



DEPARTMENT OF THE NAVY

OFFICE OF THE SECRETARY
1000 NAVY PENTAGON
WASHINGTON, D.C. 20350-1000

SECNAVINST 5000.2F
ASN (RD&A)
26 Mar 2019

SECNAV INSTRUCTION 5000.2F

From: Secretary of the Navy

Subj: DEFENSE ACQUISITION SYSTEM AND JOINT CAPABILITIES
INTEGRATION AND DEVELOPMENT SYSTEM IMPLEMENTATION

Encl: (1) References
(2) Responsibilities
(3) Acquisition Categories and Compliance Requirements
(4) Systems Engineering
(5) Test and Evaluation
(6) Life-Cycle Sustainment
(7) Information Technology Requirements
(8) Joint Requirements and Capabilities Development
(9) Two Pass, Seven Gate Governance
(10) Glossary

1. Purpose. This instruction and its enclosures:

a. Implement references (a) through (c) and (bo) within the Department of the Navy (DON).

b. Prescribe DON-specific acquisition policies and procedures that supplement references (a) through (ci) to provide for the integrated, efficient, and successful operation of the Joint Capabilities Integration and Development System (JCIDS) and Defense Acquisition System (DAS) within the DON.

c. Authorize Milestone Decision Authorities (MDAs) for DON acquisition programs to waive or tailor non-statutory procedures in reference (b) and the enclosures to this instruction, as appropriate, to more efficiently achieve program objectives.

2. Cancellation. SECNAVINST 5000.2E.

3. Background. This instruction must be read together with reference (b).

4. Applicability

a. This instruction applies to all DON activities. It applies to all DON acquisition programs except those managed under separate procedures for: (1) Defense Business Systems (DBS); (2) the middle-tier rapid prototyping and rapid fielding pathways under section 804 of P.L. 114-92, as amended; and (3) prototyping efforts under 10 U.S.C. § 2447a-2447e.

b. This instruction does not apply to the acquisition of contracted services, unless an affirmative decision has been made to manage such services as part of a DON acquisition program.

c. The policies and procedures prescribed herein do not take precedence over conflicting requirements established by statute, Federal Acquisition Regulation (FAR), Defense Federal Acquisition Regulation Supplement (DFARS), or Navy-Marine Corps Acquisition Regulation Supplement.

d. Specific guidance for the DON accelerated acquisition process is set forth in SECNAVINST 5000.42 (reference (bu)). Quick Reaction Assessments (QRA) for accelerated acquisition operational test and evaluation are addressed in enclosure (5) of this instruction.

5. Policy

a. Statutory requirements will be complied with unless waived in accordance with applicable waiver provisions and associated procedures.

b. MDAs are authorized to tailor the structure and oversight of an acquisition program, including acquisition phase content, information requirements, approval levels for program documents (program documents that are not statutory), and the scope of decision reviews that are within the MDA's approval authority under reference (b) and this instruction.

c. Approval authority for the program documents identified in reference (b) and the enclosures to this instruction will be delegated to the lowest levels appropriate, consistent with fulfilling oversight requirements.

d. Program documents will be prepared in coordination with stakeholder organizations.

6. Responsibilities. DON activities will:

a. Ensure the policies and procedures of references (a) through (c) and (bo) and this instruction, including its enclosures, are followed.

b. Review existing instructions and guidance and cancel or update to conform to this instruction and its enclosures.

(1) Unless prescribed by statute, the policies and procedures of this instruction and its enclosures will not be supplemented without prior approval from the Assistant Secretary of the Navy for Research, Development and Acquisition (ASN (RD&A)).

(2) Implementing directives, instructions, regulations, memorandums, and related issuances shall be kept to the minimum.

7. Records Management

a. Records created as a result of this instruction, regardless of format or media, must be maintained and dispositioned according to the records disposition schedules found on the Directives and Records Management Division (DRMD) portal page:
<https://portal.secnav.navy.mil/orgs/DUSNM/DONAA/DRM/SitePages/Home.aspx>.

b. For questions concerning the management of records related to this instruction or the records disposition schedules, please contact your local Records Manager or the DRMD program office.

8. Reports and Forms

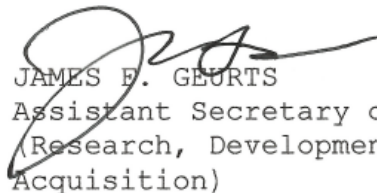
a. Reports. The following reports listed in enclosure (1) have been assigned report symbols and approved per SECNAV Manual 5214.1:

- (1) Selected Acquisition Report, DD-AT&L (Q&A) 823;
- (2) Unit Cost Report, DD-AT&L (Q&R) 1591;
- (3) Registration of Mission-Critical and Mission-Essential Information Systems, DD-C3I (AR) 2096; and
- (4) Defense Acquisition Executive Summary, DD-AT&L (Q) 1429. Data will be electronically provided monthly from the ASN (RD&A) Information System (RD&AIS) to the Under Secretary of Defense for Acquisition and Sustainment (USD (A&S)) Defense Acquisition Management Information Retrieval (DAMIR) and Service Oriented Architecture (SOA) systems.

b. Forms

(1) Standard Form (SF) 298, Report Documentation Page, is available on the DoD Forms Management Program Website at <http://www.dtic.mil/whs/directives/forms/sf-forms.htm>.

(2) DD Form 1586, Contract Funds Status Report, is available on the DoD Forms Management Program Website at <http://www.dtic.mil/whs/directives/forms/dd/ddforms1500-1999.htm>.


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Distribution:
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REFERENCES

- (a) DoD Directive 5000.01 of 12 May 2003
- (b) DoD Instruction 5000.02 of 10 August 2017
- (c) CJCS Instruction 5123.01H of 31 August 2018
- (d) 10 U.S.C. §2546a
- (e) 10 U.S.C. §2547
- (f) 32 CFR 700
- (g) 10 U.S.C. §2546
- (h) SECNAVINST 5430.7R
- (i) SECNAVINST 5400.15C
- (j) 10 U.S.C. §2222
- (k) DoD Instruction 5000.75 of 2 February 2017
- (l) DoD Instruction 5000.74 of 5 January 2016
- (m) 10 U.S.C. §2302
- (n) MIL-STD-882E of 11 May 2012
- (o) MIL-STD-464A of 19 December 2002
- (p) DoD Directive 2060.01 of 9 January 2001
- (q) SECNAVINST 5710.23D
- (r) Section 124 of Public Law 110-181
- (s) ASN (RD&A) memorandum, Energy Evaluation Factors in the Acquisition Process of 20 June 2011
- (t) DoD Instruction 8500.01 of 14 March 2014
- (u) DoD Instruction 8510.01 of 12 March 2014
- (v) SECNAVINST 5239.3C
- (w) SECNAVINST 4105.1D
- (x) SECNAVINST 5200.42
- (y) SECNAVINST 4440.33A
- (z) 10 U.S.C. §2399
- (aa) DoD Directive 1322.18 of 13 January 2009
- (ab) DoD Instruction 5000.67 of 31 August 2018
- (ac) SECNAVINST 5223.2A
- (ad) Defense Acquisition University, Glossary of Defense Acquisition Acronyms and Terms
- (ae) DoD Directive 5105.84 of 11 May 2012
- (af) SECNAVINST 5420.196A
- (ag) DODM 5000.04-M-1, Cost and Software Data Reporting (CSDR) Manual of 4 November 2011
- (ah) DoD Directive 5000.71 of 24 August 2012
- (ai) MCO 3900.17
- (aj) SECNAVINST 5090.8B
- (ak) DCMO Memo, Guidance on Department of Defense Implementation of Section 2430(d) of Title 10, United States Code of 18 December 2017

- (al) 10 U.S.C. §2446a-2446c
- (am) SECNAVINST 4140.2
- (an) ASN (RD&A) Guidebook for Acquisition of Naval Software Intensive Systems, Version 1.0 of September 2008
- (ao) DoD Manual 4140.01 Supply Chain Material Management Procedures of 06 March 2019
- (ap) Section 803 of Public Law 113-66
- (aq) E.O. 12114
- (ar) Public Law 91-190 National Environmental Policy Act (NEPA)
- (as) SECNAVINST 5100.10K
- (at) OPNAVINST 5100.23G
- (au) MCO 6260.3A
- (av) Section 838 of Public Law 115-91
- (aw) OPNAVINST 8020.14A
- (ax) MCO 8020.14
- (ay) DoD Instruction 5000.69 of 9 November 2011
- (az) NAVSEAINST 9078.2
- (ba) DoD Instruction 8320.04 of 3 September 2015
- (bb) DoD Instruction 4650.01 of 9 January 2009
- (bc) DoD Directive 3222.3 DoD Electromagnetic Environmental Effects Program
- (bd) ASN (RD&A) memo, Life-Cycle Sustainment Plan Outline Version 2.0 of 23 February 2017
- (be) 10 U.S.C. §2337
- (bf) 10 U.S.C. §2437
- (bg) Section 832 of Public Law 112-81
- (bh) OPNAVINST 1000.16L
- (bi) MCO 5311.1E
- (bj) DoD Instruction 5000.64 of 27 April 2017
- (bk) SECNAVINST 4855.20A
- (bl) 10 U.S.C. §2464
- (bm) 40 U.S.C. §11103
- (bn) 44 U.S.C. §3541
- (bo) Manual for the Operation of the Joint Capabilities Integration and Development System of 31 August 2018
- (bp) 10 U.S.C. §2366
- (bq) USD (AT&L) memo, Key Leadership Positions and Qualification Criteria of 08 November 2013
- (br) 10 U.S.C. §2441
- (bs) 40 U.S.C. §11101
- (bt) 10 U.S.C. §2448a
- (bu) SECNAVINST 5000.42
- (bv) Public Law 91-596 Occupation Safety and Health Act (OSHA) of 1970

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- (bw) 33 U.S.C. §1905-1915 Act to Prevent Pollution from Ships
(APPS)
- (bx) 42 U.S.C. §7401
- (by) 33 U.S.C. §1251-1387
- (bz) 16 U.S.C. §1531
- (ca) 16 U.S.C. Chapter 31
- (cb) OPNAVINST 11010.20
- (cc) MCO P11000.5
- (cd) SECNAVINST 11011.47
- (ce) DoD Directive 4270.5 of 12 February 2005
- (cf) Section 802 of Public Law 108-136
- (cg) 10 U.S.C. §2319
- (ch) DFARS 209.270
- (ci) Joint Aeronautical Logistics Commanders, Aviation Critical
Safety Item Management Handbook, of 16 March 2011

RESPONSIBILITIES

1. Purpose. This enclosure supplements paragraph 4 of reference (b) with DON specific guidance.

2. Acquisition and Acquisition-Related Responsibilities

a. For Major Defense Acquisition Programs (MDAPs) that the Navy will field, as required by reference (d), the ASN (RD&A) and the CNO will be responsible for balancing resources against priorities and ensuring appropriate trade-offs are made among cost, schedule, technical feasibility, and performance on a continuing basis throughout the program's life-cycle.

b. For MDAPs that the Marine Corps will field, as required by reference (d), the ASN (RD&A) and the CMC will be responsible for balancing resources against priorities and ensuring appropriate trade-offs are made among cost, schedule, technical feasibility, and performance on a continuing basis throughout the program's life-cycle.

c. For MDAPs, per reference (e):

(1) Prior to entry into the Material Solution Analysis Phase, the MDA must ensure that the Service Chief (the CNO for MDAPs the Navy will field, the CMC for MDAPs the Marine Corps will field) concurs with the need for a material solution as identified in the Material Development Decision Review.

(2) As part of the Written Determination required for Milestone A approval, the MDA must ensure that the Service Chief concurs with the cost, schedule, technical feasibility, and performance trade-offs that have been made.

(3) As part of the Certification and Determination required for Milestone B approval, the MDA for the MDAP must ensure that the Service Chief concurs that appropriate trade-offs among cost, schedule, technical feasibility, and performance objectives have been made to ensure that the program is affordable when considering the per unit cost and total life-cycle cost.

(4) Prior to granting Milestone C approval, the MDA must ensure that the Service Chief concurs that the requirements in

the program capability document are necessary and realistic in relation to program cost and fielding targets.

d. For all DON acquisition programs, as required by reference (e), the CNO or CMC will assist the ASN (RD&A) in the performance of these acquisition-related functions:

(1) Development of requirements for equipping the Navy and Marine Corps (subject, where appropriate, to validation by the Joint Requirements Oversight Council (JROC));

(2) Decisions regarding the balancing of resources and priorities, and associated trade-offs among cost, schedule, technical feasibility, and performance on MDAPs;

(3) Coordination of measures to control requirements creep in the defense acquisition system;

(4) Recommendation of trade-offs among life-cycle cost, schedule, and performance objectives, and procurement quantity objectives, to ensure acquisition programs deliver best value in meeting the approved military requirements;

(5) Termination of development or procurement programs for which life-cycle cost, schedule, and performance expectations are no longer consistent with approved military requirements and levels of priority, or which no longer have approved military requirements;

(6) Development and management of career paths in acquisition for military personnel;

(7) Assignment and training of contracting officer representatives when such representatives are required to be members of the armed forces because of the nature of the contract concerned.

e. Paragraph 700.405(c) of reference (f) assigns responsibility to the CNO for the development of military requirements and for the Test and Evaluation (T&E) of military capabilities for the Navy. Paragraph 700.505(b) of reference (f) assigns responsibility to the CMC for the development of military requirements and for the T&E of military capabilities for the Marine Corps. Hence, the CNO and the CMC will be

responsible for the management and operation of the JCIDS and for the T&E of acquisition programs for the Navy and the Marine Corps, respectively.

f. Paragraph 700.311(a)(8) of reference (f) assigns responsibility to the ASN (RD&A) for all aspects of research, development and acquisition within DON, except for the development of military requirements and the T&E of military capabilities.

g. The ASN (RD&A) will serve as the Service Acquisition Executive (SAE) and will be responsible for the management of the DAS within the DON pursuant to reference (g). The ASN (RD&A) will exercise control over the DON's implementation of the DAS and ensure it operates in an efficient, cost-effective, and customer-oriented manner.

h. Reference (h) assigns Department-wide responsibilities for areas essential to the efficient administration of the DON to and among the civilian executive assistants and staff assistants. It authorizes the civilian executive assistants and staff assistants to establish functional requirements and policies for their assigned areas of responsibility. The execution of DON acquisition programs may be affected by the functional requirements and policies of the DON Chief Management Officer (CMO) and DON Chief Information Officer (DON CIO) with the Assistant Secretaries named: ASN (RD&A); Assistant Secretary of the Navy (Energy, Installations, and Environment) (ASN (EI&E)); Assistant Secretary of the Navy (Manpower and Reserve Affairs); and, Assistant Secretary of the Navy (Financial Management and Comptroller) (ASN (FM&C)). ASN (RD&A) will ensure that DON acquisition programs comply with functional requirements and policies established by these assistants, DON CIO, and the CMO.

i. Reference (i) describes the responsibilities of, and relationships among, ASN (RD&A), CNO, CMC, Systems Command (SYSCOM) commanders, Program Executive Officers (PEOs), and Direct Reporting Program Managers (DRPMs) for research, development, acquisition and associated life-cycle management and logistics accountability. ASN (RD&A) will ensure that DON acquisition programs comply with the policies and procedures of this instruction.

ACQUISITION CATEGORIES AND COMPLIANCE REQUIREMENTS

1. Purpose. This enclosure supplements reference (b) with DON-specific guidance for Acquisition Category (ACAT) programs and Abbreviated Acquisition Programs (AAPs), and associated compliance requirements.

2. General. Enclosure 1 of reference (b) provides: ACAT designation criteria for ACAT I, IA, II, and III programs; policies for Milestone Decision Authority (MDA) assignments; information requirements associated with those acquisition categories in tabular format; and, procedures for Acquisition Program Baselines (APB) and program reporting.

3. Acquisition Categories. For all DON acquisition programs, ACAT I-IV and AAPs, Table E3T1 of this enclosure supplements Table 1 of reference (b). Any increases to dollar thresholds in future issuances of reference (b) shall be deemed incorporated in this instruction.

4. Program Designation

a. All DON acquisition programs will be assigned an ACAT or AAP designation based on the criteria in Table E3T1 and the following procedures:

(1) The cognizant PEO, SYSCOM Commander, DRPM, or the program sponsor is responsible for preparing an ACAT or AAP designation request based on the cost estimates associated with an approved requirements document.

(a) An ACAT designation request will be prepared after the approval of a capabilities document that validates the need for a new, improved, or continuing materiel solution.

(b) An AAP designation request will be prepared after the program sponsor obtains AAP requirements approval in accordance with paragraph 9a below.

(2) When the cost estimate for a proposed program breaches any MDAP dollar threshold, the cognizant PEO (or equivalent) will submit an MDAP designation request to ASN (RD&A). After ASN (RD&A) concurrence, ASN (RD&A) will designate the program as ACAT IB (or pre-ACAT IB, as appropriate). ASN

(RD&A) will transmit to USD (A&S) information as required by reference (ak) or any superseding issuance, to inform whether a basis for a subsequent ACAT ID designation exists.

(3) When the cost estimate for a potential program is consistent with an ACAT III-IV or AAP designation, the program sponsor will submit an ACAT or AAP designation request to the cognizant PEO, DRPM, or SYSCOM Commander, who will approve an appropriate program designation and provide notification to ASN (RD&A).

(a) Prior to the approval of an ACAT IVM or AAP designation, the Operational Test Agency (OTA) (COMOPTEVFOR or Director, MCOTEA) will concur in writing that Operational Test and Evaluation (OT&E) is not required.

(b) If there is no cognizant PEO, DRPM, or SYSCOM Commander, the program sponsor will submit an ACAT III-IV or AAP designation request to ASN (RD&A), who will approve a program designation and assign the potential program to a PEO, DRPM, or SYSCOM Commander.

(4) In addition to procedures described in the preceding paragraphs, USD (A&S) and ASN (RD&A) have discretion to assign Special Interest designations, as set forth in Table 1 of reference (b). ASN (RD&A) may assign Special Interest MDAP (ACAT IB) or Major Automated Information System (MAIS) (ACAT IAC) designations to programs not expected to exceed any MDAP or MAIS dollar threshold.

(5) ASN (RD&A) may assign Special Interest ACAT II designations to weapon system programs not expected to exceed any Major Systems dollar threshold.

b. The DON official who approves an ACAT I-IV or AAP designation will document the program designation in an Acquisition Decision Memorandum (ADM). Approval of an ACAT I-IV or AAP program designation does not mean the program has entered the reference (b) acquisition system.

5. Decision Authority

a. Decision Authority (DA) assignments for DON acquisition programs will be consistent with Table E3T1. The official who

approves the ACAT I-IV or AAP designation will make the DA assignment. The DA for an ACAT I-IV program will also be referred to as the MDA throughout this instruction.

6. Program Initiation. A Materiel Development Decision (MDD) (or the functional equivalent), is a prerequisite to any ACAT I-IV program's entry into the reference (b) acquisition system. An approved Resources and Requirements Review Board (R3B), Marine Requirements Oversight Council (MROC), or Naval Capabilities Board (NCB) memorandum may authorize initiating an AAP or non-deployment program.

a. The MDA may authorize any ACAT I-IV program's entry into the reference (b) acquisition system at any point consistent with its phase-specific entrance criteria and statutory requirements.

b. For DON acquisition programs subject to the Two Pass - Seven Gate Governance procedures in enclosure (9), the MDA may not approve an MDD (or the functional equivalent), without concurrence from the CNO or CMC, as appropriate.

7. Program Redesignation

a. The Program Manager will prepare an ACAT Designation Change Request when an anticipated change in an ACAT program or AAP's estimated costs will result in that program meeting the criteria in Table E3T1 for a higher or lower ACAT designation.

(1) The redesignation request will identify the reasons supporting a redesignation to a higher or lower category.

(2) The Program Manager will consult the ASN (RD&A) staff to determine the proper routing for the redesignation request. For lower ACAT programs that have not exceeded MDAP thresholds, the Program Manager will submit the redesignation request to the appropriate MDA for the resulting ACAT.

(3) ASN (RD&A) will notify the USD (A&S) in writing when an anticipated cost increase will result in a program with a lower ACAT designation meeting the Table E3T1 criteria for an MDAP designation, and will provide the requisite information to USD (A&S) (see paragraph 4.a.2 of this

enclosure). ASN (RD&A) will assign an MDAP designation to that program, as appropriate.

b. The Program Manager will notify ASN (RD&A) in writing when the anticipated costs for a lower ACAT program increases to within 10 percent of breaching any dollar threshold for an MDAP designation. After ASN (RD&A) concurrence, ASN (RD&A) will forward this notice to USD (A&S).

c. The redesignation decision will be documented in an ADM.

Table E3T1 Designation Criteria and Decision Authority for ACAT I-IV and AAP Programs

ACAT	Reason for Program Designation	Decision Authority
ACAT I	<ul style="list-style-type: none"> • Statutory MDAP: <ul style="list-style-type: none"> ○ A DON acquisition program that meets these five criteria: <ul style="list-style-type: none"> ▪ The program is not a highly sensitive classified program (as determined by the Secretary of Defense); ▪ The program is not for the acquisition of an automated information system (either a product or a service); ▪ The program will not be carried out using the middle-tier acquisition pathways for Rapid Prototyping or Rapid Fielding; ▪ The program will not be carried out using the acquisition procedures for DBS¹; and ▪ The dollar value for all increments of the program are estimated to require an eventual total expenditure for research, development, test and evaluation (RDT&E) of more than \$480 million in Fiscal Year (FY) 2014 constant dollars or, for procurement, of more than \$2.79 billion in FY 2014 constant dollars ○ Or, a DoD acquisition program that the USD (A&S) or the ASN (RD&A) designates a statutory MDAP as a discretionary act. 	<p>ACAT ID: USD (A&S) or as delegated</p> <p>ACAT IC: ASN (RD&A) or as delegated</p> <p>ACAT IB: ASN (RD&A) or as delegated</p>

ACAT IA	<ul style="list-style-type: none"> • MAIS: An Automated Information System² (AIS) (a product or a service³) that is: <ul style="list-style-type: none"> ◦ Estimated to exceed: <ul style="list-style-type: none"> ▪ \$40 million in FY 2014 constant dollars for all expenditures in any single fiscal year, for all increments, sprints, etc., regardless of the appropriation or fund source, directly related to the AIS definition, design, development, deployment, operation, and sustainment; or ▪ \$165 million in FY 2014 constant dollars for all expenditures, for all increments, sprints, etc., regardless of the appropriation or fund source, directly related to the AIS definition, design, development, and deployment, and incurred from the beginning of the Materiel Solution Analysis Phase through deployment at all sites; or ▪ \$520 million in FY 2014 constant dollars for all expenditures, for all increments, sprints, etc., regardless of the appropriation or fund source, directly related to the AIS definition, design, development, deployment, operations and maintenance, and incurred from the beginning of the Materiel Solution Analysis Phase through sustainment for the estimated useful life of the system. ◦ OR designated as a MAIS by the USD (A&S) or the ASN (RD&A) under the authority of reference (b) due to Special Interest⁴ 	<p>ACAT IAM: USD (A&S) or as delegated</p> <p>ACAT IAC: ASN (RD&A) or as delegated</p>
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Table E3T1 Designation Criteria and Decision Authority for
ACAT I-IV and AAP Programs (continued)

ACAT	Reason for Program Designation	Decision Authority
ACAT II	<p>Does not meet criteria for ACAT I</p> <p>Meets the definition of Major System⁵:</p> <ul style="list-style-type: none"> • Dollar value for all increments of the program estimated to require: <ul style="list-style-type: none"> ◦ RDT&E total expenditures > \$185 Million in FY 2014 constant dollars; or ◦ Procurement total expenditures > \$835 Million in FY 2014 constant dollars • Or, ASN (RD&A) designation as a Major System • Does not apply to AIS programs. AIS programs that do not meet the criteria for ACAT IA shall be designated ACAT III or lower, as appropriate. 	Individual designated by ASN (RD&A)

ACAT III	<p>Does not meet criteria for ACAT I or II.</p> <p>The program will acquire new or improved capability in response to a validated capabilities document.</p> <ul style="list-style-type: none"> • Dollar value for all increments of the program estimated to require: <ul style="list-style-type: none"> ○ RDT&E total expenditures \geq \$26 Million but \leq \$185 Million in FY 2014 constant dollars; or ○ Procurement total expenditures \geq \$64 Million but \leq \$835 Million in FY 2014 constant dollars 	Individual designated by the cognizant PEO, DRPM, or SYSCOM Commander.
ACAT IVT	<p>Does not meet criteria for ACAT I, II, or III.</p> <p>The program will acquire continuing capability for a deployed system in response to a validated capabilities document.</p> <p>Does require operational test and evaluation.</p> <p>Dollar value for all increments of the program estimated to require: RDT&E total expenditures \geq \$26 Million but \leq \$185 Million in FY 2014 constant dollars; or</p> <ul style="list-style-type: none"> ○ Procurement total expenditures \geq \$64 Million but \leq \$835 Million in FY 2014 constant dollars 	Individual designated by the cognizant PEO, DRPM, or SYSCOM Commander.
ACAT IVM	<p>Does not meet criteria for ACAT I, II, or III.</p> <p>The program will acquire continuing capability for a deployed system in response to a validated capabilities document.</p> <p>Does not require operational test and evaluation.⁶</p> <p>Dollar value for all increments of the program estimated to require: RDT&E total expenditures \geq \$26 Million but \leq \$185 Million in FY 2014 constant dollars; or</p> <ul style="list-style-type: none"> ○ Procurement total expenditures \geq \$64 Million but \leq \$835 Million in FY 2014 constant dollars 	Individual designated by the cognizant PEO, DRPM, or SYSCOM Commander.

Table E3T1 Designation Criteria and Decision Authority for
ACAT I-IV and AAP Programs (continued)

ACAT	Reason for Program Designation	Decision Authority
AAP	<p>Does not breach ACAT IV dollar thresholds</p> <p>Does not require operational test and evaluation. ⁶</p> <ul style="list-style-type: none"> • Dollar value for all increments of the program estimated to require: <ul style="list-style-type: none"> ○ RDT&E total expenditures < \$26 Million in FY 2014 constant dollars; and ○ Procurement total expenditures < \$64 Million in FY 2014 constant dollars 	<p>Individual designated by the cognizant PEO, DRPM, or SYSCOM Commander. (This designation authority may be delegated)</p>
<p>1. The definition, dollar value, and decision authorities for DBS are as published in Reference (j) and (k). DBS programs will follow the policy, procedures, and requirements in reference (k).</p> <p>2. AIS: A system of computer hardware, computer software, data or telecommunications that performs functions such as collecting, processing, storing, transmitting, and displaying information. Excluded are computer resources, both hardware and software, that are:</p> <ul style="list-style-type: none"> - Embedded as an integral part of a weapon or weapon system; - Used for highly sensitive classified programs (as determined by the Secretary of Defense); or - Determined by the USD (A&S) or designee to be better overseen as a non-AIS program (e.g., a program with a low ratio of RDT&E funding to total program acquisition costs or that requires significant hardware development). <p>3. Programs to acquire commercial-off-the-shelf AIS requirements as a supply or service, and requiring modification, development or integration (other than what is customarily available in the commercial marketplace) in order to deliver the capability, will follow the procedures specified in this instruction. All other acquisitions of services will comply with reference (l).</p> <p>4. A Special Interest designation is typically based on one or more of the following factors: technological complexity; congressional interest; a large commitment of resources; or the program is critical to the achievement of a capability or set of capabilities, part of a system of systems, or a joint program.</p> <p>5. The statutory definition of "major system" is codified at reference (m).</p> <p>6. The Operational Test Agency (OTA) (COMOPTEVFOR or Director, MCOTEA) will concur in writing that the program does not require operational test and evaluation.</p>		

8. ACAT Program Compliance Requirements

a. Program managers for ACAT I-IV programs will ensure their assigned programs comply with applicable statutory and regulatory requirements summarized in Tables 2-10 in reference (b) and Table E3T2.

b. ASN (RD&A) will ensure that CNO or CMC, as appropriate, concurs with the cost, schedule, technical feasibility, and performance trade-offs made with regard to an MDAP.

Table E3T2 Information Requirements for ACAT I-IV programs

Deliverables for Acquisition Categories IB, C or D, IAM or AC, II, III, and IV	MDD				MS A				RFP				MS B				MS C				FRP			
	I	IA	II	III/IV	I	IA	II	III/IV	I	IA	II	III/IV	I	IA	II	III/IV	I	IA	II	III/IV	I	IA	II	III/IV
Acquisition Decision Memorandum (ADM)	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
2366a Written Determination					S																			
2366b Certification and Determination																								
Acquisition Program Baseline (APB)									R	R	R	R	S	R	R	R	S	R	R	R	S	R	R	R
Acquisition Strategy (includes several statutory content requirements)					S	S	S	R	S	S	S	R	S	S	S	R	S	S	S	R	S	S	S	R
Affordability Analysis	R	R	R		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Analysis of Alternatives (AoA)					S	S	S	S*	R	S	R	S*					R	S	R	S*				
Analysis or Alternatives (AoA) Study Guidance	S	R	R	R					S	R	R	R	S	R	R	R	S	R	R	R				
Bandwidth Requirements Review (BRR)									S	R	R	R	S	R	R	R	S	R	R	R				
Capability Development Document (CDD)					R	R	R	R	R	R	R	R					R	R	R	R				
Capability Production Document (CPD)																	R	R	R	R				
Clinger-Cohen Act (CCA) Compliance					S	S	S	S					S	S	S	S	S	S	S	S	S	S	S	S
Concept of Operations (CONOPS)					R	R	R	R					R	R	R	R	R	R	R	R				
Core Logistics Determination/Core Logistics and Sustaining Workloads Est.					S	S	S	S	R		R	R	S	S	S	S	S'	S'	S'					
Cost Analysis Requirements Description (CARD)					R	R			R	R			R	R			R	R			R	R		
Cost, Fielding, and Performance Goals					S								S'				S'							
CYBERSAFE Certification																	R	R	R	R				
Cybersecurity Strategy					S	S	S	S	S	S			S	S	S	S	S	S	S	S	S	S	S	S
Development RFP Cost Estimate									R	R														
Developmental Test Sufficiency Assessment (DTSA)													S				S							
DoD Component Cost Estimate					R	R	R	R					R	R	R	R	R	R	R	R	R	R	R	R
DoD Component Cost Position					R	R							R	R			R	R			R			
DoD Component Live Fire Test and Evaluation (LFT&E) Report																					R''		R''	R''
DOT&E Report on Initial Test and Evaluation (IOT&E)																					S''	S''	S''	S''
Economic Analysis					S				S				S				S						S	
Exit Criteria					R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R				
Frequency Allocation Application (DD Form 1494)					S	S	S	S					S	S	S	S	S	S	S	S				
Full Funding Certification Memorandum					R	R							R	R			R	R			R	R		
Independent Cost Estimate (ICE)					S	R							S	R			S	R			S	R		
Independent Logistics Assessment																	S				S			
Independent Technical Risk Assessment (ITRA)					S								S				S				S			
Information Support Plan (ISP)									R	R	R	R					R	R	R	R				
Information Technology and National Security Interoperability Certification																					R	R	R	R
Initial Capabilities document (ICD)	R	R	R	R																				
Item Unique Identification (IUID) Implementation Plan					R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R				
Life-Cycle Mission Data Plan (LMDP)					R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Life-Cycle Sustainment Plan (LCSP)					R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Live-Fire Test and Evaluation Report																					S''	S''	S''	S''
Low-Rate Initial Production (LRIP) Quantity									R	R	R	S	S	R										
Operational Test Agency (OTA) Report on OT&E Results																					R	R	R	R
Operational Test Plan--S'' before start of OT&E (R for non-DOT&E oversight)																								
PESHE and NEPA/E.O. 12114 Compliance Schedule													S	S	S	S	S	S	S	S	S	S	S	S
Preservation and Storage of Unique Tooling Plan																	S							
Program Protection Plan					R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Replaced System Sustainment Plan					S								S											
Should-Cost Target					R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Spectrum Supportability Risk Assessment/Determination					R	R	R	R					R	R	R	R	R	R	R	R				
Systems Engineering Plan (SEP)					R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Technology Readiness Assessment (TRA)									R				R				R							
Technology Targeting Risk Assessment					R	R	R	R																
Test and Evaluation Master Plan (TEMP)					R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Validation On-line Life-cycle Threat (VOLT)	R	R	R	R	R	R	R	R	R	R	R	R					R	R	R	R	R	R	R	R
Waveform Assessment Application													R	R	R	R	R	R	R	R	R	R	R	R

Key: Regulatory (R), Statutory (S), Statutory for AIS only (S*), Statutory/Regulatory if no preceding MS (S'/R'), Statutory/Regulatory for DOT&E oversight list programs listed for applicable purpose (S''/R'')

Acronyms:

MDD: Materiel Development Decision MS: Milestone RFP: Development Request for Proposal Release FRP: Full Rate Production

Note: This table is intended as a quick-look reference supplementing DoDI 5000.02, Enclosure 1, Table 2. Program managers and legal counsel should consult current statutes, DoDI 5000.02, and DoD guidance for specific applicability, timing, content, and process requirements.

9. AAP Compliance Requirements

a. AAPs will not be initiated without appropriate phase specific funding from the sponsor and a capabilities document that is validated at an appropriate level (e.g., R3B, NCB, or MROC memorandum). AAPs will comply with Planning, Programming, Budgeting & Execution (PPBE) processes, configuration management requirements, and applicable reporting procedures.

b. PEOs, SYSCOM commanders, and DRPMs will be responsible for developing policies for managing AAPs within their respective organizations. Such policies will include procedures for DA assignments, conducting program reviews, and reporting and tracking program status. The DA will document all major program decisions.

c. As a minimum, program managers for AAPs will prepare the following program documents: cost analysis requirements description (CARD); program life-cycle cost estimate; tailored Manpower, Personnel, and Training analysis; tailored acquisition strategy; test and evaluation plan; tailored system safety program to identify Environment, Safety, and Occupational Health (ESOH) hazards, per reference (n); and, if applicable, tailored analysis of the system's ability to operate in the intended electromagnetic environment per reference (o).

d. Program managers for AAPs that acquire IT will comply with any applicable cybersecurity, IT registration, and Clinger-Cohen Act requirements.

10. Mandatory Legal Review of Potential Weapons & Weapon Systems

a. Requirement. All potential weapons and weapon systems developed, acquired, or procured by the DON will be reviewed by the Judge Advocate General (JAG) of the Navy to ensure that the intended use of such weapons or weapon systems is consistent with domestic and international law. Modifications of weapons and weapon systems must receive a new legal review. Paragraph 10e below contains definitions specific to this section and should be read carefully.

b. Scope. Legal consultation and review as described below are required whether the potential weapon or weapon system is

developed, acquired, or procured through the formal acquisition process or in any other way, including by purchase of a commercial-off-the-shelf system, by a rapid or accelerated acquisition process, or by modification of an existing system within the Department.

c. Other Service Systems. Where a weapon or weapon system was not developed, acquired, or procured by the DON but will otherwise be fielded or employed by the DON, those who field such weapons or weapon systems will ensure a review has been completed by the appropriate authority in accordance with reference (a). The Office of the JAG, Code 10 (National Security Law) can be contacted to help determine the appropriate review authority.

d. Responsibility and Timing. Program Managers, or others who develop, acquire, or procure weapons or weapon systems, will ensure that all potential weapons or weapon systems are reviewed in accordance with this section. Legal review is required regardless of whether the intended effect of the weapon or weapon system would be caused to the target or to collateral persons or objects.

(1) Legal Consultation. Program Managers, or others who develop, acquire, or procure weapons or weapon systems, will notify and consult with the Office of the JAG, Code 10 (National Security Law) concerning prospective weapons or weapon systems prior to the award of the Engineering and Manufacturing Development (EMD) contract, or any other contract for the development, acquisition, procurement, or purchase of a system.

(2) Formal Legal Review. For weapons or weapon systems acquired under DON acquisition programs, the formal legal review will take place before award of the initial production contract. In all other cases, the formal legal review will occur before fielding or employment.

e. Definitions

(1) Weapon or Weapon System. As referred to in this section, weapons or weapon systems are defined as all arms, munitions, materiel, instruments, mechanisms, devices, and those components required for their operation, that are intended to

have an effect of injuring, damaging, destroying, or disabling personnel or property, to include non-lethal weapons.

(2) Modifications. As referred to in this section, modifications are defined as any change, addition, enhancement, or improvement to a weapon or weapon system which adds, changes, or enhances effects of injuring, damaging, destroying, or disabling personnel or property. This includes effects to either the target or to collateral persons or objects.

(3) Platforms. As referred to in this section, weapons do not include launch or delivery platforms, including, but not limited to, ships or aircraft, but rather the weapons or weapon systems contained on those platforms.

f. Request. To provide the information required to conduct the legal consultation or review, the command requesting the initiation of the legal review will prepare and forward to the Office of the JAG, Code 10 (National Security Law) a memorandum containing the following in plain, commonly understood language (a template will be provided by Code 10):

(1) A complete description of the weapon or weapon system, to include: a list of all parts, how the weapon or weapon system functions, what the weapon or weapon system does, the manning level required for use, and whether the weapon or weapon system is self-propelled, mounted or attached to a platform, or individually portable.

(2) The concept of employment planned for use of the weapon or weapon system. This should include detailed information from the final approved concept of operation or method of employment that describes exactly how the system will be used and in what contexts, where appropriate.

(3) Information regarding the ability of the weapon or weapon system to be directed at a specific target, including a comparison of the accuracy of the new weapon or weapon system to similar weapons or weapon systems that have already been acquired or developed and have received a legal review.

(4) Information regarding the impact of the weapon or weapon system on the human body and on material objects,

including both the intended target and any collateral persons or objects.

(5) Any additional information or testing data and pertinent conclusions arising from these tests.

g. Legal Consultation and Review Requirements. No weapon or weapon system may be developed, acquired, procured, fielded, or employed by the DON without a legal consultation and subsequent formal review under this section.

(1) The following Law of Armed Conflict (LOAC) issues must be addressed when any weapon or weapon system is being reviewed:

(a) Whether the system is calculated to cause superfluous injury (i.e., it invariably causes unnecessary suffering or harm disproportionate to the military advantage reasonably expected to be gained from its use);

(b) Whether the system may be controlled in such a manner that it is capable of being directed against a lawful target (i.e., it is not inherently indiscriminate); and

(c) Whether there is a rule of law or treaty specifically prohibiting the use of the system.

(2) The review will also consider and specify any legal restrictions on the weapon or weapon system's use. If any specific restrictions apply, the intended concept of employment of the weapon or weapon system will be reviewed for consistency with those restrictions. Where appropriate, the review will advise on other measures that would assist in ensuring compliance with LOAC obligations during employment of the weapon or weapon system.

h. Record Keeping. The JAG will maintain a permanent file of all opinions issued under this instruction, other than reviews of weapons or weapon systems which are within Special Access Programs or Compartmented Access Programs. These reviews will be held by the office responsible. See paragraph E1.1.15 of reference (a) and reference (p) for implementation requirements for DON acquisition programs.

11. Review for Compliance with Arms Control Agreements

a. All systems developed or acquired by DON will be reviewed by the Director, Strategic Systems Programs (DIRSSP) via the Naval Treaty Implementation Program Office (NT00), with the advice of DON Office of General Counsel (OGC), to certify compliance with arms control agreements in accordance with reference (q).

b. Program Managers will ensure that as reference (q) requires, all DON acquisition program activities which may be affected by arms control agreements must be reviewed for arms control compliance before such activities are undertaken.

c. For purposes of this instruction, the terms "activities" and "arms control agreements" used in the preceding paragraph are defined in paragraphs 4 and 5.D, respectively, of reference (q).

12. First Ship in Shipbuilding Program Report. In accordance with reference (r), the First Ship in Shipbuilding Program Report is required to be submitted by SECNAV, or designee, to the congressional defense committees prior to the approval of the start of construction of the first ship for any major shipbuilding program.

13. ASN (RD&A) Reporting

a. The ASN (RD&A) Information System (RDAIS) will be the authoritative source for programmatic information for all DON managed ACAT I-IV programs and AAPs in an "active" status.

(1) Upon approval of the initial ACAT I-IV or AAP designation, a program enters into an active status and will be subject to RDAIS reporting requirements.

(2) A program remains active for reporting unless it is cancelled or is approved for entry into inactive reporting status in accordance with enclosure 3, paragraph 14.

(3) The Program Manager may request approval for the program's entry into an inactive reporting status after it exceeds the 90 percent threshold, including all blocks or

increments, for either production quantities delivered or total program costs expended.

(4) Upon entry into an inactive reporting status, the program will no longer be subject to RDAIS reporting requirements.

(5) If a program is divided into blocks or increments, each active block or increment will report separately in RDAIS. Requesting inactive status for a block or increment will be in accordance with Enclosure 3 paragraph 14.

b. The Deputy Assistant Secretary of the Navy (Management and Budget) (DASN (M&B)) will be responsible for the management and operation of RDAIS. This responsibility includes maintaining the DON Active ACAT I-IV programs and AAPs listing.

c. To comply with USD (A&S) reporting requirements for ACAT I and IA programs, RDAIS data will be available to USD (A&S) staff via retrieval methods for presentation in the DAMIR system. RDAIS data also will be provided in response to inquiries by the Government Accountability Office and other audit agencies.

d. ASN (RD&A) and CNO or CMC, as appropriate, will certify in each Selected Acquisition Report (SAR) required for a MDAP that the program's requirements are stable and the program's funding is adequate to meet cost, schedule, and performance objectives. SARs will identify and report any increased program risk since the previous report.

e. PEOs, DRPMs, and SYSCOM Commanders will monitor the active ACAT I-IV programs and AAPs under their cognizance for compliance with RDAIS reporting requirements.

f. The Program Manager for any ACAT I-IV program or AAP will ensure that DASN (M&B) is notified in writing of:

(1) The ACAT or AAP designation (or redesignation) within 10 working days after its approval;

(2) The program's entry into the acquisition process within 10 working days after the DA authorizes it;

(3) The program's anticipated costs increasing to within 10 percent of the threshold for the next higher ACAT; or

(4) The program exceeding the 90 percent threshold for quantities delivered or program costs expended.

g. Program managers for active ACAT I-IV programs and AAPs will ensure their respective programs are compliant with RDAIS reporting requirements as determined by ASN (RD&A).

14. Non-Reporting Programs

a. After greater than 90 percent of the production quantities are delivered or greater than 90 percent of the total program costs are expended, the Program Manager may request that the program be removed from the DON Active ACAT I-IV programs and AAPs listing. DASN (M&B) will approve or deny the request after consultation with appropriate stakeholders. If the request is approved, the program will enter into an inactive status for reporting purposes.

b. Until canceled, all DON managed ACAT I-IV programs and AAPs in an inactive reporting status will continue to have assigned program managers. The Program Manager assigned will serve as the single point of accountability for the life-cycle management of the system which has been acquired under the program, until the disposal of the system at the end of its useful life.

c. The Program Manager for an inactive program will ensure that its execution remains within the approved APB thresholds. The Program Manager also will ensure that the program documents for an inactive program are updated as required by reference (b). For example, the Life Cycle Sustainment Plan (LCSP), including its sections addressing the acquisition strategy, cybersecurity strategy, and intellectual property strategy, for an inactive program is required to be updated when there are changes to the product support strategy, or every five years, whichever occurs first.

d. When additional quantities of a system, without new or improved capability, are required due to operational changes, and the system was previously acquired under an acquisition program that has become inactive for reporting, those additional

quantities will be procured under the program and the APB will be revised accordingly. If, based upon the revised APB, the program will have delivered 90 percent or less of the new total production quantity and will have expended 90 percent or less of the new total program costs, then the program will be restored to active reporting status.

e. New or improved capability for a system, regardless of whether additional quantities are procured, will not be acquired under an inactive program. The new or improved capability required will be managed as a separate program with its own approved ACAT or AAP designation.

15. Capability Modifications

a. "Capability modification" is defined for purposes of this instruction as a hardware or software change to the product configuration of a system made for the purpose of acquiring new or improved capability (e.g., engineering change proposals, pre-planned product improvements, upgrades, or technology enhancements) regardless of cost or test requirements. New or improved capability will be acquired only in response to a validated requirements document.

b. When a capability modification to any active ACAT I-IV program or AAP is expected to cause that program to breach an existing APB threshold, the DA may authorize the modification to be managed as a separate program with its own approved ACAT or AAP designation. The new modification program will leverage the program documents approved for the active program to the maximum extent practicable.

c. If the DA decides a capability modification will be managed under the active ACAT I-IV program or AAP for the system, the Program Manager will ensure that the APB and other program documents are revised, if needed, to cover the modification. The Program Manager will notify DASN (M&B) if the anticipated costs for the program, including the modification, increase to within 10 percent of the threshold for the next higher ACAT.

d. If managing a capability modification under an active ACAT I-IV program or APP causes an anticipated cost increase which results in the program meeting the criteria for a higher

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ACAT designation, the Program Manager will request a new ACAT designation for the program.

e. Capability modifications to legacy systems will analyze current energy performance and the feasibility of increasing energy efficiency of the system, as well as reductions in the energy resupply rate pursuant to reference (s).

SYSTEMS ENGINEERING

1. Purpose. This enclosure supplements reference (b) with Systems Engineering guidance for DON acquisition programs.
2. General. Per reference (a), DON acquisition programs shall be managed with the application of a systems engineering approach that optimizes total system performance and minimizes total ownership costs.
3. Open Systems Architecture. For all acquisition programs, the Program Manager shall follow Modular Open Systems Architecture (MOSA) principles, and develop and implement methods to digitally represent the system of interest, if applicable. ACAT I programs that receive Milestone A or B approval after January 1, 2019 shall be designed and developed, to the maximum extent practicable, with a MOSA that meets the requirements of reference (a). Program capability documents, analyses of alternatives, acquisition strategies, and requests for proposals for such programs shall address the considerations in reference (a).
4. Systems Engineering Plan. For all acquisition programs, the Program Manager shall prepare a Systems Engineering Plan (SEP), as required by reference (b). The SEP shall address design considerations related to Human Systems Integration (HSI), Facilities and Infrastructure, and Energy, Environmental, Safety, and Occupational Health (ESOH). For acquisition programs that include software, the SEP shall also address the following: software unique risks; inclusion of software in technical reviews; identification, tracking, and reporting of metrics for software technical performance, process, progress, and quality; software safety and security considerations; and software development resources.
5. Software. For all acquisition programs that include software, the Program Manager shall incorporate automated software vulnerability analysis tools throughout the life cycle and assure remediation of software vulnerabilities is addressed in the Program Protection Plan (PPP), test plans, and contract requirements.
 - a. For programs that include software development or modification, the Program Manager shall deliver capability

through a series of testable software builds and fieldable software increments, where feasible.

b. For programs acquiring a software intensive system, the Program Manager shall follow the software development guidance in reference (an).

6. Technical Reviews. For all acquisition programs, the Program Manager shall provide for independent System Engineering Technical Reviews (SETRs) tailored to fit the program. SETRs will be event-driven, and shall be led by a senior technical Government official who is independent from the program being reviewed. For programs acquiring a software intensive system, the Program Manager shall follow the SETR guidance in reference (an). In addition to systems, SETRs shall consider real property (such as shore facilities, infrastructure, built-in equipment, land, and land rights) requirements.

7. Modeling and Simulation. For all acquisition programs, the Program Manager shall identify and fund required modeling and simulation resources early in the acquisition process including those to address shore interface requirements.

8. Manufacturing and Production. For all acquisition programs, the Program Manager shall identify manufacturing and production considerations early in the acquisition process. Such considerations will include long-lead material, parts and material obsolescence, common and standard equipment, unique processes, unique identification (including radio frequency identification), tooling, and calibration. The Program Manager shall ensure that processes are designed to identify key product and process characteristics and that validated process controls are implemented prior to production.

a. For aviation programs, the Program Manager shall ensure that processes are implemented to comply with applicable requirements for the manufacture and production planning of critical safety items and associated critical and major characteristics and critical processes, as required by reference (am).

b. For acquisition programs with embedded microelectronics, the Program Manager shall implement a diminishing manufacturing sources and material shortages (DMSMS) plan to proactively

identify and eliminate any negative impacts from DMSMS throughout the program's life-cycle, as discussed in reference (ao) and (ap).

9. Quality. For all acquisition programs, the Program Manager shall ensure that quality assurance processes are implemented during the system's design, development, manufacturing, production, and sustainment. The Program Manager shall implement anti-counterfeiting strategies using a risk based approach which balances the risks of counterfeits with the impact to readiness and cost of the measures.

10. Reliability and Maintainability Engineering. For all acquisition programs, the Program Manager shall implement a comprehensive Government Reliability and Maintainability Engineering (R&ME) program to ensure reliability and maintainability specifications and engineering activities are included in all contracts, as required.

a. The Government R&ME program shall be conducted under the direction of the program's Chief Engineer (Program CHENG), Ship Design Manager (SDM), or Systems Integration Manager (SIM), as designated. Each SYSCOM shall designate an R&ME manager responsible for SYSCOM R&ME policy, standards, guidance and oversight of R&ME implementation. Each program shall designate an R&ME systems engineer under the purview of the Program CHENG, SDM or SIM.

b. Software only programs shall use Availability and Restore Time parameters, along with software development measures and maturity metrics, instead of reliability requirements or specifications as Reliability is not a software metric. Programs that are primarily software can be treated as software only programs, except contracts for the limited hardware components shall include R&ME activities and technical specifications, when appropriate.

11. Program Protection. For all acquisition programs, a PPP shall be prepared by the Program Manager in accordance with enclosure 3 of reference (b).

12. Environment, Safety, and Occupational Health. For all acquisition programs, the Program Manager shall comply with applicable ESOH statutory and regulatory requirements. DON

policy is for systems to comply fully with applicable Federal, State, and Local safety and environmental requirements and applicable DoD and DON ESOH policies. These include but are not limited to references (aq), (ar), and (bv) through (ca).

a. The Program Manager shall identify and track the impact of ESOH requirements on a program's life-cycle cost, schedule, and performance, and the ESOH impact of a program on the user and the operating environment.

b. For all acquisition programs, the Program Manager shall integrate ESOH risk management into the overall systems engineering process for all engineering activities throughout the system's life cycle, as required by reference (b). The Program Manager shall use the methodology in reference (n). Compliance with reference (n) is mandatory for all ACAT programs. Navy programs shall follow reference (aq).

c. The Program Manager shall document the ESOH planning and compliance-driven requirements and considerations in the SEP, results of the ESOH planning implementation in the Programmatic ESOH Evaluation (PESHE), and the compliance schedule required by reference (aq) and (ar) in the SEP.

d. The Program Manager will focus resources on the areas of greatest risk and greatest return on investment, as required by reference (as). These areas are program dependent but include noise, vibration, heat stress, ergonomics, human factors, hazardous energy control, flight safety, survivability factors, confined space, toxic gases control, hazardous materials, and related ventilation and process controls.

e. For all acquisition programs ASN (RD&A) shall be the risk acceptance authority for high ESOH risks. PEOs and SYSCOM commanders, or flag-level Senior Executive Service (SES) or SES designees, DRPMs, and Chief of Naval Research (CNR) shall be the risk acceptance authorities for serious ESOH risks. Program Managers shall be the risk acceptance authorities for medium and low ESOH risks. The Program Manager shall collaborate with the user representative during the ESOH risk mitigation process throughout the life-cycle, as user formal concurrence at the peer level acceptance authority is required prior to all high-risk and serious-risk acceptance and mitigation decisions. Program and technical reviews shall address all high and serious

ESOH risks, assess risk mitigation plans, and verify which risks or risk mitigation plans have been accepted by the proper risk acceptance authority.

f. Human exposure to hazardous noise, where steady-state noise levels exceed the Navy Occupational Exposure Limits or the Marine Corps Occupational Exposure Limits established in references (at) and (au), and/or impulse noise sound pressure levels of 140 decibels of pressure or greater, has significant potential to cause permanent partial disability. Such permanent partial disability is classified as a "critical" severity, with a probability level of "probable" results in a Safety and Occupational Health (SOH) risk assessment of "high".

g. The Program Manager for a legacy system undergoing a major upgrade that has associated ESOH risks shall submit risk assessments and risk mitigation plans to the appropriate risk acceptance authority for risk acceptance. The Program Manager shall reassess the risk associated with a hazard following a mishap when the Mishap Investigation indicates a material causal factor or deficiency.

h. The PM shall ensure that system designs integrate environmental requirements in accordance with regulatory schedules applicable to the upgraded/modified future flights of legacy systems.

i. The Program Manager shall maintain a log of identified ESOH hazards, risk mitigation plans, assessment of event risk, and risk acceptance by the proper risk acceptance authority. Internal control oversight of ESOH hazards, risk mitigation plans, and risk acceptance will be conducted during SETRs, TRBs, independent logistics assessments (ILAs), and Gate Reviews.

j. For all acquisition programs, the SEP shall include the NEPA and E.O. 12114 compliance schedule. Per references (aq) and (ar), the action proponent must assess potential environmental impacts of specific program activities (referred to as proposed actions). Potential impacts shall be analyzed before actual execution of an activity.

k. The Program Manager shall support action proponent compliance with references (aq) and (ar). The action proponent for each proposed action shall prepare the formal environmental

documentation, establish the initiation date for each action, establish the type of environmental documentation prior to the proposed action start date, establish the start and completion dates for the final environmental documentation, and identify the specific approval authority. Final approval authority for acquisition program-related environmental documents is shown in tables E4T1 and E4T2. The Program Manager shall also provide system-specific analyses and data to support other organizations' environmental analyses.

1. The CNR shall be the final approval authority for Science and Technology (S&T) project environmental assessments (EAs) and reference (aq) overseas EAs. The PEO, SYSCOM commander, DRPM or CNR, as applicable, shall be the final approval authority for assigned non-acquisition program-related reference (ar) EAs and reference (aq) overseas EAs. Approval of records of decisions (RODs) under NEPA is at the ASN-level and may not be delegated, except as noted in Footnote 4 of table E4T2. All acquisition programs shall follow the environmental documentation process tables for environmental analyses in this paragraph when a PESHE or other evaluation determines that there is a need for references (aq) or (ar) documentation. Prior to OPNAV (N45) endorsement, the PEOs, SYSCOMs, and DRPMs for assigned programs must review environmental analyses documentation as a part of the references (aq) and (ar) process.

Table E4T1 ENVIRONMENTAL DOCUMENTATION PROCESS--NEPA

DOCUMENT	PREPARED BY ACTION PROPONENT	REVIEW	CONCURRENCE/ ENDORSEMENT	APPROVAL/ SIGNATURE
Categorical Exclusion (CATEX)	PM, CNR, COMOPTEVOR/ Dir, MCOTEA, FLTFORCOM ⁸ , COMPACFLT ⁹ or designee	PEO/SYSCOM/DRPM CNO (N00N) ¹ Host Installation CO ² ASN(EI&E), Info Copy		PM, CNR, COMOPTEVOR/ Dir, MCOTEA, FLTFORCOM ⁸ , COMPACFLT ⁹ or designee, Sign
Environmental Assessment (EA)	PM, CNR, COMOPTEVOR/ Dir, MCOTEA, FLTFORCOM ⁸ , COMPACFLT ⁹ or designee	PEO/SYSCOM/DRPM CNO (N00N) ¹ Host Installation CO ² Office of Counsel ASN(EI&E), Info Copy	CNO/CMC ³ FLTFORCOM ¹⁰ COMPACFLT ¹⁰ DON Regional Environmental Coordinator (REC) ¹⁰	PEO/SYSCOM COMMANDER/ DRPM, CNR, COMOPTEVOR/ Dir, MCOTEA, COMPACFLT ⁹ , FLTFORCOM ⁸ , or designee, Approve
Finding of No Significant Impact (FONSI)	PM, CNR, COMOPTEVOR/ Dir, MCOTEA, FLTFORCOM ⁸ , COMPACFLT ⁹ or designee	PEO/SYSCOM/DRPM CNO (N00N) ¹ Host Installation CO ² Office of Counsel ASN(EI&E), Info Copy	CNO/CMC ³	PEO/SYSCOM COMMANDER/ DRPM, CNR, COMOPTEVOR/ Dir, MCOTEA, COMPACFLT ⁹ , FLTFORCOM ⁸ , or designee, Sign ⁵
Environmental Impact Statement (EIS) (NOI/DEIS/FEIS)	PM, CNR, COMOPTEVOR/ Dir MCOTEA, FLTFORCOM ⁸ , COMPACFLT ⁹ or designee	PEO/SYSCOM/DRPM CNO (N00N) ¹ Host Installation CO ² Office of Counsel	CNO/CMC FLTFORCOM ¹⁰ COMPACFLT ¹⁰ DON REC ¹⁰ ASN(EI&E)	ASN(RD&A), Approve ⁴ ASN(EI&E), Approve ⁷
Record of Decision (ROD)	PM, FLTFORCOM ⁸ , COMPACFLT ⁹ or CNO/CMC	PEO/SYSCOM/DRPM CNO (N00N) ¹ Host Installation CO ² Office of Counsel	CNO/CMC ASN(EI&E)	ASN(RD&A), Sign ^{4, 5} ASN(EI&E), Sign ^{5, 7}

(See footnotes for the NEPA table below the E.O. 12114 table on the next page.)

PM - Program Manager
PEO - Program Executive Officer
SYSCOM - Systems Command
DRPM - Direct Reporting Program Manager
CNR - Chief of Naval Research
COMOPTEVOR - Commander, Operational Test and Evaluation Force
Dir, MCOTEA - Director, Marine Corps Operational Test and Evaluation Activity
CO - Commanding Officer
NOI - Notice of Intent
DEIS - Draft Environmental Impact Statement
FEIS - Final Environmental Impact Statement
Info Copy - Information Copy
DON REC - Department of the Navy Regional Environmental Coordinator
FLTFORCOM - Fleet Forces Command
COMFLTFORCOM - Commander, Fleet Forces Command
COMLANTFLT - Commander, Atlantic Fleet
COMPACFLT - Commander, Pacific Fleet

**Table E4T2 ENVIRONMENTAL DOCUMENTATION PROCESS -- EXECUTIVE
ORDER 12114, ENVIRONMENTAL EFFECTS ABROAD**

DOCUMENT	PREPARED BY ACTION PROPONENT	REVIEW	CONCURRENCE/ ENDORSEMENT	APPROVAL/ SIGNATURE
EO 12114 Negative Decision (Citing a previously approved OEA, OEIS, ER, or ES; an Overseas CATEX; or exemption)	PM, CNR, COMOPTEVOR/ Dir, MCOTEA, or designee	PEO/SYSCOM/DRPM CNO (N00N) ¹ Host Installation CO ² Office of Counsel ASN(EI&E), Info Copy		PM, CNR, COMOPTEVOR/Dir, MCOTEA, or designee, Sign
Overseas Environmental Assessment (OEA) ⁶	PM, CNR, COMOPTEVOR/ Dir, MCOTEA, or designee	PEO/SYSCOM/DRPM CNO (N00N) ¹ Host Installation CO ² Office of Counsel ASN(EI&E), Info Copy	CNO/CMC ³ USFLTFORCOM ¹⁰ COMPACFLT ¹⁰ DON REC ¹⁰	PEO/SYSCOM COMMANDER/ DRPM, CNR, COMOPTEVOR/ Dir, MCOTEA, or designee, Approve
Overseas EIS (OEIS)	PM, CNR, COMOPTEVOR/ Dir, MCOTEA, or designee	PEO/SYSCOM/DRPM CNO (N00N) ¹ Host Installation CO ² Office of Counsel	CNO/CMC FLTFORCOM ¹⁰ COMPACFLT ¹⁰ DON REC ¹⁰ ASN(EI&E) ⁷	ASN(RD&A), Approve ⁴ ASN(EI&E), Approve ⁷
Environmental Review (ER)/ Environmental Study (ES)	PM, CNR, COMOPTEVOR/ Dir, MCOTEA, or designee	PEO/SYSCOM/DRPM CNO (N00N) ¹ Host Installation CO ² Office of Counsel	CNO/CMC FLTFORCOM ¹⁰ COMPACFLT ¹⁰ DON REC ¹⁰ ASN(EI&E) ⁷	ASN(RD&A), Approve ⁴ ASN(EI&E), Approve ⁷
ER or ES Concluding No Significant Impact	PM, CNR, COMOPTEVOR/ Dir, MCOTEA, or designee	PEO/SYSCOM/DRPM CNO (N00N) ¹ Host Installation CO ² Office of Counsel ASN(EI&E), Info Copy	CNO/CMC ³ FLTFORCOM ¹⁰ COMPACFLT ¹⁰ DON REC ¹⁰	PEO/SYSCOM COMMANDER/ DRPM, CNR, COMOPTEVOR/ Dir, MCOTEA, or designee, Approve

FOOTNOTES

1. Obtain concurrence from CNO (N00N) for acquisition programs involving nuclear propulsion matters.
2. The host installation CO (e.g., test facility CO) where the proposed action is occurring.
3. CNO/CMC may delegate endorsement when a PEO/SYSCOM/DRPM has a clear knowledge of the requirements as demonstrated by the preparation of acceptable EAs and FONSI or corresponding EO 12114 documents.
4. ASN(RD&A) approval/signature authority may be delegated to PMDASN(RD&A).
5. The PM is responsible for ensuring public notification of FONSI and RODs via appropriate medium. Where publication in the *Federal Register* is required, CNO/CMC will publish FONSI and ROD notifications.
6. The overseas EA includes a statement of either (1) no significant harm, or (2) significant harm may occur and an Overseas EIS must be prepared.
7. ASN(EI&E) has final approval and signature authority of EISs, OEISs, ESs, and RODs related to homeporting and homebasing decisions. However, ASN(EI&E) may delegate endorsement. OPNAV N45 has final approval and signature authority of all ERS.
8. COMPACFLT is the action proponent for Navy homebasing/homeporting actions in the OCONUS-Pacific.
9. FLTFORCOM is the action proponent for Navy CONUS homebasing/homeporting actions.
10. FLTFORCOM and COMPACFLT, as the area environmental coordinators, will coordinate with appropriate DON regional environmental coordinator(s) (REC) for all environmental planning and compliance for proposed actions that affect resources in their region.

m. PESHE. For all acquisition programs, the Program Manager shall prepare and maintain a PESHE to document data generated by ESOH analyses conducted in support of program execution. The PESHE shall include, at a minimum, identification of ESOH risks and their status, the identification of hazardous materials, wastes, and environmentally regulated pollutants associated with the system and its support, the plans for minimization and/or safe, environmentally-compliant disposal, and a schedule for NEPA and E.O. 12114.

n. Engineering support during operations and sustainment shall be summarized in the PESHE. The PESHE shall be updated to include the full consideration of fleet representative input associated with environmental issues relative to post-Initial Operational Capability (IOC) operations at Navy training ranges and operating areas. The PESHE will be coordinated with affiliated SYSCOM Technical Warrants (where applicable) and ESOH subject matter experts before being approved by the Program Manager. The PESHE is required at program initiation for ships, Milestones B and C, and full-rate production decision review for all programs. The Program Manager shall integrate the ESOH risk management strategy and compliance-driven design requirements for the program into the SEP. The Program Manager shall present the program's ESOH posture and status at Gate Reviews for the program.

o. Mishap Investigation Support. The Program Manager shall support Class A and B mishap investigations, as required by reference (b). Mishap data summaries and investigation reports of serious mishaps may be obtained from the Naval Safety Center.

13. Pollution Prevention. For all acquisition programs, the Program Manager shall ensure compliance with relevant pollution control regulations and conduct appropriate pollution prevention planning for the system being developed.

a. DON policy requires the Program Manager to ensure that all specifications and standards that contain Ozone Depleting Substances (ODS) are revised as environmentally protective and mission acceptable substitutes become available. The Program Manager shall minimize to the greatest extent practical, the use of ODS and ensure that any unplanned use of Class I ODS is

processed in coordination with ASN (EI&E) and OPNAV N45 in accordance with DON policy.

b. For all acquisition programs, the Program Manager shall promote energy efficiency, water efficiency, recycled content, and use of environmentally preferable products, reduce the quantity of toxic chemicals and HAZMAT used in and for maintenance of the system, and reduce greenhouse gas emissions.

14. Explosives Safety. Acquisition programs that include or support munitions, explosives, or energetics shall comply with DoD and DON explosives safety requirements, including requirements of references (aw) and (ax).

15. Safety Technical Reviews. Program and technical reviews shall address the status of Safety Technical Reviews and recommendations. For Joint Programs the Program Manager shall comply with the requirements and processes to conduct Joint reviews as defined in reference (ay).

16. Weapons System Explosive Safety Review Board (WSESRB). The WSESRB shall be the Navy's independent oversight agent for assessing DON weapons programs' safety compliance efforts associated with explosives, energetic systems, weapons, combat systems, and those systems that manage and control weapons. The WSESRB is the advisory authority to the responsible Navy, and Marine Corps commands, MDAs, PEOs, and PMs on the adequacy of compliance. The WSESRB has final DA over the explosive safety planning for the conduct of final developmental and operational testing and overall explosive safety compliance for major acquisition decisions.

17. Laser Safety Review Board (LSRB). The LSRB shall be the Navy's independent oversight agent for assessing DON laser systems acquired for use by the DON and for administering a Military Exemption to Manufacturers. For designated Military Exempt lasers, the LSRB is the advisory authority to the responsible Navy, and Marine Corps commands, MDAs, PEOs, and PMs on the adequacy of compliance of lasers designated Military Exempt.

18. Hazardous Materials Management. For all acquisition programs, the Program Manager shall implement proven Hazardous Materials (HAZMAT) management procedures and processes. The Program Manager shall identify HAZMAT inherent in the system and

that which is required to operate and maintain the system throughout its lifecycle, to ensure safe handling and disposal. During system design, the Program Manager shall document HAZMAT management processes in the SEP and LCSP.

The Program Manager shall utilize the NAS 411 and corresponding Hazardous Materials Target List or the respective SYSCOM-approved list of targeted HAZMAT, when addressing HAZMAT in design. HAZMATs that could not be eliminated during design shall be identified in the Product Support documentation. Hazards associated with HAZMAT inherent in end items or used in operations and maintenance, shall be evaluated and tracked using the risk assessment methodology cited in reference (n).

19. Energy. For all acquisition programs, the Program Manager shall ensure that energy performance criteria specified in capability requirements are integrated in the systems design criteria and described in the SEP. System design alternatives, including materials and components, that may contribute to improved energy-related capability, shall be identified as targets for improved energy performance and used to inform trade-off decisions within the systems engineering process.

20. Corrosion Prevention and Control. For all acquisition programs, as applicable, the Program Manager shall include corrosion control management and design considerations for corrosion prevention and control in the SEP and LCSP required by reference (ab). The Program Manager shall also ensure that corrosion control requirements are included in the system design and verified as part of test and acceptance programs.

21. Aviation and Ship Critical Safety Items. For all acquisition programs, the Program Manager shall ensure compliance with statutes and regulations that govern the identification, cataloging, procurement, management, and disposal of Critical Safety Items (CSIs). Aviation CSIs requirements are described in references (am), (ao), and (cf) - (ci). Ship CSIs requirements are described in reference (az).

22. Item Unique Identification. For all acquisition programs, the Program Manager shall plan for and implement item unique identification (IUID) to identify and track applicable major end items, configuration-controlled items, and government-furnished property, as required by reference (y) and (ba). The Program Manager shall prepare an IUID implementation plan to document

compliance with this requirement. The SEP must contain an electronic hotlink to the IUID implementation plan.

23. Spectrum Supportability. For acquisition programs with equipment using electromagnetic spectrum, the Program Manager shall ensure the program complies with reference (b) statutes and regulations governing electromagnetic spectrum usage. The Program Manager shall follow the guidance on Electromagnetic Environmental Effects and Spectrum Supportability in references (bb) and (bc). The Program Manager shall submit written determinations at Milestones A, B, and C to the Department of the Navy Chief Information Officer (DON CIO), or designee, that the electromagnetic spectrum necessary to support the operation of the program during its expected life cycle is or must be available in accordance with reference (bb).

24. Real Property Assessments. Program Managers shall ensure real property (such as shore facilities, infrastructure, built-in equipment, land, and land rights) requirements are considered throughout the weapons system design and development process. Facilities and infrastructure (real property) affect product supportability elements such as training, maintenance, supply, sustainment engineering, storage, transportation, and support equipment. Effective early planning increases system reliability and improves platform affordability by integrating the weapon system design with the shore capabilities.

25. Platform Real Property Requirements. Program Managers shall ensure proper weapon system ashore interface and support readiness by considering the real property requirements, starting at Gate 1, during Analysis of Alternatives (AoA) and throughout the weapons system design and development process. This ashore advanced planning, during the weapon system acquisition, is critical to determine the real property requirements necessary to support the weapon system at IOC and FOC.

26. Project Development for Real Property. If a real property solution is required for shore integration, Program Managers shall use the latest version of reference (cb) for the classification, preparation, submission, review, programming, approval, and reporting of real property facilities work at Navy shore installations and sites. See latest version of reference (cc) for the preparation, submission, review, approval, and reporting of facilities projects at Marine Corps installations. See latest version of reference (cd) for DON (USN or USMC) policy for the acquisition, management, and disposal of real property

(land) and real property interests (land rights), and to assign responsibility and delegate authority. Per reference (ce), DoD Agencies and the DoD field activities on Navy installations must utilize COMNAVFACENGCOM in the maintenance, repair, design, construction, rehabilitation, alteration, addition, and/or expansion of a real property facility for which the Navy has jurisdiction of the real property facility. Use of another construction agent requires requesting Assistant Secretary of Defense for Energy, Installations, and Environment (ASD EI&E) approval with copies sent to COMNAVFACENGCOM and ASN EI&E, concurrently.

27. Real Property Funded by Milcon Appropriations. If funded by Military Construction (MILCON) appropriations, program managers shall allow five to seven years (including programming, budgeting, design, construction, and fitout) to acquire or modify real property facilities, infrastructure, and land to ensure their timely availability.

28. Programming, Budgeting, and Design. To ensure sufficient time for programming, budgeting, and design, a DD 1391 providing well defined requirements endorsed by CNIC or USMC and based on comprehensive planning (to include site identification, economic analysis, facility planning data, identification of equipment to be supported with any special support requirements, identification of anticipated environmental or cultural mitigation required, and schedule constraints) should be forwarded to NAVFAC CI MILCON by May of the Budget Year minus 3 years (where Budget Year is the fiscal year of Congressional enactment). For example, for a MILCON project expected to be enacted in FY 2024, this would be May 2021.

29. Construction and Fit Out. Unless otherwise identified by NAVFAC, assume construction will be awarded in February of the Budget Year. Contact NAVFAC for a better estimate of construction duration. In addition, allow time for fitout after construction completion prior to Initial Operating Capability.

TEST AND EVALUATION

1. Purpose. This enclosure supplements reference (b) with DON policies for Developmental, Operational, and Live Fire Test and Evaluation (DT&E, OT&E, and LFT&E) and system certifications.

2. DON T&E Executive. The Department of the Navy Test and Evaluation Executive/ Director, Innovation, Technology Requirements and Test and Evaluation (DoN T&E/OPNAV N94) is the DoN lead for acquisition T&E policy development and implementation, T&E resources and infrastructure, OSD T&E oversight coordination and management of the T&E acquisition workforce.

To provide specific and regularly updated policy and processes, DoN T&E/OPNAV N94 will publish a SECNAVINST 5000.2TE instruction that will apply to all USN/USMC ACAT programs, the various Accelerated and Rapid Acquisition Programs, Non-Developmental Items (NDI) and Commercial Off-the-Shelf (COTS) items.

a. ACQUISITION ITEMS EXEMPT FROM T&E PROVISIONS WITHIN THIS INSTRUCTION. The following items are tested by other organizations and are exempt from the T&E provisions of this instruction:

- (1) Cryptographic or cryptology equipment;
- (2) Naval nuclear reactors and associated systems;
- (3) Nuclear Weapons (ordnance components);
- (4) Medical and dental systems; and
- (5) Spacecraft and space-based systems.

b. T&E CONSIDERATIONS THAT APPLY TO EXEMPT ITEMS. The exemption herein does not apply to the following aspects of these items;

- (1) Information Technology (IT) administrative systems;
- (2) Ships or aircraft that carry these systems;
- (3) Other systems that these exempt items support or are

supported by: and

(4) Testing conducted at the request of or in cooperation with above parent organizations.

c. If the exempt system is part of a system of systems (platform), the OTA can assess impacts caused by the exempt system. In this case, this instruction will be used to plan, manage, and execute the T&E necessary to meet OTA requirements.

When the performance of these exempted items affects the effectiveness, suitability, survivability, or lethality of a system not exempt (e.g., communications system with embedded cryptology subsystem, ship with nuclear propulsion), then the exempted item's performance may be considered in the T&E of the supported system. Such performance assessments must be coordinated with and approved by the organization with direct responsibility for the exempted item (e.g., National Security Agency for cryptology systems or Naval Reactors for naval nuclear propulsion systems).

3. T&E Planning

a. Early Planning Requirements. T&E planning starts with understanding program requirements and determining the data needed to support program decisions. To facilitate this, the T&E WIPT is chartered to develop an efficient and effective test and evaluation strategy that incorporates a coherent Decision Support Framework (DSF) with accompanying Integrated Evaluation Framework, based on requirements defined in the acquisition strategy, capability development documents (CDDs), capability production documents (CPDs), System Engineering Plan (SEP) and LCSP.

b. Program Requirement Testability, Traceability and Impact on Resources. DoN T&E/N94 and the appropriate OTA shall review draft requirement documents for all DoN acquisition programs to:

(1) Ensure testability and traceability of requirement language;

(2) Assess the T&E implications of the initial concept of operations (CONOPS) and Key Performance Parameters (KPP), Key System Attributes (KSA), and APA;

(3) Ensure that KPP/KSA/APA metrics selected do not drive large numbers of T&E resources (targets, runs, etc.) to develop reliable data.

c. Capabilities, KPP, KSA, and APA Traceability to Critical Operational Issues (COIS). For DoN programs, requirements will be traceable across the analysis of alternatives, ICD, CDD and CPDs, APB, System Engineering Plan (SEP), and the TEMP. The TEMP shall document how specific capabilities, KPPs, KSAs, and APAs trace to COIs and kill chains, and how each will be addressed in T&E. Test results will be tracked to monitor progress toward achieving desired operational capabilities as well as specific KPP, KSA, APA and COI performance measures identified in the TEMP.

d. Performance Thresholds and Critical Technical Parameters (CTPs). Testable and measurable technical performance thresholds for DT&E and LFT&E shall be established, tracked, and reported throughout the acquisition life-cycle. CTPs are Systems Engineering measures that are established as appropriate to aid the PM during system development. CTPs that best relate system design maturity to achieve KPPs and KSAs shall be incorporated in the TEMP by the PM. Operational parameters and critical issues derived from the ICD, CDD, and CPD to be used for OT shall be established and incorporated in the TEMP by the OTA.

e. T&E Metrics in Proposals and Contracts. Program office CDT/T&E leads, in coordination with program system engineers, are responsible for ensuring that the CDD requirements, performance metrics and CTP language are decomposed into measurable, testable and properly worded CDRLs for inclusion in the RFP and SOW. They are also responsible for ensuring that a service-approved TEMP is included in the solicitation.

f. Environmental Planning Requirements. Prior to any live fire, developmental or operational test decision that may affect the physical environment, the PM shall ensure that all applicable requirements per references (aq) and (ar) are satisfied. Testing shall be planned to ensure sufficient time to comply with applicable environmental requirements. Environmental impact considerations that directly affect testing shall be addressed in the TEMP and respective test plan as

limitations or conditions of the testing. Additionally, the PM's designated environmental manager in coordination with SYSCOM and fleet environmental staffs supporting ranges and fleet end-users, shall verify the review of potential environmental planning requirements for the system's T&E and will ensure that these requirements will be fully satisfied. The requirements will be considered fully satisfied only if the system's testing and usage is within the scope of existing environmental documentation and permits, or the test range, training range, and end users have verified they have the necessary information, time, and resources to meet the requirements before testing, training, or IOC occurs at their location.

4. Test and Evaluation Master Plan (TEMP). All DON ACAT programs (except ACAT IVM) shall develop and implement a TEMP for program DT&E, OT&E, and LFT&E per reference (b). The TEMP should be tailored and scoped to focus on PM decision points. Administrative comments and program history are to be minimized. The TEMP documents the commitment between signatories to schedule, resource, fund and execute test events, schedules, and resources.

a. DON T&E is the Department of the Navy's designated single point of contact for USN/USMC TEMP coordination with OSD T&E oversight organizations.

b. The PM is responsible for distribution of an approved TEMP to all agencies involved in testing; providing support, resources, or oversight; or that have a relevant and official need to access testing information, consistent with applicable restrictions on distribution.

c. To the maximum extent possible the TEMP shall reference documents (CDD/CONOPS/SEP etc.) rather than restate language. The TEMP shall include:

(1) A brief description of the System Under Test (SUT), and the System of Systems (SoS) that enables the SUT to succeed;

(2) A decision support framework that identifies PM decisions/program events to be supported, data required to support decisions, timeline for delivery and resources required to generate the necessary data;

(3) A schedule of test phases and events integrated with key program objectives and decision points;

(4) Specific entry criteria and resources required for each phase of testing;

(5) Anticipated use of M&S in system evaluation and the M&S proponent's VV&A strategy; and

(6) Cost estimates for DT&E, OT&E and LFT&E.

5. Follow-On TEMP Requirements. A TEMP update shall be provided when any changes to system operational capabilities drive the program to an additional phase of operational testing. The TEMP shall be minimal and focused on system changes. There is no need to discuss previous program history and testing unless it pertains to the capability being delivered. This includes Engineering Change Proposals (ECP) that change operational capability. TEMP updates are not required for tech refresh or engineering/life cycle upgrades that do not change system performance. If the PM and cognizant OTA are unable to agree on the need for operational testing, DoN T&E will adjudicate via the Test and Evaluation Coordination Group (TECG) process.

6. Modeling and Simulation (M&S). M&S applications include physics-based computer models, effects-based computer models, hardware-, software-, or operator-in-the-loop simulators, system integration laboratories, threat environment models, live virtual constructive environments (e.g. cyber ranges), threat system simulators, emulators or stimulators, physical targets or any combination thereof. Per reference (z), computer modeling and simulation may not be used as the exclusive method for conducting operational assessments (OA). M&S may be used to augment or supplement developmental, operational and/or live fire testing to achieve confidence in performance assessments, represent conceptual systems that do not exist and/or explore performance in environments that cannot be tested due to resource limitations or personnel and equipment safety restrictions.

a. For M&S to be credible to support decision making, confidence in a particular model or simulation must be justified before its results can be used to make decisions involving

significant resources or risk to human life. A rigorous process must be followed to ensure modeling assumptions are documented, results produced by the M&S are stable and the correlation between observed M&S behavior and observed real world behavior is well understood. M&S will be verified, validated and accredited in accordance with DoD, DoN and OTA instructions.

b. M&S Verification, Validation and Accreditation (VV&A). Verification is the process of determining that a model or simulation implementation and its associated data represent the developer's conceptual description and specifications. Validation is the process of determining the degree to which a model or simulation and its associated data are an accurate representation of the real world from the perspective of the intended uses of the model. Validation activities should be planned, budgeted, and scheduled to complete well in advance of operational or live fire testing. Accreditation is the official certification that a model or simulation and its associated data are acceptable for use for a specific purpose.

c. Accreditation for OT&E is the responsibility of the OTA. Accreditation for Developmental and Live Fire Testing is the responsibility of the Program Manager. Before initiating verification and validation efforts, the Accreditation Authority shall identify the intended use of the M&S tool and provide the Modeling and Simulation Proponent an Accreditation Plan to guide Verification and Validation activities to ensure sufficient data pedigree will exist to support an accreditation decision. An Integrated Product Team, with representatives from the Program Office, Developing Agency, Resource Sponsor, Operational Test Agency and for programs under OSD oversight, Director, Operational Test and Evaluation (DOT&E), shall be established to develop the verification and validation plan and review and approve the results of V&V activities. VV&A of M&S used previously for other programs or test phases may be reused, but it must be formally accredited by the appropriate accreditation authority prior to satisfying its intended use and provide an explanation of how the previous validation is relevant for the intended use in the current test.

d. The Program Manager and OTA shall identify the need for M&S and the resources required to develop and perform VV&A for the M&S early in the acquisition life cycle. Specific uses of M&S for each DT&E, OT&E and/or LFT&E phase, the validation

strategy and resources required to perform VV&A for the M&S will be identified in the TEMP. For digital models and computer based simulations, the TEMP should include a discussion of the response variables and/or mission level metrics of interest, the range of conditions over which the M&S will be validated, the plan for collecting the necessary live and simulation data to inform the validation effort, an analysis of statistical risk, and the validation methodology.

7. T&E Funding Responsibilities

a. Program Manager (PM) Responsibilities. Except as noted below, the PM shall plan, program, budget, and fund all resources identified in the approved TEMP. Funds for OT&E shall be transferred to the OTA for distribution as required. The PM is not required to fund:

- (1) Fleet operating costs for RDT&E support;
- (2) Fleet travel for training;
- (3) Non-program-related OTA travel and administrative costs; and
- (4) Major range and test facility base (MRTFB) institutional costs.

8. Resource Sponsor/Program Funding Agency Responsibilities. A TEMP is an agreement among the program manager, the resource sponsor, OTA and OSD oversight agencies. As such, resource sponsor TEMP approval serves as an agreement to fund the developmental, operational and live fire test programs, including live test events, range support, unique infrastructure, threat representations, and M&S.

9. Target Funding. Some targets may be centrally funded and allocated by OPNAV. Target costs, whether paid for by the program office directly or provided by other means (centrally funded) should be included in Part IV of the TEMP. Costs should include target replacement costs (if planned for expenditure), preparation, recovery, refurbishment, and associated threat emitters.

10. Fleet Commanders' Responsibilities. Fleet commanders shall plan and budget for:

- a. Fleet travel for training;
- b. Operating costs for RDT&E support provided by fleet units;
- c. All costs associated with routine operational expenses except procurement costs of the systems tested and OTA costs.

11. Non-deployment Programs Responsibilities. The R&D agency for a non-deployment or pre-ACAT program has responsibilities equivalent to those of the PM for T&E costs.

12. RDT&E

a. Scheduling RDT&E Fleet Support. Any developing agency, USN/USMC PM, OTA or R&D agency requiring fleet assets to accomplish T&E shall request support from fleet commanders via COMOPTEVFOR Fleet Support Schedulers. MCOTEA will coordinate FMF activities via USMC's PP&O or related authorities. RDT&E fleet support requests shall be submitted and updated on a quarterly basis nine months prior to the quarter in which services are needed. OPNAV N94 will issue a quarterly call message with submission deadlines to the OTAs and SYSCOMs.

b. Test and Evaluation Identification (TEIN) Assignment. The TEIN assists in tracking T&E documentation, scheduling fleet services, and execution of oversight requirements. A TEIN is required before requesting fleet support services. The PM shall request a TEIN from DoN T&E/OPNAV N94 via the resource sponsor.

13. Phases of Test and Evaluation

a. DT&E. The PM shall ensure that adequate DT&E is conducted to support system development, provide data on the progress of system maturation and attainment of performance criteria, inform risk management decisions, and characterize technical readiness for Initial OT&E (IOT&E). The LDTO shall provide the PM with unbiased technical data to inform program decisions. DT&E will be sufficiently robust to adequately characterize system performance in an operational environment.

Specific government and vendor DT&E responsibilities will be described in the TEMP, RFP and contract SOW.

b. DT Sufficiency Assessments. Reference (av) establishes a requirement for MDAPs to conduct DT Sufficiency Assessments at Milestones B and C. If the MDA is the SAE of the military department that is managing the program, the sufficiency assessment shall be conducted by the senior official within the military department with responsibility for developmental testing. As the DoN senior official responsible for DT&E, the DoN T&E Executive will oversee the SYSCOMs' development and execution of these assessments for ACAT IB and IC programs.

c. OT&E. OT&E is defined as testing conducted by an independent OTA using production-representative articles and with an approved test plan. DoN OTAs include COMOPTEVFOR and Director, MCOTEA for ACAT I, IA, II, III, and IVT programs. OT&E includes Early Operational Assessments (EOA), OA, IOT&E, Follow-On OT&E (FOT&E), and QRA.

d. Operational testing shall evaluate the SUT's effectiveness, suitability and survivability in a cyber-contested environment, identify system deficiencies and map them back to kill chains and mission effects, and examine the SoS integration in the SUT mission.

e. The PM shall ensure OT&E is conducted for each increment of operational capability to support fleet understanding of the SUT and characterize the impact on kill chains and the SoS. If the OTA and PM are unable to reach an agreement on the scope of OT&E required, then a N94-chaired TECG will be convened to resolve the issue.

14. QRA

a. QRAs are abbreviated OT&E events in support of the DoN Accelerated/Rapid Acquisition Process. This assessment is specific to warfighting solutions that address an urgent operational need or identified as an accelerated acquisition program. A QRA provides an objective characterization of system operational capabilities, limitations, and considerations for deploying the system as delivered to the Government, using the criteria supplied by the end user in the rapid acquisition

documentation. There is no assessment of effectiveness or suitability.

b. QRAs do not obviate or replace scheduled OT in an approved TEMP, and do not meet statutory IOT&E requirements for Full Rate Production (FRP) decisions. Accelerated programs which have been placed on the DOT&E Oversight list by DOT&E are required to have their QRA test plans approved by DOT&E.

15. OT Resource Requirements. The OTA shall develop robust cost and resource requirements to support the Milestone A TEMP (or initial TEMP for programs starting after Milestone A), and update them during each TEMP revision. The OTA shall conduct an analysis of OT resources required in support of the initial TEMP and identifying gaps that will need to be filled before IOT&E.

16. Certification of Readiness for Operational Testing

a. Reference (b) directs the Services to develop a standard policy for certification of readiness to commence operational testing. An Operational Test Readiness Review (OTRR) shall be conducted for all formal operational test events (EOA, OA, IOT&E, FOT&E) as well as OTA-supported QRA.

b. The PEO (or PEO deputy) shall chair the IOT&E OTRR. For all other OT phases, the PEO shall chair (or designate a chair for) the OTRR. The PEO shall release the OT Certification message, regardless of who chairs the OTRR. This is not delegable.

c. The OTRR shall consist of representatives from the PEO, PM, LDTO, DoN T&E/OPNAV N94, resource sponsor, ASN (RD&A), and the OTA. For programs on OSD T&E Oversight, representatives from DOT&E shall be included. The PEO is responsible for certifying that the system under test is ready for OT&E. If the developing organization does not include a PEO, then the senior of the following three positions present in the organization shall develop certification processes and chair the OTRR - SYSCOM Commander, DRPM or MDA.

d. At the completion of an OTRR, the chair shall determine if the system is ready for OT&E, and if ready, certify that the system is either "Certified for OT without T&E Exceptions" or "Certified for OT with T&E Exceptions".

17. LFT&E. Per reference (bp), any covered system, munitions program, missile program, or covered product improvement program shall complete realistic survivability and lethality testing and generate and submit a report of findings and risk to combat capability prior to the Beyond LRIP (BLRIP) decision.

a. Survivability and lethality tests required by statute must be completed early enough in the EMD phase to allow correction of any design deficiency before proceeding BLRIP.

b. Each program increment or modification requires a review for LFT&E requirements. If such requirements are found to exist, they must be addressed through the LFT&E Strategy (LF-TES) and TEMP update process.

c. Programs with LFT&E requirements shall develop a LF-TES outlining the LFT&E approach and resources required. The LF-TES documents the commitment between signatories to schedule, fund and execute LFT&E events, schedules, and resources.

d. PMs, in coordination with the SYSCOM LFT&E subject matter experts, resource sponsor, and the OTA as appropriate are responsible for drafting the LF-TES, and documenting which of the two LFT&E approaches will be used - Full Up System Level (FUSL) or Alternate Live Fire Test and Evaluation (ALFT&E).

18. Testing Increments in Incremental Acquisition. PMs shall ensure adequate DT&E, OT&E, and LFT&E are planned, funded, and executed for each new increment of capability, as required. The PM shall ensure an independent phase of OT&E is completed prior to operationally fielding each increment.

19. Interoperability Testing and Certification. Programs that conduct a data exchange with any non-DoN system are required to demonstrate joint interoperability as part of Operational Testing. The OTA has a responsibility to evaluate progress towards joint interoperability as part of each testing phase. Interoperability testing consists of intra-Service Navy-Marine Corps, joint Service, and where applicable, allied and coalition testing.

20. Cybersecurity. Cybersecurity is critical to every acquisition program with any capability to process, store,

transmit or receive DoD information. System owners must categorize IT based on information types and identify the impact to the security objectives, confidentiality, integrity and availability, and implement appropriate security measures. RMF for DoD IT Assessment and Authorization provides the DoD method to verify and validate cybersecurity throughout the life cycle of the IT. The PM coordinates with the OTA, the Authorizing Official (AO), the Security Control Assessor, and CNO/CMC (or designee) to determine the Cybersecurity DT&E and OT&E test requirements in order to optimize test activity. The PM documents Assessment and Authorization requirements in the TEMP. The PM must obtain an authorization to operate (ATO) prior to OT from the cognizant AO. For early OT events, such as OA, this can be an interim authority to test, an ATO with Conditions, or ATO. To begin IOT&E, PMs must obtain an ATO or an ATO with Conditions. The OTA will evaluate security controls and ability to protect, detect, react, and restore systems during OT based upon the system categorization. OTRRs shall include a dedicated cybersecurity discussion as outlined in the certification criteria. The OTA does not certify the system for cybersecurity, but evaluates the effectiveness, suitability, and survivability of the system in its intended environment. TEMPs shall capture how the six phase cyber DT/OT process will be implemented within the program schedule and resources, culminating in a Cooperative Vulnerability and Penetration Assessment and Adversarial Assessment.

LIFE-CYCLE SUSTAINMENT

1. Purpose. This enclosure supplements reference (b) with Life-Cycle Sustainment planning guidance for DON acquisition programs.
2. General. Per reference (a), for DoD acquisition programs the Program Manager shall be the single point of accountability for accomplishing program objectives for total life-cycle systems management, including sustainment. Supportability is a key component of performance and as such shall be considered throughout the life-cycle of a system.
3. Life-Cycle Sustainment Plan. For DON ACAT programs, the Program Manager shall develop and maintain a LCSP consistent with references (b) and (bd). The Program Manager shall use the LCSP to plan, resource, and execute the life-cycle sustainment of the system. LCSPs for ACAT I and II programs shall be coordinated with DASN (ELM) in accordance with reference (bd). The MDA, or designee, shall be the approval authority for the LCSP.
4. Product Support Managers (PSM). For each ACAT I and ACAT II weapon system program, as required by reference (be) the MDA shall ensure that a PSM has been assigned to the program. For new systems, the MDA will ensure that the PSM is assigned at program initiation. For deployed systems, the MDA will confirm during program reviews that there is an assigned PSM. For ACAT I programs, PSM selections will be consistent with qualification criteria set forth in reference (bq).
5. Replaced System Sustainment Plan (RSSP). Prior to beginning the development of a new system that will be managed as an MDA, the Program Manager for the system to be replaced shall prepare an RSSP, if required by reference (bf). The RSSP shall provide estimates of the funding levels necessary to sustain the system to be replaced at operational availability threshold levels throughout transition to the new system. The RSSP's schedule and funding estimates shall be updated to reflect any schedule changes for deploying the new system. A summary of the RSSP shall be included in the LCSP.
6. ILA. Per reference (w), an ILA and ILA Certification is required for all DON ACAT programs: at Milestone B; at Milestone

C; at the FRP or Full Deployment decision; no later than 2 years after FRP or Full Deployment; and at least once every 5 years throughout the program's lifecycle. The requirement to conduct an ILA prior to key decision points is statutory for MDAPs, pursuant to reference (bg). The cognizant PEO, SYSCOM commander, DRPM, or designee, shall be responsible for ensuring that life-cycle sustainment strategy, planning, and execution are independently assessed. For ILAs conducted after FRP, an Independent Cost Estimate (ICE) shall be updated for each ACAT I and II program in support of the ILA, and NCCA shall assess the cost elements identified in reference (br) as part of the ILA team.

7. Management of Government Property. PEOs, SYSCOM commanders, DRPMs, and PMs shall ensure that Government property is properly managed and accounted for consistent with reference (x) and SECNAV or Service implementing instructions. All government property shall have accountable records established in an Accountable Property System of Records (APSR) that has been approved by the ASN (FM&C). Accountable records shall include all required data elements as delineated in reference (bj). Third party property management or accountability systems, such as custodial systems or contractor property management systems shall not supersede or replace accountable property records in the government's APSR or the accountability records maintained by the DON.

8. Counterfeit Material. For all ACAT and AAP programs, per reference (bk), the Program Manager shall establish and implement a risk-based approach to identify and prevent introduction of material that is at high risk for counterfeiting. This risk based approach includes assessments of the system's design prior to the Preliminary Design Review and throughout its life-cycle to determine the risk of counterfeiting to the selected parts and materiel in the design. Materiel identified as critical or at high risk of being counterfeited shall be documented in the Risk Management Plan or Systems Engineering Plan. Processes and measures to protect systems from counterfeit materiel during operations and sustainment shall be documented in the LCSP.

9. DMSMS. To support implementation of reference (ap), Program Managers for all ACAT programs will ensure that a DMSMS plan is developed to proactively identify, resolve, and eliminate any negative impacts from DMSMS throughout all phases of a program's life-cycle. This plan will be prepared prior to the Milestone B decision point and updated throughout the program's life cycle.

10. Core Logistics Capabilities. Statutory requirements that pertain to core logistics capabilities, including those in reference (b1), are summarized in enclosure 1 (Table 1) and enclosure 6 of reference (b). The Program Manager shall ensure compliance with those requirements, as applicable.

11. Sustaining Engineering: Reliability and Maintainability. PSMs, in coordination with RM&E systems engineers, are responsible for ensuring that achievement of reliability KPPs (O&S Cost and Mean Down Time) and KSAs (Time to Repair, Fault Detection /Fault Isolation (FD/FI), Maintenance Ratio, etc.) are adequately planned for and processes are established to maintain those KPP and KSA requirements during sustainment. To ensure achievement of the sustainment KPPs and KSAs, a Failure Reporting, Analysis and Corrective Action System (FRACAS) is required to be implemented during development and sustainment. During the initial program phase, the PSM and the R&ME systems engineer must work together to establish a transition plan for FRACAS while the system is being deployed. During the Sustainment Phase, the PSM must implement a Fleet FRACAS program in coordination with the Development/Production FRACAS through the end of Production and then on to the end of the system life cycle. The PSM and the R&ME systems engineer should work together, as needed, to implement this process. Since achievement of sustainment KPPs and KSAs are dependent upon FD/FI in most cases, the PSM in coordination with RM&E systems engineer, shall ensure that FD/FI performance is designed and developed to meet maintainability requirements. During sustainment, the PSM shall ensure that a process is in place for the fleet to report FD/FI anomalies and correct anomalies as part of the FRACAS process. The PSM shall lead development of the Sustainment-Cost Rationale Report and work with the program R&ME systems engineer and the Cost Engineer/Estimator in its development. The PSM, having lead responsibility for sustainment planning, shall document the overall plan for addressing sustainment planning and implementation in the LCSP.

INFORMATION TECHNOLOGY REQUIREMENTS

1. Purpose. This enclosure supplements the IT requirements in reference (b) with guidance for DON acquisition programs containing IT.
2. Applicability. This enclosure applies to DON acquisition programs containing IT, as defined in references (bm), (bn), and (bs).
3. Clinger-Cohen Act Compliance. Refer to reference (b) enclosure 1, Table 10 and enclosure 11.
4. Cybersecurity. Refer to Enclosures 11 and 14 of reference (b). All DON ISS shall be certified and accredited and identified with a specific mission assurance category and confidentiality level.
5. Trusted Systems and Networks. Refer to enclosure 11 of reference (b).
6. Department of Defense Enterprise Software Initiative. Refer to enclosure 11 of reference (b).
7. Department of Defense Data Center Consolidation. Refer to enclosure 11 of reference (b).
8. Information Technology, Including National Security Systems, Interoperability. Refer to enclosure 11 of reference (b).

JOINT REQUIREMENTS AND CAPABILITIES DEVELOPMENT

1. Purpose. This enclosure supplements references (b), (c), and (bo) with guidance on Joint Requirements and Capabilities Development for DON acquisition programs.
2. General. Per reference (b), each DON acquisition program shall have its capability requirements validated and documented. Leadership of the acquisition and budget processes will be involved as advisors to the validation authority during consideration of initial or adjusted validation of capability requirements to ensure coordination across the three processes.

The DON uses a capabilities-based approach to define, develop, and deliver technologically sound, sustainable, and affordable military capabilities. This approach is implemented via the Naval Capabilities Development Process (NCDP), the Marine Corps Capabilities Based Assessment (MC CBA), the Urgent Needs Process (UNP), and the Joint Capabilities Integration and Development System (JCIDS) to improve existing and develop new warfighting capabilities. Coordination among Department of Defense (DoD) Components and within DON is an essential element of these processes. Joint concepts, DON concepts, CONOPs, and DON Enterprise Architecture (EA) are used to identify and prioritize capabilities gaps and integrated doctrine, organization, training, materiel, leadership and education, personnel, facilities, and policy (DOTMLPF-P) solutions. The following paragraphs outline major roles and responsibilities and provide the process for DON capabilities development.

3. DON Principal Capabilities Points of Contact

- a. Chief of Naval Operations (CNO)/Commandant of the Marine Corps (CMC) Responsibilities. As user representatives, CNO/CMC (program and resource sponsor) shall execute the responsibilities defined in references (a) through (f) and (bo) to identify, define, validate, make affordability determinations for, and prioritize required mission capabilities through JCIDS and allocate program resources to meet those requirements and needs through the PPBE. In addition, CNO/CMC shall coordinate the test and evaluation process as described in enclosure 5. Continuous interaction with ASN (RD&A) is required throughout the acquisition process.

b. CNO/CMC is designated as the approval and validation authority for JCIDS documents not approved and validated by the JROC or Joint Capabilities Board (JCB).

c. In accordance with reference (e), a capability document supporting a Milestone B or subsequent milestone decision for an MDAP may not be approved until CNO/CMC (or designee) determines in writing that the requirements in the document are necessary and realistic in relation to the program cost and fielding targets established under reference (bt).

d. Program and Resource Sponsor Responsibilities. Program sponsors are responsible for identifying program capability needs. They shall provide the key interfaces among the JCIDS, the NCDP, the MC CBA, the PPBES, and the Defense Acquisition System. A requirements officer (RO) shall be assigned for each platform, system, or initiative for which funding is programmed or planned. The RO is responsible for ensuring that capabilities are properly defined and approved for each platform, system, or initiative for which funding is programmed or planned, prior to program initiation. The resource sponsors are responsible for managing specific appropriation categories. Resource sponsors may also have dual responsibility as program sponsors. Resource sponsors have AAP requirements memorandum request authority, subject to R3B, NCB, or CNO (N9) approval. The definition, change, or clarification of capabilities for ACAT programs is not allowed via any type of memorandum or letter.

e. The program and resource sponsor shall:

(1) Act as the user representative;

(2) Establish and provide user-based cost, schedule, and total force performance requirements through validated capabilities needs documents and other associated documentation;

(3) Provide explicit direction for systems interoperability within an operations and support environment associated with all capabilities needs;

(4) Program the funds necessary to develop and sustain programs that satisfy capabilities needs evolution and development;

(5) Define the operational environment, thresholds and performance parameters for developmental and operational testing; and

(6) For IT systems, including national security systems (NSS):

(a) Ensure capabilities documents are reviewed by DON functional area managers (FAMs). The DON Deputy CIO (Navy) is the single FAM authority for the Navy;

(b) Define mission-related, outcome-based performance measures for IT systems, including NSS;

(c) Ensure operational need is documented in the DON EA as currently defined.

f. Vice Chief of Naval Operations (VCNO) Responsibilities. VCNO is Navy's representative on the Joint Requirements Oversight Council.

g. Deputy CNO (Warfare Systems) (CNO (N9)) Responsibilities.

(1) CNO (N9) shall coordinate staffing, validation, and approval of Navy Initial Capabilities Documents (ICDs), CDDs, CDD updates, CPDs, and DOTMLPF-P change recommendations (DCRs) for all Navy and joint systems within the JCIDS process. Additionally, CNO (N9) shall coordinate the Navy staffing of capabilities documents developed by other Services. For Navy documents, CNO approval authority has been delegated to CNO (N9) for non-ACAT I JCIDS documents designated as joint integration and joint information. CNO (N9) approves the initiation of all Navy Capabilities Based Assessments (CBAs) that support development of capabilities documents and endorses the results of CBAs for use in requirements development.

(2) CNO (N9) also serves as the Navy urgent needs gatekeeper for assignment of action for Navy urgent operational needs submitted by Navy component commanders and joint urgent operational needs statements assigned to the Navy for action.

(3) CNO (N9) is also responsible for executing Navy's participation in JCIDS forums. Execution includes establishment

of administrative procedures for preparation of Navy representatives to the Joint Requirements Oversight Council and JCB, providing a representative to the JCB, and coordinating with other OPNAV Principal Officials to identify representatives for Functional Capabilities Boards.

(4) CNO (N9) is also responsible for coordinating the training of Navy's requirements workforce. This includes Requirements Management Certification Training in accordance with reference (bo) and applicable statutes, as well as training on execution of the Navy Capability Development Process.

h. Deputy CNO (Information Warfare) (CNO (N2N6)) Responsibilities. CNO (N2/N6) shall coordinate staffing, validation, and approval of Navy architecture artifacts and products within ICDs, CDDs, CDD updates, and CPDs for assessment and compliance with the DON EA for all Navy and joint systems within the JCIDS process.

4. DON Capabilities Development and Processing Procedures

a. NCDP. The NCDP translates strategic guidance and operational concepts to specific warfighting capabilities. The NCDP is a capabilities-based assessment process used to develop the naval warfare Integrated Capabilities Plan (ICP). The ICP serves as the Navy's "warfare investment strategy" for programming operational capabilities. The product of the ICP and resource sponsor programming and analysis will be the sponsor program proposal, detailing systems required to deliver the warfighting capabilities identified in the ICP. These systems will be acquired through the Defense acquisition process.

(1) The NCB, the R3B, or Gate Reviews shall be the only forums in which JCIDS documents, CBAs, and Analyses of Alternatives are vetted and approved by CNO (N9), VCNO, or CNO prior to entry into the Joint Staff for processing and joint review.

(2) Except for documents for which approval authority has been further delegated in accordance with Navy's implementation of the "Information Technology (IT) Box" model, the NCB and R3B will review and endorse all Navy JCIDS documents, including the initiation and results of Navy-level

CBAs. The NCB and R3B recommends validation of all warfighting requirements: KPPs, Space, Weight, and Power-Cooling (SWP-C) margins; KSAs; key cost parameters (KCPs), and key schedule parameters (KSPs). All documents with the Joint Designation of JROC Interest or JCB Interest, and all ACAT I programs, will be reviewed by the R3B. All capability documents for other programs will be reviewed by the NCB.

(3) For the Navy, CNO, VCNO, and CNO (N9) have the authority to approve capabilities documents, or changes to previously approved capabilities documents, unless that authority has not been delegated by the JROC. When documented by a Navy board (either NCB, R3B, or Gate Review) decision memorandum, approval authority for Capability Drops (CD) may be further delegated for those programs operating under the "IT Box" model.

b. Marine Corps Capabilities Development Process for Programs with Navy Fiscal Sponsorship. The following specific procedures shall apply to Marine Corps programs that have Navy fiscal sponsorship (e.g., aviation programs). The capabilities documents shall be prepared and submitted by the CMC (Deputy Commandant, Combat Development and Integration (DC, CD&I)) to the applicable Office of the Chief of Naval Operations (OPNAV) program sponsor, via Navy, Joint, and Urgent Requirements Branch (OPNAV (N9IJ)), for concurrence, prioritization, staffing, and endorsement. Prior to joint review, review of these capabilities documents within the Navy and Marine Corps should be accomplished in parallel, with only one board of appropriate membership (NCB, R3B, MROC, or Gate Review) to endorse the document prior to joint review.

c. Urgent Capability Needs and Acquisition Processes. Enclosure 13 of Reference (b) and reference (bu) set forth specific guidance for urgent capability acquisition.

TWO-PASS SEVEN-GATE GOVERNANCE

1. Purpose. This enclosure supplements reference (b) with DON's unique Two-Pass Seven-Gate Governance procedures.

2. General. The Two-Pass Seven-Gate Governance procedures herein provide an integrated, collaborative, and disciplined framework for DON senior leaders from the requirements, resources, acquisition, and warfighting communities to make sound investment decisions at key points within the JCIDS and the DAS.

a. The CNO/CMC and ASN (RD&A) shall implement these procedures in a collaborative manner to arrive at informed decisions concerning requirements and programs and accurately assess the overall progress and health of programs.

b. This process will ensure that documented requirements are technically achievable at affordable costs and within acceptable risk parameters. This process also will ensure that acquisition strategies and resulting contracts clearly state the performance requirements to be achieved within allocated funding and schedule constraints.

3. Applicability. The Two-Pass Seven-Gate Governance procedures shall apply to:

a. Proposed programs, regardless of ACAT designation, which have capability requirement documents with anticipated or assigned Joint Staffing designators of JCB or JROC interest.

b. Pre-MDAP, MDAP (ACAT I), pre-MAIS, and MAIS (ACAT IA) programs.

c. ACAT II and ACAT III programs that ASN (RD&A) determines in writing shall be subject to Two-Pass Seven-Gate Governance procedures based on special interest.

4. Membership. The membership for each gate is identified in Table E9T1. Gate review attendance is limited to a participating organization's principal or deputy at the Flag Officer, General Officer, or Senior Executive Service level.

For ACAT I programs, if a gate review will be the forum used to meet annual Configuration Steering Board (CSB) requirements, then

the senior officials required by reference (b) to participate in the CSB shall be invited to attend the gate review meeting.

5. Gate Requirements. The entrance criteria, objectives and briefing content for each gate are identified below in Table E9T1. Gate reviews shall not be combined unless approved by CNO and/or ASN (RD&A). The entrance criteria and briefing content requirements for gates shall not be tailored except as jointly agreed to by CNO/CMC and ASN (RD&A), or their designated representatives.

a. Program affordability shall be reviewed at each gate. Additionally, at each Gate review meeting, the resource sponsor or program manager will report on the program's progress towards achieving applicable KPPs, including SWP-C margins; KCPs, and KSPs.

b. For Gate 7 sustainment reviews, results and recommendations for corrective actions of the most recent ILA and, for MDAPs, all nine elements as identified in reference (br), shall be reviewed.

6. Gate Decision Making

a. Gates 1, 2, and 3 reviews, as well as Gate 6 reviews to endorse a program's updated CDD, shall be chaired by CNO/CMC, or CNO/CMC's designated representative. Gates 4, 5, 6 (except for CDD updates and Sufficiency reviews), shall be chaired by ASN (RD&A), or ASN (RD&A)'s designated representative. Gate 6 Sufficiency and Gate 7 Sustainment reviews shall be co-chaired by CNO/CMC and ASN (RD&A), or designees.

b. ASN (RD&A) shall utilize the Two-Pass Seven-Gate Governance process to ensure that CNO or CMC, as appropriate, concurs with the cost, schedule, technical feasibility, and performance trade-offs made with regard to an MDAP.

c. CNO/CMC shall utilize the Two-Pass Seven-Gate Governance process, and R3B, to formally revise IOC, Full Operational Capability, requirements (KPPs/KSAs/Other Attributes), or capability documents.

d. Gate 6 Sufficiency and Gate 7 Sustainment review minutes and/or ADMs shall be co-signed by the co-chairs. Decision

memoranda and meeting minutes resulting from all other gate reviews shall be approved by the chair.

DON Requirements/Acquisition Two-Pass Seven-Gate Process with Development of a System Design Specification

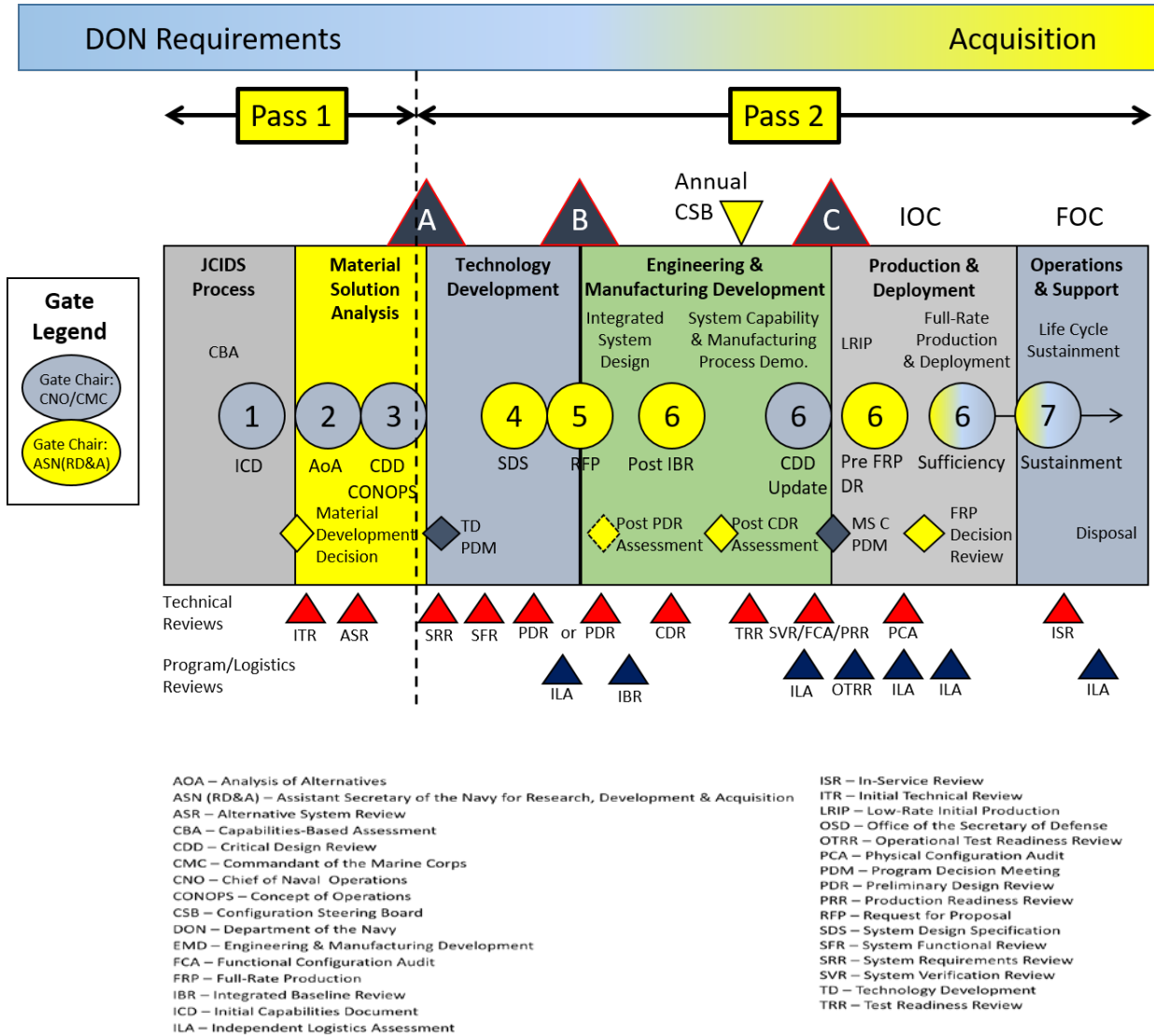


Table E9T1

GATE 1 (ICD)	MEMBERSHIP	OBJECTIVES	BRIEFING CONTENT
<p>PURPOSE:</p> <p>Endorse the ICD (or equivalent requirements document) and the proposed AoA Study Guidance.</p> <p>ENTRANCE CRITERIA:</p> <ol style="list-style-type: none"> 1. Completed Service review of the ICD (or equivalent). 2. Completed Service review of the proposed AoA Study Guidance and draft AoA Study Plan (approved/endorsed by N81). 3. Identification of mutually shared needs with foreign countries is completed. 	<p><u>Briefer:</u> RO, prospective Program Manager (PM), and AoA Director (Dir)</p> <p><u>Chair:</u> CNO/DC, CD&I, or designee</p> <p><u>Principals:</u> N9, N1/DC, M&RA, N2/N6/MC Intel, N3/N5/DC, PP&O, N4/DC, I&L, DON CIO, DirC4/DC Info, DC, P&R, ASN (RD&A), ASN (FM&C), ASN (EI&E), N00N, PMD, WE Lead and/or USFLTFORCOM/MARFOR, SYSCOM</p> <p><u>As Required:</u> PEO/DirSSP, CNR, DC Avn</p> <p><u>Advisors:</u> DASN (RDT&E), DASNs, N80, N81, N82, N81B, N94, N9I, USFLTFORCOM (N8), HQMC (CL, PA&E), OGC, DASN (Budget), DASN (C&E), DASN (I&F), DASN (Environment), DASN (Safety), SYSCOM cost director, resource sponsor, DirNIPO, DUSN, COTF/MCOTEA</p>	<ol style="list-style-type: none"> 1. Endorsement of the ICD (or equivalent) prior to its submission to the Joint Staff review, or submission to CNO/CMC for signature. 2. Satisfactory review of the proposed AoA Study Guidance, assumptions, and timelines. 3. Endorsement of the proposed AoA Study Guidance prior to its submission for approval to Director, Cost Assessment and Program Evaluation (D,CAPE) for ACAT I and IA programs; or approval of the proposed AoA Study Guidance for lower level ACAT programs. 4. Satisfactory review of the draft AoA Study Plan. 5. Concurrence with the doctrine, organization, training, materiel, leadership education, personnel, and facilities DCRs. 6. Satisfactory review of program health. 7. Satisfactory review of affordability assessment. 8. Approval to proceed to Materiel Development Decision (MDD) and Gate 2. 	<ol style="list-style-type: none"> 1. ICD description, including mission description and success criteria (Mission Technical Baseline). 2. AoA Study Guidance description. 3. Summary of draft AoA Study Plan. 4. Summary of mutually shared needs with foreign countries. 5. DCRs inputs. 6. Programmatic (cost constraints and affordability assessment, schedule, energy, interdependencies). 7. Program health. 8. Cybersecurity

Entrance Criteria - Requirements for convening a Gate Review.

Table E9T1 (Continued)

GATE 2 (AOA)	MEMBERSHIP	OBJECTIVES	BRIEFING CONTENT
<p>PURPOSE:</p> <p>Endorse, or approve, the AoA report and preferred alternative(s); approve the CDD and CONOPS guidance and assumptions.</p> <p>ENTRANCE CRITERIA:</p> <ol style="list-style-type: none"> Completed Service review of the AoA Report. Preferred alternative(s) identified. Approved ICD and MDD (as applicable). Completed Initial technical review (ITR) and alternative system review (ASR). Staffs of principals and advisors had an opportunity to review drafts of the TDS and initial Key Performance Parameters and KPPs/KSAs. 	<p>Briefer: RO, prospective PM, and AoA Dir</p> <p>Chair: CNO/CMC, or designee</p> <p>Principals: VCNO/ACMC, N9, N8/DC, P&R/DC, CD&I, N1/DC, M&RA, N2/N6/MC Intel, N3/N5/DC, PP&O, N4/DC, I&L, DON CIO, DirC4/DC Info, ASN (RD&A), ASN (FM&C), ASN (EI&E), N00N, PMD, SYSCOM WE Lead and/or USFLTFORCOM/MARFOR,</p> <p>As required: CNR, DC Avn</p> <p>Advisors: DASN (RDT&E), DASNs, N80, N81, N82, N81B, N94, N9I, USFLTFORCOM(N8), HQMC(CL, PA&E), OGC, DASN (Budget), DASN (C&E), DASN (I&F), DASN (Environment), DASN (Safety), SYSCOM cost director, Resource Sponsor, PEO/DirSSP, DirNIPO, DUSN, COTF/MCOTEA</p>	<ol style="list-style-type: none"> Satisfactory review of AoA results. Endorsement of the AoA report and preferred alternative(s) prior to the report's submission to the D,CAPE to assess for ACAT ID and ACAT IAM programs; or approval of the AoA report and preferred alternative(s) prior to the report's submission to the Milestone Decision Authority (MDA) for other programs. Approval of CDD and CONOPS guidance and assumptions. Authorization to develop CDD and CONOPS. Approval of the initial, draft KPPs/KSAs. Satisfactory review of program health. Satisfactory review of affordability assessment. Approval to proceed to Gate 3. 	<ol style="list-style-type: none"> AoA Report summary, including assumptions, findings, and implications of Total Ownership Costs (TOC) for preferred alternative(s) at system, system of systems, and mission levels. Warfighter review of AoA results. Analysis of cost risk for each proposed alternative. Assessment of DCRs. Initial Service Cost Position (SCP), assumptions, and cost risk for the preferred alternative, with S-curves by appropriation (as applicable). Cost arrayed per NCCA policy (i.e., MIL HDBK 881 and D,CAPE protocols). Initial KPP/KSAs summary. Initial sustainment strategy Proposed CDD/CONOPS guidance and assumptions. ITR & ASR results. Environmental Safety and Occupational Health (ESOH) issues and impacts. Technology maturation and risk reduction efforts. Industrial Base assessment. Programmatics (schedule, energy, interdependencies). Program risks. Program health. Energy impacts and energy demand supportability. Affordability assessment. Cybersecurity. Facilities and Infrastructure requirements.

Entrance Criteria - Requirements for convening a Gate Review.

Table E9T1 (Continued)

GATE 3 (CDD/CONOPS)	MEMBERSHIP	OBJECTIVES	BRIEFING CONTENT
<p>PURPOSE:</p> <p>Endorse the CDD and CONOPS.</p> <p>ENTRANCE CRITERIA:</p> <ol style="list-style-type: none"> 1. Approved AoA. 2. Approved AoA update, if required. 3. Completed Service review of the CDD and CONOPS. 4. Completed Service review of the System Design Specification (SDS) development plan and SDS outline. 5. Draft cost reduction strategy. 6. Completed cost estimate by SYSCOM Cost Estimating Directorate. (For MDAPs, ICE must be approved before Milestone A.) 7. Completed program office review of the potential opportunities for export or cooperative development. 8. Staffs of principals and advisors had an opportunity to review drafts of the Acquisition Strategy (AS), Test and Evaluation Master Plan (TEMP), and Systems Engineering Plan (SEP). 	<p><u>Briefer:</u> RO and PM</p> <p><u>Chair:</u> CNO/CMC, or designee</p> <p><u>Principals:</u> VCNO/ACMC, N9, N8/DC, P&R/DC, CD&I, N1/DC, M&RA, N00N, N2/N6/MC Intel, N3/N5/DC, PP&O, N4/DC, I&L, DON CIO, DirC4/DC Info, ASN (RD&A), ASN (FM&C), ASN (EI&E), PMD, WE Lead and/or USFLTFORCOM/MARFOR, SYSCOM</p> <p><u>As required:</u> CNR, DC Avn</p> <p><u>Advisors:</u> DASN (RDT&E), DASNs, N80, N81, N82, N81B, N94, N9I, USFLTFORCOM(N8), HQMC(CL, PA&E), OGC, DASN (Budget), DASN (C&E), DASN (I&F), DASN (Environment), DASN (Safety), SYSCOM cost director, resource sponsor, PEO/DirSSP, DirNIPO, DUSN, COTF/MCOTEA</p>	<ol style="list-style-type: none"> 1. Endorsement of the initial CDD prior to its submission to the Joint Staff review, or submission to CNO/CMC for signature. 2. Approval, or endorsement, of the CONOPS. 3. Evaluation of SDS development plan and SDS outline. 4. Determination of potential for export or cooperative development. 5. Evaluation of the initial life-cycle sustainment strategy. 6. Satisfactory review of the program assumptions as reflected in the CARD. 7. Satisfactory review of the draft AS, TEMP, and SEP. 8. Endorsement of the full funding certification for Milestone A (as applicable). 9. Satisfactory review of program health. 10. Satisfactory review of affordability assessment. 11. Approval to proceed to Milestone A decision (as applicable) and Gate 4. 	<ol style="list-style-type: none"> 1. Preferred alternative(s), and any changes after AoA approval. 2. CONOPS summary. 3. CDD description, with warfighting effectiveness and analysis supporting all KPPs and KSAs, and aligned with CONOPS. 4. Review capability and threat 5. SYSCOM cost estimate with assumptions, and cost risk, with S-curves by appropriation (as applicable). 6. Cost drivers by phase and by KPP/KSA, to include specific cost reduction strategies, cost drivers, and cost sensitivity ("knee-in-the-curve"). 7. Cost arrayed per NCCA policy. 8. Overview of Initial life-cycle sustainment strategy. 9. Updated assessment of DCRs. 10. AS summary. 11. Summary of potential opportunities for export or cooperative development. 12. Describe modular, common, and open systems approach. 13. SRR and SFR results. 14. ESOH issues/impacts. 15. TES summary. 16. SDS development plan and SDS outline. 17. Programmatics (schedule, energy, interdependencies). 18. Program risks. 19. Program health. 20. Energy impacts and energy demand supportability. 21. Affordability assessment. 22. ITRA. 23. Cybersecurity. 24. Facilities and Infrastructure requirements.

Entrance Criteria – Requirements for convening a Gate Review.

Table E9T1 (Continued)

GATE 4 (SDS)	MEMBERSHIP	OBJECTIVES	BRIEFING CONTENT
<p>PURPOSE: Approve the SDS.</p> <p>ENTRANCE CRITERIA:</p> <ol style="list-style-type: none"> 1. Approved CDD. 2. Approved CDD update, if required. 3. Approved CONOPS. 4. SDS approved by the PM, SYSCOM CHSENG, and resource sponsor. 5. Completed SYSCOM cost analysis, with focus on derived technical requirements, their cost drivers, risks, and sensitivity. 6. Completed Service review of program cost containment and cost reduction strategies. 7. Completed system requirements review (SRR), system functional review (SFR). 8. Completed procurement planning & strategy. 	<p><u>Briefer:</u> PM</p> <p><u>Chair:</u> ASN (RD&A), or designee</p> <p><u>Principals:</u> VCNO/ACMC, ASN (FM&C), ASN (EI&E), N9, N8/DC, P&R/DC, CD&I, N1/DC, M&RA, N00N N2/N6/MC Intel, N3/N5/DC, PP&O, N4/DC, I&L, DON CIO, DirC4/DC Info, PMD, WE Lead and/or USFLTFORCOM/MARFOR, SYSCOM, PEO/DirSSP</p> <p><u>As required:</u> CNR, DC Avn</p> <p><u>Advisors:</u> DASN (RDT&E), DASNs, N80, N81, N82, N81B, N94, N9I, USFLTFORCOM(N8), HQMC(CL, PA&E), OGC, OSBP, DASN (Budget), DASN (C&E), DASN (I&F), DASN (Environment), DASN (Safety), SYSCOM cost director, resource sponsor, PEO/DirSSP, DirNIPO, DUSN COMOPTEVOR/DirMCOTEA</p>	<ol style="list-style-type: none"> 1. Satisfactory review of SDS' derived technical requirements traceability to CDD KPP/KSA; and derived requirement cost drivers, risks, and sensitivity. 2. Approval of SDS. 3. Concurrence with CSB recommended capability changes. 4. Authorization to submit CSB recommended capability changes to R3B/MROC, or CNO/CMC, with request for Service approval. 5. Determination that program is sufficiently structured to operate within DON's business enterprise. 6. Satisfactory review of program health. 7. Satisfactory review of affordability assessment. 8. Approval to proceed to Gate 5. 	<ol style="list-style-type: none"> 1. Review capability & threat. 2. Program capability review focused on: traceability of SDS to CDD, identify SDS technical requirements, producibility. 3. CSB. 4. Updated SCP, assumptions, & cost risk; S-curves by appropriation. 5. Cost drivers by phase & by KPP/KSA to include specific cost reduction strategies. 6. Warfighter review of KPP/KSA cost drivers. 7. Cost arrayed per NCCA policy (i.e., MIL HDBK 881 and OSD CAPE protocols). 8. Draft acquisition strategy. 9. Draft life-cycle sustainment strategy. 10. Modular, common, and open systems plan. 11. Job task analysis (JTA), preliminary Navy training system plan (NTSP), & front end analysis (FEA). 12. Updated assessment of DCRs. 13. Update consideration of potential export/codevelopment. 14. RFP strategy. 15. Post-PDR assessment. 16. Environmental issues/impacts. 17. Review the overall T&E program & results of key test events. 18. Programmatic (schedule, interdependencies). 19. Program risks. 20. Program health. 21. Cybersecurity. 22. Facilities and Infrastructure requirements.

Entrance Criteria - Requirements for convening a Gate Review.

Table E9T1 (Continued)

GATE 5 (Dev RFP/MS B)	MEMBERSHIP	OBJECTIVES	BRIEFING CONTENT
<p>PURPOSE:</p> <p>Endorse, or approve, the Development Request for Proposal Release (Dev RFP Rel). Milestone B.</p> <p>ENTRANCE CRITERIA:</p> <ol style="list-style-type: none"> 1. Approved SDS and technical data package. 2. Approved Acquisition Strategy. 3. Completed SCP. (For MDAPs, ICE must be approved before Milestone B.) 4. Staffs of principals and advisors had an opportunity to review the Dev RFP. 5. Approved TEMP. 6. Approved alternate Live-Fire Test and Evaluation Strategy (FL-TES) and LFT&E waiver from full-up, system-level (FUSL) testing. 7. Completed Service review of the LCSP. 8. Completed Service review of PESHE. 9. Developmental Test Sufficiency Assessment (DTSA) per 10 U.S.C. § 2366b. 	<p><u>Briefer:</u> PM</p> <p><u>Chair:</u> ASN (RD&A), or designee</p> <p><u>Principals:</u> VCNO/ACMC, ASN (FM&C), ASN (EI&E), N9, N8/DC, P&R/DC, CD&I, N1/DC, M&RA, N00N N2/N6/MC Intel, N3/N5/DC, PP&O, N4/DC, I&L, DON CIO, DirC4/DC Info, PMD, WE Lead and/or USFLTFORCOM/MARFOR, SYSCOM, PEO/DirSSP</p> <p><u>As required:</u> CNR, DC Avn</p> <p><u>Advisors:</u> DASN (RDT&E), DASNs, N80, N81, N82, N81B, N94, N9I, USFLTFORCOM(N8), HQMC(CL, PA&E), OGC, OSBP, DASN (Budget), DASN (C&E), DASN (I&F), DASN (Environment), DASN (Safety), SYSCOM cost director, resource sponsor, PEO/DirSSP, OTA, DirNIPO, DUSN, COMOPTEVOR/DirMCOTEA</p>	<ol style="list-style-type: none"> 1. Satisfactory review of the Development RFP. 2. Endorsement of Dev RFP for ACAT ID and ACAT IAM programs, or approval of Dev RFP Rel decision point for other programs. 3. Concurrence with the CSB recommended capability changes. 4. Authorization to submit CSB recommended capability changes to R3B/MROC, or CNO/CMC, with request for Service approval. 5. Endorsement or approval of the APB and full funding certification for Milestone B (as applicable). 6. Satisfactory review of program health. 7. Satisfactory review of affordability assessment. 8. Approval to proceed to MS B decision and Gate 6 Post-Integrated Baseline Review (Post-IBR) review. 	<ol style="list-style-type: none"> 1. Review capability & threat. 2. Acquisition strategy. 3. Program schedule. 4. RFP content & issues. 5. All critical data deliverables, data rights, and related intellectual property rights issues addressed. 6. Milestone B SCP, assumptions, and cost risk; S-curves by appropriation. 7. Cost drivers by phase & by KPP/KSA to include specific cost reduction strategies. 8. TOC planning. 9. Cost arrayed per NCCA policy (i.e., MIL HDBK 881 and OSD CAPE protocols). 10. Independent logistics assessment (ILA) results and LCSP. 11. Updated assessment of DCRs. 12. JTA, FEA, and final NTSP. 13. Summarized results of PDR. 14. Environmental issues/impacts. 15. Review the overall T&E program & results of key test events. 16. Interdependencies. 17. CSB. 18. ITRA. 19. Program risks. 20. Program health. 21. Cybersecurity. 22. Facilities and Infrastructure requirements.

Entrance Criteria - Requirements for convening a Gate Review.

Table E9T1 (Continued)

GATE 6 (Post-IBR)	MEMBERSHIP	OBJECTIVES	BRIEFING CONTENT
<p>PURPOSE: Sufficiency review of Integrated Baseline Review (IBR) results and the contractor's performance measurement baseline.</p> <p>ENTRANCE CRITERIA:</p> <ol style="list-style-type: none"> 1. Development Contract awarded. 2. Completed IBR. 3. Completed cost review board. 4. Completed PDR (if PDR held post Milestone B). 	<p><u>Briefer:</u> PM and RO</p> <p><u>Chair:</u> ASN (RD&A), or designee</p> <p><u>Principals:</u> VCNO/ACMC, ASN (FM&C), ASN (EI&E), N9, N8/DC, P&R/DC, CD&I, N1/DC,M&RA, N00N N2/N6/MC Intel, N3/N5/DC, PP&O, N4/DC, I&L, DON CIO, DirC4/DC Info, PMD, WE Lead and/or USFLTFORCOM/MARFOR, SYSCOM, PEO/DirSSP</p> <p><u>As required:</u> CNR, DC Avn</p> <p><u>Advisors:</u> DASN (RDT&E), DASNs, N80, N81, N82, N81B, N94, N9I, USFLTFORCOM(N8), HQMC(CL, PA&E), OGC, DASN (Budget), DASN (C&E), DASN (I&F), DASN (Environment), DASN (Safety), SYSCOM cost director, resource sponsor, PEO/DirSSP, DirNIPO, DUSN, OTA, COMOPTEVOR/DirMCOTEA</p>	<ol style="list-style-type: none"> 1. Satisfactory review of IBR results. 2. Determination that the contractor's performance measurement baseline meets SDS requirements. 3. Concurrence with the CSB recommended capability changes. 4. Authorization to submit CSB recommended capability changes to R3B/MROC, or CNO/CMC, with request for Service approval. 5. Satisfactory review of program health. 6. Satisfactory review of affordability assessment. 7. Approval to proceed to Gate 6 CDD Update. 	<ol style="list-style-type: none"> 1. Summarized results of IBR and PDR (if PDR post Milestone B). 2. Program schedule. 3. Updated SCP, assumptions, and cost risk; S-curves by appropriation. 4. Cost drivers by phase & by KPP/KSA to include specific cost reduction strategies. 5. Cost arrayed per NCCA policy (i.e., MIL HDBK 881 and OSD CAPE protocols). 6. Updated LCSP. 7. CSB. 8. Review capability & threat. 9. Environmental issues/impacts. 10. Review overall T&E program, results of key test events, & system deficiencies discovered through testing activities. 11. Interdependencies 12. Updated assessment of DCRs. 13. Program risks. 14. Program health. 15. Cybersecurity. 16. Facilities and Infrastructure requirements.

Entrance Criteria - Requirements for convening a Gate Review.

Table E9T1 (Continued)

GATE 6 (CDD Update)	MEMBERSHIP	OBJECTIVES	BRIEFING CONTENT
<p>PURPOSE: Endorse the revised CDD.</p> <p>ENTRANCE CRITERIA:</p> <ol style="list-style-type: none"> 1. Completed Service review of CDD Update and CONOPS. 2. Updated technical data package for LRIP. 3. Completed production Readiness review (PRR) in support of LRIP. 4. Completed cost review board. 5. Updated TEMP has been approved. 	<p><u>Briefer:</u> RO and PM</p> <p><u>Chair:</u> CNO/CMC or designee</p> <p><u>Principals:</u> VCNO/ACMC, ASN (RD&A) ASN (FM&C), ASN (EI&E), N9, N8/DC, P&R/DC, CD&I, N1/DC, M&RA, N2/N6/MC Intel, N00N N3/N5/DC, PP&O, N4/DC, I&L, DON CIO, DirC4/DC Info, PMD, WE Lead and/or USFLTFORCOM/MARFOR, SYSCOM, PEO/DirSSP</p> <p><u>As required:</u> CNR, DC Avn</p> <p><u>Advisors:</u> DASN (RDT&E), DASNs, N80, N81, N82, N81B, N94, N9I, USFLTFORCOM(N8), HQMC(CL, PA&E), OGC, DASN (Budget), DASN (C&E), DASN (I&F), DASN (Environment), DASN (Safety), SYSCOM cost director, resource sponsor, PEO/DirSSP, DirNIPO, DUSN COMOPTEVOR/DirMCOTEA</p>	<ol style="list-style-type: none"> 1. Endorsement of the CDD update prior to its submission to the Joint Staff review, or submission to CNO/CMC for signature. 2. Concurrence with the CSB recommended capability changes. 3. Authorization to submit CSB recommended capability changes to R3B/MROC, or CNO/CMC, with request for Service approval. 4. Satisfactory review of program health. 5. Satisfactory review of affordability assessment. 6. Approval to proceed to Gate 6 Milestone C review. 	<ol style="list-style-type: none"> 1. CDD update description including KPPs, KSAs, & other attributes. 2. PRR results in support of LRIP. 3. Contract strategy. 4. Updated technical data package for LRIP traced to KPP/KSA capability thresholds. 5. CSB. 6. Review overall T&E program, results of key test events & system deficiencies discovered through testing activities. 7. Program schedule. 8. Milestone C SCP, assumptions, and cost risk; S-curves by appropriation. 9. Cost arrayed per NCCA policy (i.e., MIL HDBK 881 and OSD CAPE protocols). 10. Cost drivers by phase & by KPP/KSA to include specific cost reduction strategies. 11. Warfighter review of production baseline on operations & support (O&S) elements of SCP. 12. Updated LCSP to include logistics requirements & funding summary (LRFS). 13. Updated assessment of DCRs. 14. JTA, FEA, final NTSP, and ME. 15. Environmental issues/impacts. 16. Review capability & threat. 17. Summary of CONOPS. 18. Interdependencies. 19. Program risks. 20. Program health. 21. Cybersecurity. 22. Facilities and Infrastructure requirements.

Entrance Criteria - Requirements for convening a Gate Review.

Table E9T1 (Continued)

GATE 6 (MS C)	MEMBERSHIP	OBJECTIVES	BRIEFING CONTENT
<p>PURPOSE:</p> <p>Approve, or endorse, the program's entry into Milestone C.</p> <p>ENTRANCE CRITERIA:</p> <ol style="list-style-type: none"> Completed SCP and, for MDAP Milestone C approvals, approved ICE. Completed PRR. Completed Service Review of updates to the TEMP (as applicable). Updated technical data package for Low Rate Initial Production (LRIP) contract (as applicable). AS update. Developmental Test Sufficiency Assessment per 10 U.S.C. § 2366c. 	<p><u>Briefer:</u> PM</p> <p><u>Chair:</u> ASN (RD&A), or designee</p> <p><u>Principals:</u> VCNO/ACMC, ASN (FM&C), ASN (EI&E), N9, N8/DC, P&R/DC, CD&I, N1/DC,M&RA, N2/N6/MC Intel, N00N N3/N5/DC, PP&O, N4/DC, I&L, DON CIO, DirC4/DC Info, PMD, WE Lead and/or USFLTFORCOM/MARFOR, SYSCOM, PEO/DirSSP</p> <p><u>As required:</u> CNR, DC Avn</p> <p><u>Advisors:</u> DASN (RDT&E), DASNs, N80, N81, N82, N81B, N94, N9I, USFLTFORCOM(N8), HQMC(CL, PA&E), OGC, DASN (Budget), DASN (C&E), DASN (I&F), DASN (Environment), DASN (Safety), SYSCOM cost director, resource sponsor, PEO/DirSSP, DirNIPO, DUSN, OTA, COMOPTEVOR/DirMCOTEA</p>	<ol style="list-style-type: none"> Satisfactory review of the program's readiness for entry into Milestone C. Endorsement of program's readiness for entry into Milestone C for ACAT ID and ACAT IAM programs, or approval of Milestone C for other programs. Concurrence with the CSB recommended capability changes. Authorization to submit CSB recommended capability changes to R3B/MROC, or CNO/CMC, with request for Service approval. Endorsement of the full funding certification for Milestone C (as applicable). Satisfactory review of program health. Satisfactory review of affordability assessment. Approval to proceed to Gate 6 FRP Review. 	<ol style="list-style-type: none"> PRR results in support of MS C. Review DT&E, Operational Assessment (OA), and JITC interoperability test results, discuss major deficiencies discovered and risk to IOT&E/mission. Review LCSP execution and ILA Results (programmatics); costs; and affordability in context of allocated resources (i.e., LCSP/LRFS execution). Review reliability growth. Updated assessment of DCRs. Schedule. Milestone C SCP, assumptions, & cost risk; S-curves by appropriation. Cost arrayed per NCCA policy (i.e., MIL HDBK 881 and OSD CAPE protocols). Cost drivers by phase & by KPP/KSA to include specific cost reduction strategies. Warfighter review of production baseline of O&S elements of SCP. Review capability & threat. Environmental issues/impacts. CSB. ITRA. Interdependencies. Program risks. Program health. Cybersecurity. Facilities and Infrastructure requirements.

Entrance Criteria - Requirements for convening a Gate Review.

Table E9T1 (Continued)

GATE 6 (FRP)	MEMBERSHIP	OBJECTIVES	BRIEFING CONTENT
<p>PURPOSE:</p> <p>Approve, or endorse, the program's entry into FRP.</p> <p>ENTRANCE CRITERIA:</p> <ol style="list-style-type: none"> 1. Completed IOT&E. 2. Beyond LRIP Report submitted by DOT&E (as applicable). 3. Life Fire Test and Evaluation Report (LFT&E) submitted by DOT&E. 4. Completed PRR in support of FRP DR. 5. Completed SCP and, for MDAP FRP approvals, approved ICE. 6. Completed Service Review of updates to the TEMP (as applicable). 7. AS update. 	<p><u>Briefer:</u> PM</p> <p><u>Chair:</u> ASN (RD&A), or designee</p> <p><u>Principals:</u> VCNO/ACMC, ASN (FM&C), ASN (EI&E), N9, N8/DC, P&R/DC, CD&I, N1/DC,M&RA, N2/N6/MC Intel, N00N N3/N5/DC, PP&O, N4/DC, I&L, DON CIO, DirC4/DC Info, PMD, WE Lead and/or USFLTFORCOM/MARFOR, SYSCOM, PEO/DirSSP</p> <p><u>As required:</u> CNR, DC Avn</p> <p><u>Advisors:</u> DASN (RDT&E), DASNs, N80, N81, N82, N81B, N94, N9I, USFLTFORCOM(N8), HQMC(CL, PA&E), OGC, DASN (Budget), DASN (C&E), DASN (I&F), DASN (Environment), DASN (Safety), SYSCOM cost director, resource sponsor, PEO/DirSSP, DirNIPO, DUSN, OTA, COMOPTEVOR/DirMCOTEA</p>	<ol style="list-style-type: none"> 1. Satisfactory review of the program's readiness for entry into FRP. 2. Endorsement of program's readiness for entry into FRP for ACAT ID and ACAT IAM programs, or approval of FRP for other programs. 3. Concurrence with the CSB recommended capability changes. 4. Authorization to submit CSB recommended capability changes to R3B/MROC, or CNO/CMC, with request for Service approval. 5. Endorsement of the full funding certification for FRP (as applicable). 6. Satisfactory review of program health. 7. Satisfactory review of affordability assessment. 8. Acceptance of the disposition of the major system deficiencies identified during the IOT&E. 9. Satisfactory review of affordability assessment. 	<ol style="list-style-type: none"> 1. PRR results in support of FRP. 2. Review DT&E, IOT&E, and JITC interoperability test results, discuss major deficiencies discovered and risk to mission of fielding/not fielding system. 3. Review LCSP execution and ILA Results (programmatics); costs; and affordability in context of allocated resources (i.e., LCSP/LRFS execution). 4. Review reliability growth. 5. Updated assessment of DCRs. 6. Schedule. 7. FRP SCP, assumptions, & cost risk; S-curves by appropriation. 8. Cost arrayed per NCCA policy (i.e., MIL HDBK 881 and OSD CAPE protocols). 9. Cost drivers by phase & by KPP/KSA to include specific cost reduction strategies. 10. Warfighter review of production baseline of O&S elements of SCP. 11. Review capability & threat. 12. Environmental issues/impacts. 13. ITRA. 14. CSB. 15. Interdependencies. 16. Program risks. 17. Program health. 18. Cybersecurity. 19. Facilities and Infrastructure requirements.

Entrance Criteria - Requirements for convening a Gate Review.

Table E9T1 (Continued)

GATE 6 (Sufficiency/CSB)	MEMBERSHIP	OBJECTIVES	BRIEFING CONTENT
<p>PURPOSE:</p> <p>Sufficiency review of the system's mission readiness, affordability, and sustainability.</p> <p>ENTRANCE CRITERIA:</p> <ol style="list-style-type: none"> 1. Achieved FRP of the system. 2. Achieved IOC of the system. 3. Updated program cost estimates per NCCA policy (i.e., MIL HDBK 881 and OSD CAPE protocols) 4. Updated LRFS, including TOC reduction initiatives. 5. Updated LCSP. 	<p><u>Briefer:</u> RO and PM</p> <p><u>Co-Chairs:</u> ASN (RD&A) and CNO/CMC, Or designees</p> <p><u>Principals:</u> VCNO/ACMC, ASN (RD&A) ASN (FM&C), ASN (EI&E), N9, N8/DC, P&R/DC, CD&I, N1/DC,M&RA, N2/N6/MC Intel, N00N N3/N5/DC, PP&O, N4/DC, I&L, DON CIO, DirC4/DC Info, PMD, WE Lead and/or USFLTFORCOM/MARFOR, SYSCOM, PEO/DirSSP</p> <p><u>As required:</u> CNR, DC Avn</p> <p><u>Advisors:</u> DASN (RDT&E), DASNs, N80, N81, N82, N81B, N94, N9I, USFLTFORCOM(N8), HQMC(CL, PA&E), OGC, DASN (Budget), DASN (C&E), DASN (I&F), DASN (Environment), DASN (Safety), SYSCOM cost director, resource sponsor, PEO/DirSSP, DirNIPO, DUSN, OTA, COMOPTEVOR/DirMCOTEA</p>	<ol style="list-style-type: none"> 1. Satisfactory review of the system's mission readiness and sustainability. 2. Endorsement of selected recommendations to resolve system and mission readiness issues and shortfalls. 3. Concurrence with TOC reduction opportunities. 4. Concurrence with risk assessments. 5. Satisfactory review of affordability assessment. 	<ol style="list-style-type: none"> 1. IOC/FOC schedule & definitions. 2. Review of LCSP (programmatics); costs; and affordability in context of allocated resources (i.e., LCSP/LRFS execution). 3. Results of ILA. 4. Facilities and Infrastructure requirements. 5. Technical health. 6. T&E Major deficiencies & resolutions. 7. Budget and funding. 8. Threat and capability review. 9. Summary of CONOPS as employed. 10. CSB. 11. Evaluation of TOC reduction, initiatives, and investment. 12. Cost arrayed per NCCA policy (i.e., MIL HKBK 881 and OSD CAPE protocols). 13. Cost drivers by phase & by KPP/KSA to include specific cost reduction strategies. 14. Interdependencies. 15. Schedule. 16. Significant risks. 17. Program health. 18. Cybersecurity.

Entrance Criteria - Requirements for convening a Gate Review.

Table E9T1 (Continued)

<p>GATE 7 (Post IOC Sustainment)</p>	<p>MEMBERSHIP</p>	<p>OBJECTIVES</p>	<p>BRIEFING CONTENT</p>
<p>PURPOSE:</p> <p>Approve or endorse results and corrective actions of the sustainment reviews conducted in accordance with 10 U.S.C. §2441.</p> <p>ENTRANCE CRITERIA:</p> <ol style="list-style-type: none"> Five years after achievement of Initial Operational Capability (IOC) of the system and every five years thereafter. Updated ICE per NCCA policy Independent Logistics Assessment per reference (g) and SECNAVINST 4105.1. Updated LCSP. Corrective action plans and milestones for findings identified in the ILA Updated Sustainment Business Case Analysis (BCA) (as required by statute). 	<p><u>Briefer:</u> RO PM and PSM</p> <p><u>Co-Chairs:</u> ASN (RD&A) and CNO/CMC, Or designees</p> <p><u>Principals:</u> VCNO/ACMC, ASN (RD&A) ASN (FM&C), ASN (EI&E), N9, N8/DC, P&R/DC, CD&I, N1/DC,M&RA, N2/N6/MC Intel, N00N N3/N5/DC, PP&O, N4/DC, I&L, , DirC4/DC Info, PMD, WE Lead and/or USFLTFORCOM/MARFOR, SYSCOM, PEO/DirSSP</p> <p><u>As required:</u> CNR, DC Avn</p> <p><u>Advisors:</u> DASNs, N80, N81, N82, N81B, N94, N9I, USFLTFORCOM(N8), HQMC(CL, PA&E), OGC, DASN (Budget), DASN (C&E), DASN (I&F), DASN (Environment), DASN (Safety), SYSCOM cost director, resource sponsor, PEO/DirSSP, DirNIPO, DUSN, OTA, COMOPTEVOR/DirMCOTEA</p>	<ol style="list-style-type: none"> Satisfactory assessment of the effectiveness of the product support strategy to include mission readiness, sustainability, and maintainability. Satisfactory assessment of the sustainment cost against current cost estimates. Endorsement of recommendations to resolve system and mission readiness issues and product support shortfalls. Concurrence with TOC reduction opportunities. Concurrence with sustainment risk assessments and mitigations identified by the fleet and the ILA. Satisfactory review of affordability assessment. Starting within five years after IOC of an MDAP, conduct and documentation of the sustainment review required by 10 U.S.C. § 2441. 	<ol style="list-style-type: none"> IOC/FOC schedule & definitions. Overview of Maintenance strategy. Results of latest Sustainment BCA. Sustainment risks and risks that impact sustainment Results of ILA. Scorecard of the nine cost and sustainment elements identified in 10 U.S.C. § 2441. Results of assessed current program sustainment costs against updated ICE. Status of sustainment KPPs and KSAs to include any reliability and maintainability metrics. Sustainment issues identified by the fleet Status of Budget and funding for sustainment. Threat and capability review to include cyber threats and their impact on sustainment. Changes to CONOPS of the system and/or requirements changes since FRP. CSB. Evaluation of TOC reduction, initiatives, and investment. Cost drivers by phase & by KPP/KSA to include specific cost reduction strategies. Interdependencies. Schedule. Cybersecurity. Facilities and Infrastructure requirements.

GLOSSARY

1. Purpose. DON-specific acquisition acronyms and terms are listed herein.
2. General. The Defense Acquisition University's Glossary (reference (ad)) of common acquisition acronyms and terms may be found at <https://dap.dau.mil/glossary/Pages/Default.aspx>.
3. DON-Specific Acquisition Acronyms
 - a. NCB - Naval Capabilities Board
 - b. MROC - Marine Requirements Oversight Council
 - c. R3B - Resources and Requirements Review Board
4. DON-Specific Acquisition Terms. Non-Deployment Program - An RDT&E funded effort that does not require a validated capabilities document and will not directly result in the acquisition of a weapon, weapon system, or IT system for operational deployment.