINST 5000.2B, the ASN (RD&A) is the DoN MDA for assigned acquisition programs. Systems Command (SYSCOM) Commanders, Program Executive Officers (PEOs), and Direct Reporting Program Managers (DRPMs) act as MDA for programs as assigned by ASN (RD&A). Current ACAT/MDA assignments are part of the Acquisition Program Database (APDB) maintained by ASN

(RD&A). The MDA serves as the decision authority for assigned programs and ensures that DoN programs have identified and implemented applicable JTA requirements. The MDA will report the status of JTA implementation to ASN (RD&A).

2.1.1.2.2 Systems Command (SYSCOM) Commanders

SYSCOMs provide support to PEOs and PMs and act as milestone decision authorities for assigned programs. SYSCOMs ensure that PMs have identified and implemented applicable JTA requirements.

2.1.1.2.3 Program Executive Officers (PEOs)/Direct Reporting Program Managers (DRPMs)

PEOs/DRPMs review and assess assigned programs, and act as milestone decision authorities for certain programs. PEOs/DRPMs will ensure that PMs have identified and implemented applicable JTA requirements.

2.1.1.3 Program/Resource Sponsor

The Program Sponsor, through the Resource Sponsor where separately assigned, will act as the user representative and provide explicit direction with regard to joint interoperability, mission and operational requirements generation (MNS/ORD), as shown in FIGURE 2-2; program the funds necessary for proper execution; define the thresholds and parameters for operational testing; prepare the necessary program documentation; and be accountable for keeping Chief of Naval Operations (CNO) informed on issues and the need for programmatic changes.

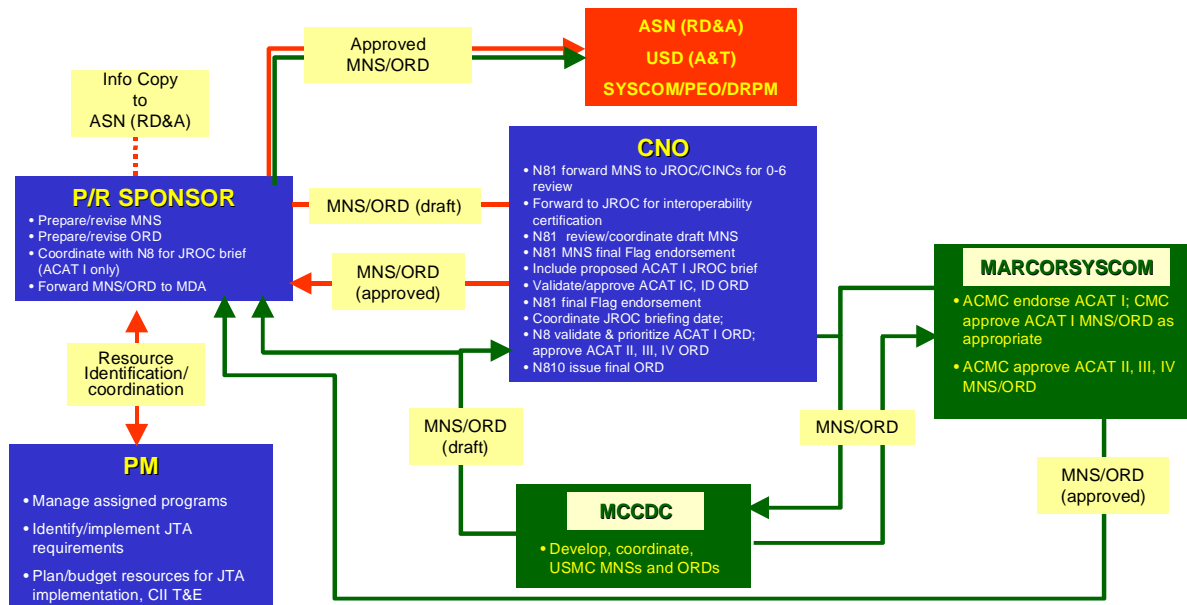


FIGURE 2-2: MNS/ORD Process Overview

2.1.1.3.1 Mission Need Statement (MNS)

The MNS identifies a need which relates to the Defense Planning Guidance (DPG) and which cannot be satisfied by a change in tactics, doctrine, or procedures. The MNS is prepared and approved in accordance with SECNAVINST 5000.2B.

The MNS will include the following information concerning JTA compliance:

- A statement that demonstrates the commitment to use JTA approved standards, and that addresses compatibility and interoperability as follows:
 - Compatibility with existing and planned systems and equipment
 - Interoperability with other US functionally related IT systems and equipment
 - Interoperability with Allied nations' functionally related IT systems and equipment
- Standards approach for exchange of information and data
- Joint Potential Designator (JPD) (e.g., joint, joint interest, or independent)

The standards addressed in the MNS must be consistent with current DoN/DoD standards policy. Issues/concerns resulting from the MNS review will be resolved at the lowest level possible. The MCEB Interoperability Improvement Panel (MCEB IIP) will forward unresolved issues/concerns to the Joint Staff for resolution.

2.1.1.3.2 Operational Requirements Document (ORD)

The ORD specifies key performance and readiness parameters and is the major control document for system acquisition. The ORD is prepared and approved in accordance with SECNAVINST 5000.2B. The ORD will include the following information concerning the JTA:

- Identification of interfacing systems (at the system/subsystem, platform, and force levels), related to standardization and interoperability
- Identification of companion ORDs and other Services with similar requirements
- Description of how the system will be integrated into the enterprise architecture
- Considerations for joint use and North Atlantic Treaty Organization (NATO) cross-servicing
- Identification of JTA related procedural and technical interfaces (this includes the respective interface standards for information processing, message/data formats, information transfer, security, and human computer interface (HCI))
- Communications, protocols, and standards required for compatibility and interoperability with other Services, joint Service, and Allied systems
- Identification of the Joint Potential Designator

Issues/concerns resulting from the ORD review/approval process will be resolved at the lowest level possible. The MCEB IIP will forward unresolved issues/concerns to the Joint Staff for resolution.

2.1.1.4 Chief of Naval Operations (CNO)

The CNO is designated as the Navy ACAT I program MNS and ORD validation and approval authority whenever Joint Requirements Oversight Council (JROC) does not retain the authority. The Deputy Chief of Naval Operations (Resources, Warfare Requirements and Assessments) (CNO (N8)) is designated as the authority to review, validate, and prioritize MNSs and ORDs for Navy ACAT II - IV level programs. Acquisition Program Baseline (APB) Key Performance Parameters (extracted from the ORD) are validated by CNO (N8) (ACAT IC - IV) who also serves as the principal interface between CNO and ASN (RD&A) on matters relating to test and evaluation (T&E). CNO will review and/or endorse ACAT I-III TEMPs. OPNAV will identify, define, validate, and prioritize mission requirements, program the appropriate resources through the PPBS, and coordinate the T&E process.

2.1.1.5 Commander, Operational Test and Evaluation Force (COMOPTEVFOR)

The COMOPTEVFOR is responsible for independent operational test and evaluation for the Navy; and will assist the PM in developing inputs to applicable sections of the TEMP. COMOPTEVFOR will review/endorse ACAT IVT TEMPs.

2.1.1.6 Marine Corps Operational Test and Evaluation Activity (MCOTEA)

The MCOTEA supports the Combat Development Process by managing the Marine Corps Operational Test Program. MCOTEA performs analyses of operational effectiveness and suitability of ORD requirements via independent testing. The MCOTEA is responsible for independent operational test and evaluation for the Marine Corps; and will assist the PM in developing inputs to applicable sections of the TEMP. MCOTEA will review/endorse ACAT IVT TEMPs.

2.1.1.7 Marine Corps Combat Development Command (MCCDC)

The MCCDC develops interoperability and standards requirements for ORDs. MCCDC is the principal interface between CNO, Assistant Commandant of the Marine Corps (ACMC), and Commandant of the Marine Corps (CMC) for the development, coordination, and validation/approval of United States Marine Corps (USMC) MNSs and ORDs.

2.1.1.8 Commandant of the Marine Corps (CMC)/Assistant Commandant of the Marine Corps (ACMC)

The CMC is designated as the USMC ACAT I program MNS and ORD validation and approval authority whenever JROC does not retain the authority. The CMC is responsible for the USMC requirement generation process, operational test and evaluation, readiness, planning and programming to satisfy operational requirements. The CMC approves USMC ACAT I ORDs and MNSs. The ACMC endorses USMC ACAT I ORDs and MNS; approves ACAT II-IV ORDs and MNSs.

2.2 JTA COMPLIANCE AND VALIDATION (ALL OTHER ACQUISITIONS/PROGRAMS)

For purposes of DoN implementation of the JTA and alignment with the current DoD JTA memorandum, non-traditional, as used herein, refers to acquisitions and related efforts that are not ACAT programs.

Non-traditional acquisitions are not required to adhere to the DoD and DoN processes outlined in DoD 5000.2 or SECNAVINST 5000.2. These acquisitions are sometimes associated with concept or technology demonstrations to improve warfighting capability and do require documentation to justify cost, schedule, performance capability, associated risk, and overall IT investment benefit. As depicted in FIGURE 2-3, associated documentation is dependent on requirements imposed by the resource sponsor to justify its purpose and monitor its compliance with DoN IT investment rules and the JTA.

JTA compliance and validation is the Joint responsibility of the cognizant PM/PEO/DRPM and resource sponsor organization. Documentation should satisfy the JTA compliance/validation criteria cited in paragraph 2.0.

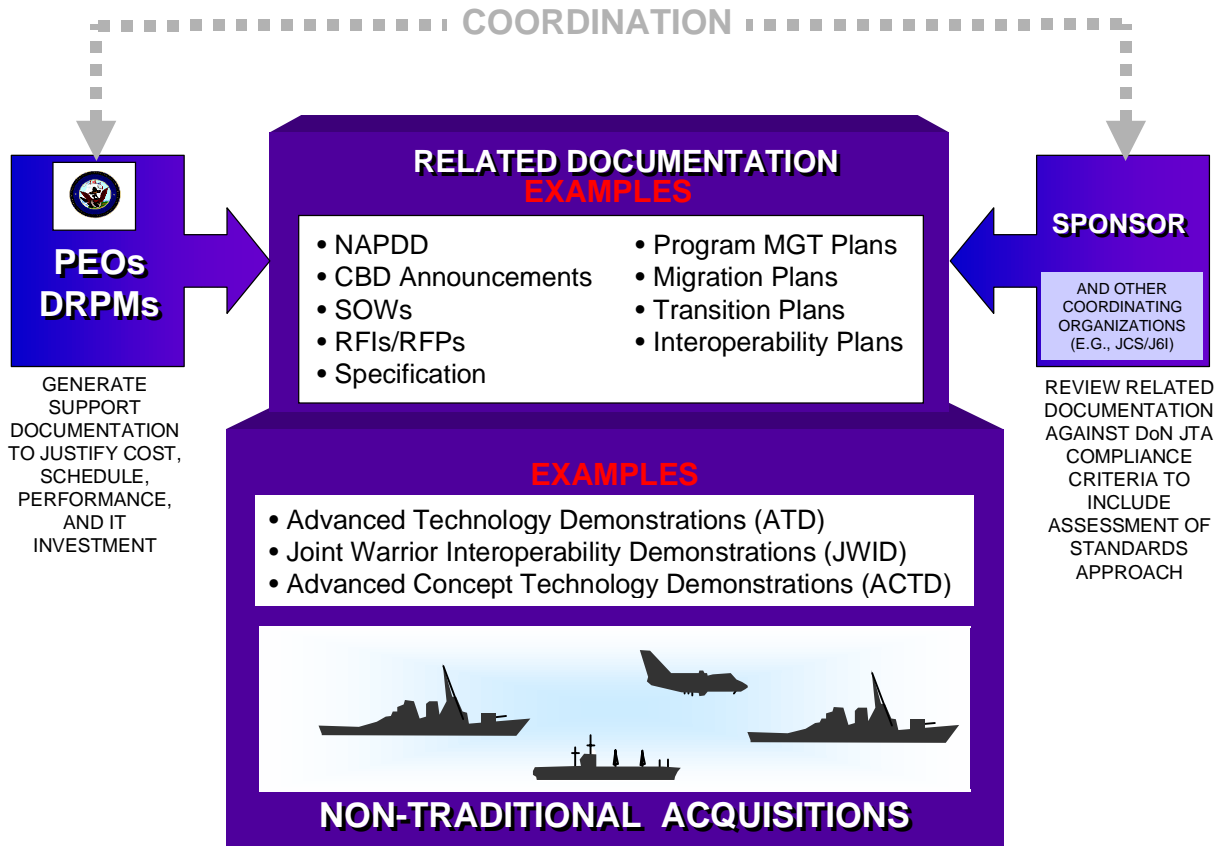


FIGURE 2-3: Non-Traditional Acquisition Process Overview

2.3 JTA WAIVERS

To the maximum extent possible, the JTA cites commercially supported standards consistent with DoD policy minimizing the use of military specifications. In some instances where no acceptable commercial equivalent(s) exists, joint military specifications and DoD generated profiles of commercial standards are cited.

In cases where implementing a JTA mandated standard for a new system or major upgrade may present negative program impacts and a compelling argument can be made against the use of a JTA mandated standard, justification with respect to cost, schedule, and performance impact must be presented via the submission of a JTA waiver request. Waivers from the use of a mandated JTA standard may be requested by the PM, PEO, or responsible management entity and forwarded to the respective approving authority as highlighted in FIGURE 2-4.

As a minimum, each waiver request is required to identify any cost, schedule, and performance impacts should the waiver not be granted. Each JTA waiver request should include, as a minimum, the identification of the JTA standard in which the request is being generated as well as identification of the standard intended to be used in lieu of the JTA mandate. Reference to the JTA standard also requires citation of the JTA document version and respective paragraph number for ease of reference. Additional substantiating data may include consideration toward cost savings, schedule acceleration, system performance improvements and subsequent risks should the JTA waiver not be granted.

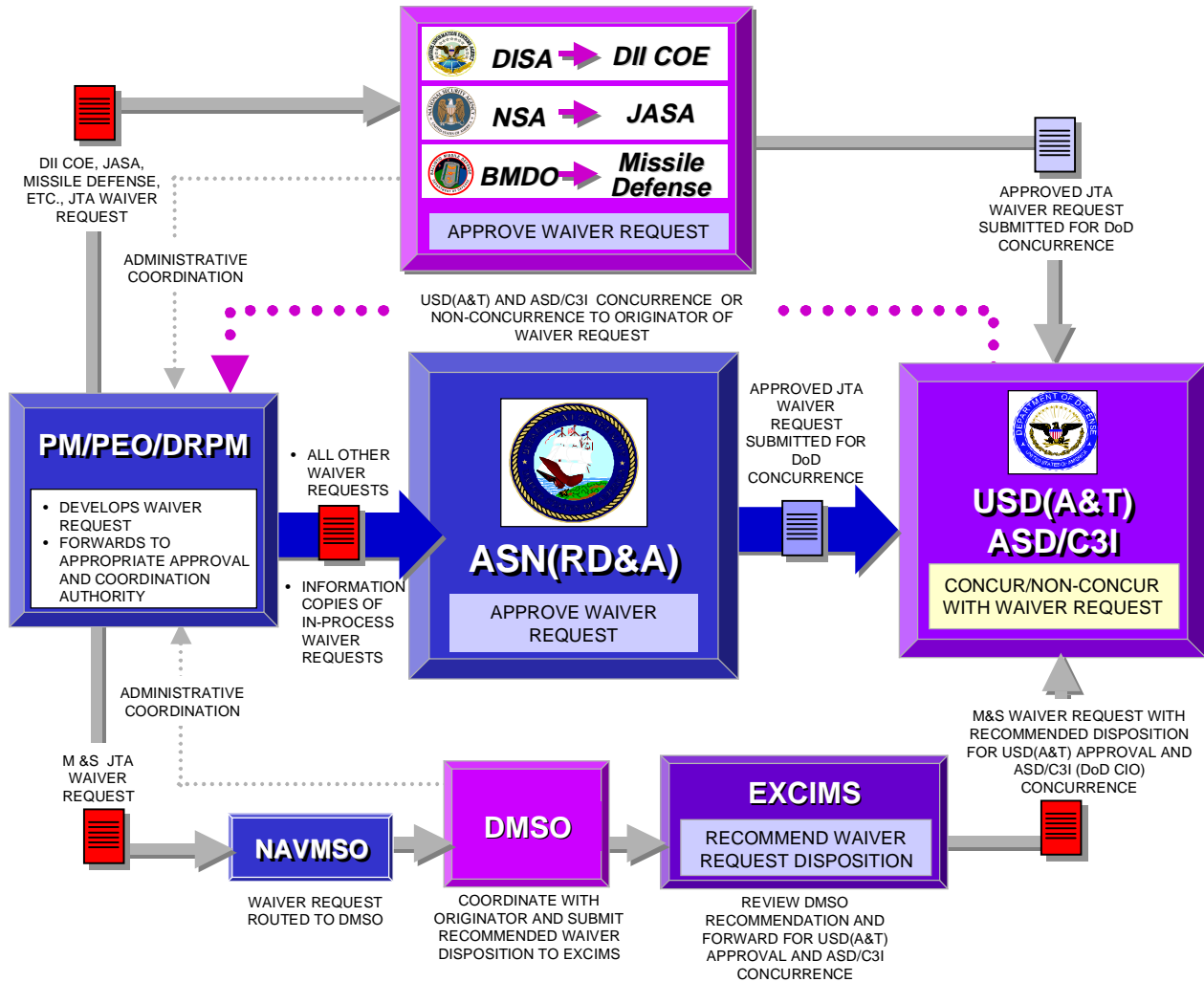


FIGURE 2-4: JTA Waiver Process Overview

All JTA waiver requests with the exception of JTA M&S High Level Architecture (HLA) standards and respective JTA systemic implementations (such as Defense Information Infrastructure (DII) Common Operating Environment (COE)) will be submitted to the ASN (RD&A) for DoN approval.

- JTA waiver requests related to the standards identified in the M&S domain annex will be routed through the DoN's M&S Management Office to the Defense Modeling and Simulation Office (DMSO). DMSO will coordinate the waiver with the originator and administratively process a recommended disposition for submission to the Executive Council for Modeling and Simulation (EXCIMS). EXCIMS will submit their recommendation to the USD (A&T) for approval with the concurrence of the ASD/C3I (DoD CIO).
- JTA waiver requests related to systemic implementations of the JTA (for example, the DII COE) will be routed to the organization responsible for systemic implementation (for example, DISA for DII COE, National Security Agency (NSA) for the Joint Airborne SIGINT Architecture (JASA), Ballistic Missile Defense Organization (BMDO) for Missile Defense Standards). The responsible organization will administratively coordinate through the established mechanism and grant the waiver for subsequent USD (A&T) and ASD/C3I concurrence.

Upon approval of a JTA waiver request, all waivers will be forwarded to USD (A&T) and ASD/C3I for concurrence or non-concurrence. Waiver concurrence by USD (A&T) and ASD/C3I can be assumed if no response is provided back within the DoD allocated 14 calendar days from the date of receipt.

DoN IT STRATEGY

3.0 DoN IT INVESTMENTS

Current DoN policy requires IT investment-funding decisions to be based on quantified mission benefits. Rather than create a parallel process for IT investments, DoN (in concert with OSD and other MILDEPs) is using the existing PPBS to select IT investments for funding (as shown in FIGURE 3-1). The acquisition process, as defined in the DoD/DoN 5000 series, will be used to manage and evaluate acquisition programs over their life-cycle.

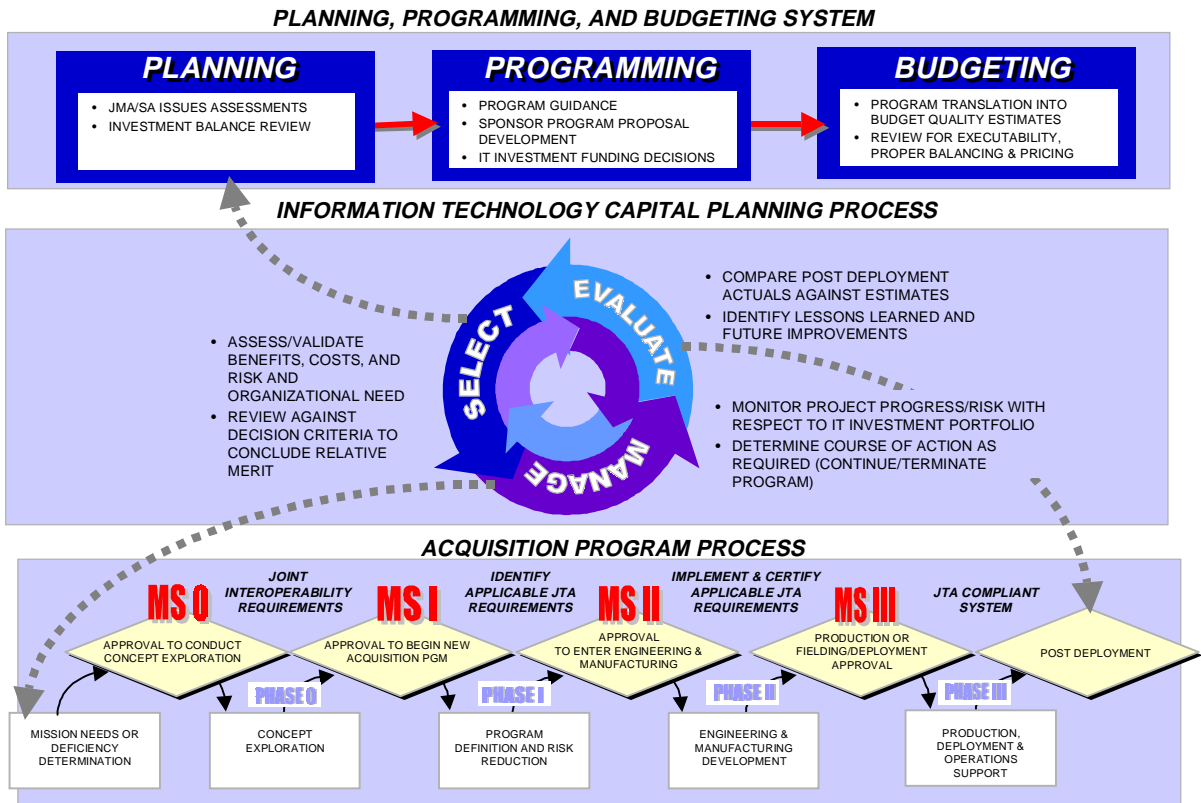


FIGURE 3-1: DoN IT Strategy Focus toward PPBS

Recent IT legislation shifts the IT management focus from procurement to business planning and mission accomplishment. This differentiation is critical in focusing on steps involved in mission, business, and acquisition planning and execution.

The review of IT investments by Resource Sponsors and claimants against minimum criteria as prerequisite for funding approval will ensure that the DoN is in full compliance with the law and that IT investments are evaluated, selected for funding based on contribution to mission accomplishment, and incorporated appropriately into the DoN overall investment portfolio. The review for JTA compliance is an integral part of the strategy and will be addressed with respect to Naval IT investment criteria.

3.1 PLANNING, PROGRAMMING, AND BUDGETING

Responsibility for planning and programming are delegated to the two separate Naval services, Navy and Marine Corps, with staff offices consolidating a departmental product for the Secretary of the Navy (SECNAV) who is the final decision-maker.

3.2 DoN IT INVESTMENT CRITERIA

JTA implementation and degree thereof will be used, in part, to assess information system investments and respective funding by the Office of Management and Budget (OMB) and respective sponsor(s). Aligned with DoD, DoN will assess JTA compliance toward decision criteria defined in OMB Memorandum M-97-02 as a means to evaluate information systems investments proposed for funding. JTA compliance will be assessed toward criterion which: establishes the critical link between planning and implementation; and the information architecture alignment with technology with mission goals.

3.3 JTA COMPLIANCE OVERSIGHT

The DoN CIO and ASN (RD&A) are responsible for JTA implementation progress accountability in addition to reporting back to OSD/C3I and USD (A&T) as a means to improve cross-Service and cross-functional coordination of the JTA implementation planning.

3.4 JTA COMPLIANCE REPORTING

Resource sponsors must include the status of IT investments as a part of their Sponsor Program Proposal (SPP) briefs. As a minimum, reporting responsibilities encompass: (1) status of JTA compliance; (2) planning for migrating toward JTA compliance; and (3) progress toward JTA compliance with major, new (pre-MSI) programs, and other applicable acquisitions. Assessments will be accomplished at each milestone review to determine the extent of JTA implementation.

For traditional acquisition programs, the MDA will report the status of JTA implementation and degree of JTA non-compliance to ASN (RD&A). All other non-traditional acquisitions/programs will be assessed and reported on by the organization or agency responsible for program management and execution.

APPENDIX A ACRONYMS

ACAT	Acquisition Category
ACMC	Assistant Commandant of the Marine Corps
ACTD	Advanced Concept Technology Demonstration
APB	Acquisition Program Baseline
APDB	Acquisition Program Database
ASD/C3I	Assistant Secretary of Defense, Command, Control, Communications, and Intelligence
ARO	Acquisition Reform Office
ASN(RD&A)	Assistant Secretary of the Navy, Research, Development and Acquisition
ATD	Advanced Technology Demonstration
BMDO	Ballistic Missile Defense Organization
BSA	Base Service Area
C4I	Command, Control, Communications, Computers, and Intelligence
CAE	Component Acquisition Executive
CFS	Center For Standards
CII	Compatibility, Interoperability, Integration
CIO	Chief Information Officer
CM	Configuration Management
CMC	Commandant of the Marine Corps
CNO	Chief of Naval Operations
COE	Common Operating Environment
COI	Critical Operational Issue
COMOPTEVFOR	Commander, Operational Test and Evaluation Force
DA	Developing Activity
DII	Defense Information Infrastructure
DISA	Defense Information Systems Agency
DMSO	Defense Modeling and Simulation Office
DoD	Department of Defense
DoN	Department of the Navy
DPG	Defense Planning Guidance
DRPM	Direct Reporting Program Manager
DT&E	Developmental Test and Evaluation
EXCIMS	Executive Council for Modeling and Simulation
HCI	Human-Computer Interface
HLA	High Level Architecture
ISR	Intelligence, Surveillance, and Reconnaissance
IT	Information Technology
ITIA	Information Technology Infrastructure Architecture
ITMRA	Information Technology Management Reform Act
ITSG	Information Technology Standards Guidance
JASA	Joint Airborne SIGINT Architecture
JITC	Joint Interoperability Test Center
JMA	Joint Mission Area

JPD	Joint Potential Designation
JROC	Joint Requirements Oversight Council
JS	Joint Staff
JTA	Joint Technical Architecture
JWID	Joint Warrior Interoperability Demonstration
M&S	Modeling and Simulation
MCCDC	Marine Corps Combat Development Command
MCEB	Military Communications Electronics Board
MCEB IIP	Military Communications Electronics Board Interoperability Improvement Panel
MCEB ITP	Military Communications Electronics Board Interoperability Test Panel
MCO	Marine Corps Order
MCOTEA	Marine Corps Operational Test and Evaluation Activity
MDA	Milestone Decision Authority
MILDEP	Military Department
MNS	Mission Need Statement
MOE	Measures of Effectiveness
MOP	Measures of Performance
NATO	North Atlantic Treaty Organization
NSA	National Security Agency
NSS	National Security System
OMB	Office of Management and Budget
OPA	Office of Program Appraisal
OPNAV	Operations Navy
ORD	Operational Requirements Document
OSD	Office of the Secretary of Defense
OT&E	Operational Test and Evaluation
PEO	Program Executive Officer
PM	Program Manager
PPBS	Planning, Programming and Budgeting System
SAE	Service Acquisition Executive
SECNAV	Secretary of the Navy
SPP	Sponsor Program Proposal
SYSCOM	Systems Command
T&E	Test and Evaluation
TEMP	Test and Evaluation Master Plan
USD(A&T)	Under Secretary of Defense, Acquisition and Technology
USMC	United States Marine Corps

APPENDIX B

SOURCE DOCUMENTATION URL LISTING

DOCUMENT REFERENCE	TITLE	URL
Joint Technical Architecture	Department of Defense Joint Technical Architecture, Version 2.0, 26 May 1998	http://www-jta.itsi.disa.mil/
CJCSI 6212.01A	Compatibility, Interoperability, and Integration of Command, Control, Communications, and Intelligence (C3I) Systems, 30 June 1995	http://jitic.fhu.disa.mil/ciidocs.htm
CJCSI 3170.01	Requirements Generation System, (Formerly MOP 77), 13 June 1997	http://www.dtic.mil/doctrine/jel/cjcsd/cjcsi.htm
Memorandum, ASD(C3I), JS, and USD (A&T)	Subject: DoD Joint Technical Architecture (JTA) Version 2.0, 30 November 1998	http://www-jta.itsi.disa.mil/
DoDD 4630.5	Compatibility, Interoperability, Integration of C3I, 12 November 1992	http://jitic.fhu.disa.mil/ciidocs.htm
DoDI 4630.8	Procedures for Compatibility, Interoperability, and Integration of Command, Control, Communications, and Intelligence (C3I) Systems, 12 November 1992	http://jitic.fhu.disa.mil/ciidocs.htm
DoD 5000.1	Defense Acquisition, 15 March 1996	http://www.acq.osd.mil/api/asm/product.html
DoD 5000.2-R, CH-3	Mandatory Procedures for a Major Defense Acquisition Programs and Major Automated Information Systems, 23 March 1998	http://www.acq.osd.mil/api/asm/product.html
JIEO 9002	Requirements Assessment and Interoperability Certification of C4I and AIS Equipment and Systems, 23 January 1995	http://jitic.fhu.disa.mil/ciidocs.htm
EO 13011	Executive Order 13011, Federal Information Technology, 17 July 1996	http://www.c3i.osd.mil/org/org_cio.html
DoN IT Capital Planning Guide	DoN Information Technology Capital Planning Guide, draft, 21 July 1998	http://www.doncio.navy.mil/links/Publications/Capital_Planning/
GSA Guide	A Guide to Planning, Acquiring, and Managing Information Technology Systems, Version 1, December 1998	http://www.itpolicy.gsa.gov/mks/combine.htm
ITSG	DoN Information Technology Standards Guidance (ITSG), Version 99-1, 5 April 1999	http://www.doncio.navy.mil/links/publications
ITIA	DoN Information Technology Infrastructure Architecture (ITIA), Version 1.0, proposed, 16 March 1999	http://www.doncio.navy.mil/links/publications
ITMRA	Information Technology Management Reform Act (ITMRA), 1995 (now Clinger-Cohen Act)	http://www.itpolicy.gsa.gov/mks/regs-leg/s1124_en.htm
SECNAVINST 5000.2B	Implementation of Mandatory Procedures for Major and Non-Major Defense Acquisition Programs and Major and Non-Major Information Technology Acquisition Programs	http://www.doncio.navy.mil/links/References/

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APPENDIX C JTA VERSION 2.0 IMPLEMENTATION MEMO



ACQUISITION AND
TECHNOLOGY

OFFICE OF THE UNDER SECRETARY OF DEFENSE

3000 DEFENSE PENTAGON
WASHINGTON DC 20301-3000



30 NOV 1998

MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS
CHAIRMAN OF THE JOINT CHIEFS OF STAFF
UNDER SECRETARIES OF DEFENSE
DIRECTOR, DEFENSE RESEARCH AND ENGINEERING
ASSISTANT SECRETARIES OF DEFENSE
GENERAL COUNSEL OF THE DEPARTMENT OF DEFENSE
DIRECTOR, OPERATIONAL TEST AND EVALUATION
ASSISTANTS TO THE SECRETARY OF DEFENSE
DIRECTORS OF THE DEFENSE AGENCIES
DIRECTORS OF THE DEFENSE FIELD ACTIVITIES

SUBJECT: DoD Joint Technical Architecture (JTA) Version 2.0

JTA Version 2.0 was approved by the Architecture Coordination Council on May 28, 1998 and has been posted to the JTA Home Page with a notice that formal authorization for use will be provided separately. This memorandum makes JTA Version 2.0 effective for use immediately, superseding version 1.0. In addition, this memorandum updates the portion of Paragraph 4.3.9 of DoD 5000.2-R (with Change 3) covering the JTA applicability and waiver process, pending a formal revision of DOD 5000.2-R and other DoD Directives and Instructions.

Implementation of JTA, that is the use of applicable JTA mandated standards, is required for all emerging, or changes to an existing capability that produces, uses, or exchanges information in any form electronically; crosses a functional or DoD Component boundary; and gives the warfighter or DoD decision maker an operational capability. Use of an applicable JTA mandated standard must consider the cost, schedule, or performance impacts, and if warranted a waiver from use granted as described below. Hence, implementation of the JTA is required for all DoD Acquisition Categories, and all other non-traditional (e.g., Defense Information Infrastructure (DII) Common Operating Environment (COE)), systemic (e.g., Joint Airborne SIGINT Architecture (JASA)), or non-DoD 5000 series acquisitions (e.g., procurement of information technology services, CINC Initiatives) that meet these criteria. In addition, implementation of the JTA is required for pre-acquisition programs such as: Advanced Concept Technology Demonstration (ACTDs), Advanced Technology Demonstrations (ATDs), Joint Warrior Interoperability Demonstrations (JWIDs), 'Exploitation-year', and Battle Laboratory projects that meet these criteria.

Each DoD Component and cognizant OSD authority is responsible for implementation to include compliance assurance, programming and budgeting of resources, and scheduling. Only the Component Acquisition Executive, or cognizant OSD authority can grant a waiver from the use of an applicable JTA mandated standard. All waivers shall be submitted to the USD (A&T) and ASD(C3I) (the DoD Chief Information Officer (CIO)) for concurrence. Both




USD(A&T) and ASD(C3I) (DoD CIO) concurrence can be assumed if no response is received two weeks after the date of receipt. To assure proper and timely consideration, all waivers must be accompanied by the identification of cost, schedule, and performance impacts that will occur if waiver is not granted and acknowledgment of any resulting operational limitations.

To preclude the granting of duplicative waivers, caused by implementing this and other OSD mandates, the organization responsible for systemic implementations of the JTA (e.g., DISA for the DIJ COE; NSA for the JASA; BMDO for the standards in the Missile Defense) will administratively coordinate through the establish mechanism and grant the waiver and forward to USD(A&T) and ASD(C3I) (DoD CIO) for concurrence. Lastly, all waivers of the standards contained in the Modeling & Simulation Domain Annex must be submitted through the M&S management office of the responsible DoD Component to the Defense Modeling and Simulation Office (DMSO). DMSO will then coordinate and administratively process a recommended disposition to the Executive Council for Modeling & Simulation (EXCIMS). EXCIMS will submit their recommendation to the USD(A&T) for approval with the concurrence of the DoD CIO.

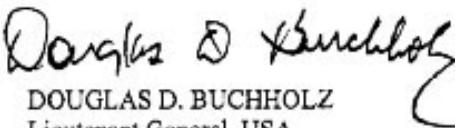
Each DoD Component and cognizant OSD authority is requested to provide a new or revised implementation plan to the USD(A&T) and the ASD(C3I)(DoD CIO). Revision of an existing plan is due within 60 days while a new plan is due within 90 days from the date of this memorandum. These plans must include consideration of JTA implementation for existing capabilities meeting the criteria provided in the second paragraph.

The JTA is a living document and will continue to evolve with the technologies, marketplace, and associated standards upon which it is based. The JTA is the minimum set of performance based primarily non-governmental standards needed to maximize interoperability and affordability within DoD and hence is entirely consistent with Acquisition Reform principles and practices. Tests and exercises will be used to evaluate the JTA implementation progress.

Addressees are requested to assure the widest distribution of this memorandum. Request Director, Joint Staff forward this memorandum to Unified Combatant Commands.


Jacques S. Gansler
Under Secretary of Defense
(Acquisition and Technology)


Arthur L. Money
Senior Civilian Official


DOUGLAS D. BUCHHOLZ
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