DEPARTMENT OF THE NAVY
OFFICE OF THE SECRETARY
1000 NAVY PENTAGON
WASHINGTON DC 20350-1000

SECNAVINST 5000.2G
ASN (RD&A)
08 Apr 2022

SECNAV INSTRUCTION 5000.2G

From: Secretary of the Navy

Subj: DEPARTMENT OF THE NAVY IMPLEMENTATION OF THE DEFENSE ACQUISITION SYSTEM AND THE ADAPTIVE ACQUISITION FRAMEWORK

Encl: (1) References
(2) Responsibilities
(3) Department of the Navy Urgent Needs Process and Urgent Capability Acquisition
(4) Middle Tier of Acquisition
(5) Major Capability Acquisition
(6) Software Acquisition
(7) Defense Business Systems
(8) Defense Acquisition of Services
(9) Systems Engineering
(10) Test and Evaluation
(11) Life-Cycle Sustainment
(12) Property Management During Acquisition and Sustainment
(13) Information Technology Requirements
(14) Cybersecurity Requirements
(15) Joint Requirements and Capabilities Development
(16) Two-Pass, Seven-Gate Governance
(17) Data Across the Acquisition Pathways
(18) Mandatory Legal Reviews and Arms Control Compliance Reviews of Weapon Systems
(19) Glossary

1. Purpose. This instruction:

a. Prescribes DON-specific program acquisition and sustainment policies and procedures that supplement applicable Department of Defense (DoD) issuances to provide for the integrated, efficient, and successful operation of the Defense Acquisition System (DAS), and provides policies for the implementation of the Adaptive Acquisition Framework (AAF) within the Department of the Navy (DON). Enclosures (1) through (19) provides detailed policy and guidance for this program.

b. Implements the DAS and AAF within the DON consistent with references (a) through (hc). The DAS and AAF support the National Defense Strategy through the development and fielding of affordable and lethal exportable capabilities. These capabilities increase DoD's ability to maintain a technological edge over potential adversaries, advance coalition interoperability, strengthen partnerships that preserve and extend United States (U.S.) global influence and support the U.S. defense industrial base.

2. Cancellation. SECNAVINST 5000.2F, SECNAVINST 5000.42, and SECNAVINST 5239.22.

3. Background. This instruction must be read together with reference (b) and associated AAF DoD instructions.

4. Applicability

a. This instruction applies to all DON Research and Development (R&D), acquisition, and associated life-cycle management and sustainment programs under the DAS and AAF. Enclosure (8) of this instruction applies to DON acquisition of services that are subject to reference (l).

b. The policies and procedures prescribed herein must be applied and interpreted consistently with requirements established by statute, the Federal Acquisition Regulation (FAR), the Defense Federal Acquisition Regulation Supplement (DFARS), the Navy Marine Corps Acquisition Regulation Supplement (NMCARS), any other applicable federal regulations, and DoD directives and instructions. This instruction is supplemental to the DoD directives and instructions governing the DAS and AAF and must be read together with those issuances. This instruction is not intended to comprehensively re-state these DoD issuances. Omission of a requirement or an authority stated in an applicable DoD issuance from this instruction shall not be interpreted to mean the requirement or authority does not apply.

5. Policy

a. DON acquisition programs will comply with all statutory requirements. Statutory requirements may be waived only In Accordance With (IAW) applicable statutory waiver provisions and associated procedures.

b. Subject to paragraphs 4.b and 5.a, Milestone Decision Authorities (MDA) are authorized to tailor the structure and oversight of an acquisition program, including acquisition phase content, information requirements, approval levels for program documents, and the scope of decision reviews, that are within the MDA's approval authority under the AAF and this instruction.

c. Approval authority for the program documents identified in applicable DoD AAF issuances, reference (ej), 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 within applicable DoD issuances 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 with more restrictive or burdensome policies or procedures 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 a minimum.

c. Coordinate with appropriate stakeholders and utilize available authorities, to mitigate both risks related to foreign ownership, control, or influence of DON contractors or subcontractors and risks to the DON supply chain. Such risks may include, but are not limited to, the following:

(1) Theft of Intellectual Property (IP).

(2) Foreign influence in decision-making processes.

(3) Supply chain denial or disruption.

(4) Intentional reduction of a program's productivity.

(5) Observation (both passive and active), physical access, and other security breaches.

(6) Other insider threat related risks.

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. Information Management Control. The reporting requirements in the following enclosures are exempt from information collection control IAW reference (go), Part IV, paragraphs 7h, 7j, 7k, 7n, and 7q:

a. Enclosure (5) is exempt IAW paragraphs 7h, 7j, and 7q.

b. Enclosure (6) is exempt IAW paragraph 7h.

c. Enclosures (7), (9), and (10) are exempt IAW paragraphs 7h and 7n.

d. Enclosures (8), (15), and (16) are exempt IAW paragraph 7k.

e. Enclosures (11) and (17) are exempt IAW paragraph 7q.

CARLOS DEL TORO

Distribution:
Electronic only, via the DON Issuances Website:
https://www.secnav.navy.mil/doni/default.aspx

**REFERENCES**

(a) DoD Directive 5000.01 of 9 September 2020
(b) DoD Instruction 5000.02 of 23 January 2020
(c) CJCS Instruction 5123.01I of 30 October 2021
(d) 10 U.S.C. §2546a
(e) 10 U.S.C. §2547
(f) U.S. Navy Regulations 1990
(g) 10 U.S.C. §2546
(h) SECNAVINST 5430.7S
(i) SECNAVINST 5400.15D
(j) 10 U.S.C. §2222
(k) DoD Instruction 5000.75 of 2 February 2017
(l) DoD Instruction 5000.74 of 10 January 2020
(m) 10 U.S.C. §2302
(n) MIL-STD-882E of 11 May 2012
(o) MIL-STD-464C of 1 December 2010
(p) DoD Directive 2060.01 of 23 June 2020
(q) SECNAVINST 5710.23D
(r) 10 U.S.C. §8669c
(s) ASN (RD&A) Memo, 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 14 March 2014
(v) SECNAVINST 5239.3C
(w) SECNAVINST 4105.1D
(x) SECNAVINST 5200.42
(y) SECNAVINST 5200.44
(z) 10 U.S.C. §2399
(aa) DoD Directive 1322.18 of 3 October 2019
(ab) DoD Instruction 5000.67 of 1 February 2010
(ac) SECNAVINST 7110.12
(ad) Defense Acquisition University, Glossary of Defense Acquisition Acronyms and Terms
(ae) DoD Directive 5105.84 of 14 August 2020
(af) DoD Instruction 5000.80 of 30 December 2019
(ag) DODM 5000.04, Cost and Software Data Reporting of 7 May 2021
(ah) DoD Directive 5000.71 of 24 August 2012
(ai) MCO 3900.17
(aj) SECNAVINST 5090.8B
(ak) 10 U.S.C. §8669b
(al) 10 U.S.C. §2446a
(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 Volumes 1-12, DoD Supply Chain Materiel Management Procedures, dates vary by volume
(ap) Section 803 of Public Law 113-66
(aq) E.O. 12114
(ar) 42 U.S.C. §4321 et seq
(as) SECNAVINST 5100.10K
(at) OPNAVINST 5100.23H
(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 Instruction 3222.03 of 25 August 2014
(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) 10 U.S.C. §2430
(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 30 October 2021
(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) 10 U.S.C. §2366b
(bv) 29 U.S.C. §651 et seq
(bw) 33 U.S.C. §§1905-1915
(bx) 42 U.S.C. §7401
(by) 33 U.S.C. §§1251-1387
(bz) 16 U.S.C. §1531

(ca) 16 U.S.C. §1361-1423h
(cb) OPNAVINST 11010.20H
(cc) MCO P11000.5G
(cd) SECNAVINST 11011.47D
(ce) DoD Directive 4270.05 of 12 February 2005
(cf) 10 U.S.C. §2382
(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
(cj) DoD Instruction 5000.87 of 2 October 2020
(ck) DoD Instruction 5000.81 of 31 December 2019
(cl) SECNAVINST 5100.14E
(cm) DoD Instruction 5200.39 of 28 May 2015
(cn) DoD Instruction 5200.44 of 5 November 2012
(co) 10 U.S.C. §2366c
(cp) 32 CFR Part 775
(cq) DoD Manual 4715.06, Volumes 1-4
(cr) National Aerospace Standard Hazardous Materials Management Program (NAS 411)
(cs) National Aerospace Standard Hazardous Materials Target List (NAS 411-1)
(ct) COTF Cyber Survivability Test and Evaluation Handbook, Version 1, of 26 May 2020
(cu) SECNAVINST 5230.14
(cv) Department of the Navy Business Capability Acquisition Cycle Interim Guidance, Version 1.0, of 25 January 2019
(cw) OPNAVINST 5000.53A
(cx) Section 804 of Public Law 114-92
(cy) 10 U.S.C. §2302d
(cz) 10 U.S.C. §2466
(da) DoD Instruction 5000.88 of 18 November 2020
(db) DoD Instruction 5000.85 of 6 August 2020
(dc) SSPC: The Society for Protective Coatings (SSPC) and NACE International (NACE) Standard SSPC-CPC I/NACE SP21412-2016, Corrosion Prevention and Control Planning
(dd) Corrosion Prevention and Control Planning Guidebook for Military Systems and Equipment, Spiral 4, of 4 February 2014
(de) SECNAV M-5239.1
(df) OPNAVINST 5239.1D
(dg) U.S. Navy Risk Management Framework Process Guide
(dh) MCO 5239.2B

(di) U.S. Marine Corps Enterprise Cybersecurity Manual 018, Marine Corps Assessment and Authorization Process (MCAAP), of 28 July 2017 (NOTAL)
(dj) NIST Special Publication 800-53 Revision 5, Security and Privacy Controls for Information Systems and Organizations of September 2020
(dk) DoD Instruction 5000.02T of 7 January 2015
(dl) DASN (RDT&E) Memo, Corrected: Risk Assessment and Acceptance of Impulse Noise Hazards of 180 dB or Below of 18 October 2019
(dm) DoD Cybersecurity Test and Evaluation Guidebook of 10 February 2020
(dn) DoD Instruction 5000.83 of 20 July 2020
(do) SECNAVINST 4440.34
(dp) OPNAVINST 3110.18U
(dq) 10 U.S.C. §139
(dr) OPNAVINST 5239.4
(ds) SECNAVINST 5510.36B
(dt) Section 839 of Public Law 115-91
(du) DoD Dictionary of Military and Associated Terms, of November 2021
(dv) DOT&E TEMP Guidebook 3.1
(dw) MCO 3120.12A
(dx) MARFORCOM 061157Z of June 2018 (NOTAL)
(dy) Implementing Capabilities Based Test and Evaluation: A Guide for Test Professionals
(dz) USFF/COTF 261726Z of February 2019 (NOTAL)
(ea) DTM 19-007
(eb) DON T&E Manual (NOTAL)
(ec) DoD Data Strategy of 30 September 2020
(ed) DON Implementation Plan of the DoD Data Strategy (I-Plan) of 23 October 2020
(ee) USD (A&S) Memo, Data Transparency to Enable Acquisition Pathways of 15 June 2020
(ef) Defense Acquisition Guide
(eg) 10 U.S.C. §2433
(eh) 10 U.S.C. §2432
(ei) ASN (RD&A) Information System User Guide
(ej) Adaptive Acquisition Framework Document Identification (AAFDID)
(ek) 10 U.S.C. §8025
(el) DON Budget Guidance Memoranda (NOTAL)
(em) DoD Instruction 5000.73 of 13 March 2020
(en) DoD Instruction 5000.89 of 19 November 2020

(eo) DoD Instruction 8580.1 of 9 July 2004
(ep) MCSCO 5000.8
(eq) DoD Directive 2311.01 of 2 July 2020
(er) Section 103 of Division S of Public Law 116-260
(es) ASN (RD&A) Memo, Rapids Acquisition Processing Update, of 1 August 2007
(et) DoD Instruction 4245.15 of 5 November 2020
(eu) DoD Instruction 5000.90 of 31 December 2020
(ev) Section 800 of Public Law 116-92
(ew) SECNAVINST 5200.43A
(ex) SECNAVINST 5200.44
(ey) SECNAVINST 5200.45
(ez) DoD 7000.14-R, Volumes 1-16, dates vary by volume
(fa) FAR 37.101
(fb) FAR 37.502
(fc) FAR 2.101
(fd) FAR 35.017
(fe) DoD Instruction 5000.77 of 31 January 2018
(ff) OPNAVINST 4700.7M
(fg) NMCARS 5237.192
(fh) NMCARS 5206.303-1
(fi) NMCARS Part 5237
(fj) Naval Data Management Concept of Employment (CONEMP) of 28 August 2020
(fk) DoD Instruction 8320.02 of 5 August 2013
(fl) DoD Instruction 8320.07 of 3 August 2015
(fm) DSD memo, Actions to Enhance and Accelerate Enterprise Data Management of 10 December 2020
(fn) SECNAVINST 5200.46
(fo) Implementing Capabilities Based Test and Evaluation: A Guide for Test Professionals (NOTAL)
(fp) DoD Instruction 5025.01 of 1 August 2016
(fq) 10 U.S.C. §2320
(fr) 10 U.S.C. §2321
(fs) 10 U.S.C. §2439
(ft) Section 814 of Public Law 110-417 (as amended)
(fu) SD-22 Diminishing Manufacturing Sources and Material Shortages (DMSMS) Guidebook
(fv) 10 U.S.C. §2334
(fw) 10 U.S.C. §2439
(fx) NAVSO P-10002 (NOTAL)
(fy) DoD Directive 4715.21 of 14 January 2016
(fz) 10 U.S.C. §2337a
(ga) 10 U.S.C. §2446b

(gb) Commander, Pacific Fleet OPORDER 201-19 (NOTAL)
(gc) Weapon System Facilities and Infrastructure Planning (WSFIP) Consistency Guide (NOTAL)
(gd) MIL-HDBK-828C of 31 March 2017
(ge) OPNAVINST 5420.118
(gf) DoD Instruction 5000.86 of 11 September 2020
(gg) DON CDO Memo, Implementation of Data Service Interface Specifications, of 21 January 2021
(gh) 10 U.S.C. §2443
(gi) OPNAVINST 1500.76D
(gj) NAVSO P-3692
(gk) 10 U.S.C. §2911
(gl) DoD Instruction 5000.82 of 21 April 2020
(gm) OPNAVINST 3811.1F
(gn) OPNAVINST 3880.6B
(go) SECNAV M-5214.1
(gp) 10 U.S.C. §8014
(gq) 10 U.S.C. §8016
(gr) NMCARS Subpart 5207.1
(gs) 10 U.S.C. §2358
(gt) MIL-STD-881E of 6 October 2020
(gu) FIPS-199, Standards for Security Categorization of Federal Information and Information Systems
(gv) DON CIO Memo, Department of the Navy Cloud Policy, of 7 December 2020
(gw) SECNAVINST 2400.2A
(gx) DoD Instruction 4140.67 of 26 April 2013
(gy) DoD Instruction 3150.09 of 8 April 2015
(gz) DoD Instruction 5000.91 of 4 November 2021
(ha) NMCARS 5204.73
(hb) ASN (RD&A) Memo, Implementation of Enhanced Security Controls on Select Defense Industrial Base Partner Networks of 28 September 2018
(hc) ASN (RD&A) Memo, Updated Implementation of the DIB Memo of 6 September 2019

**RESPONSIBILITIES**

1. Purpose. This enclosure supplements the DAS and the AAF with DON specific responsibilities.

2. Acquisition and Acquisition-Related Responsibilities. ASN (RD&A), Chief of Naval Operations (CNO), Commandant of the Marine Corps (CMC), Systems Command (SYSCOM) Commanders, Program Executive Officers (PEOs), Direct Reporting Program Managers (DRPMs), and Program Managers (PMs) will ensure performance of the responsibilities, functions, and tasks specified in this instruction, reference (i), and other applicable DoD policy. Reference (i) documents and describes the duties and responsibilities of, and relationships for, all DON Research and Development, Acquisition, Life-Cycle Management, and Sustainment program efforts.

a. SECNAV

(1) Establish, through planning and programming guidance, specific direction to the Service Acquisition Executive (SAE) on annual priorities for acquisition, including research, development, analysis, testing, acquisition, and sustainment.

(2) Maintain general oversight of the DON acquisition enterprise and provide direction to the SAE as appropriate.

b. ASN (RD&A)

(1) ASN (RD&A) serves as the SAE and is responsible for the management of the DAS within the DON pursuant to reference (g). ASN (RD&A) exercises control over the DON's implementation of the DAS and ensures it operates in an efficient, cost-effective, and customer-oriented manner.

(2) IAW reference (gq), the principal duty of ASN (RD&A) is the overall supervision of research, development, acquisition, and sustainment (including maintenance) matters of the DON. Reference (h) and paragraph 0311(2)(a) of reference (f) assign responsibility to ASN (RD&A) for all aspects of research, development, and acquisition within the DON, except for the development of military requirements and the Operational Test and Evaluation (OT&E) of military capabilities.

(3) Develop, document, and implement a risk-based framework for identifying leading indicators of program risk, including risks to expected cost, schedule, and performance, and notifying and briefing senior DON leaders, including the Secretary and Under Secretary of the Navy.

c. CNO/CMC

(1) IAW reference (gp) and paragraph 0405(3) of reference (f), the CNO is responsible for the development of military requirements and for the OT&E of military capabilities for the Navy. IAW reference (gp) and paragraph 0505(2) of reference (f), the CMC is responsible for the development of military requirements and for the OT&E of military capabilities for the Marine Corps. CNO and CMC are responsible for the management and operation of the Joint Capabilities Integration and Development System (JCIDS) and for the OT&E of acquisition programs for the Navy and the Marine Corps, respectively.

(2) The CNO and CMC shall assist ASN (RD&A) in the performance of the acquisition-related functions specified in subsection (a) of reference (e).

**DEPARTMENT OF THE NAVY URGENT NEEDS PROCESS AND URGENT CAPABILITY ACQUISITION**

1. Purpose. This enclosure supplements reference (ck), defines the DON Urgent Needs Process (UNP), establishes policy, provides procedures, and assigns responsibilities for acquisition programs that provide capabilities to fulfill Urgent Operational Needs (UON) and other quick reaction capabilities that can be fielded in less than two years.

2. General. Programs using the urgent capability acquisition pathway must not exceed $525 million in Research, Development, Test and Evaluation (RDT&E), or $3.065 billion for procurement in Fiscal Year (FY) 2020 constant dollars. The DON UNP typically employs the Urgent Capability Acquisition pathway to rapidly develop and deliver capabilities to resolve UONs.

3. Applicability. This instruction applies to DON acquisition programs and DON organizations that utilize the Urgent Capability Acquisition pathway and the DON UNP.

4. Definitions

a. Joint Emergent Operational Need (JEON). UONs that are identified by a Combatant Command (CCMD), Chairman Joint Chiefs of Staff (CJCS), or Vice Chairman Joint Chiefs of Staff (VCJCS) as inherently joint and impacting an anticipated contingency operation. See reference (c). JEONs are generally validated by the Joint Requirements Oversight Council (JROC) and typically deliver capabilities to forces not yet actively involved in combat.

b. Joint Urgent Operational Need (JUON). UONs that are identified by a CCMD, CJCS, or VCJCS as inherently joint and impacting an ongoing contingency operation. See reference (c). JUONs are generally validated by the Joint Staff J8 and typically deliver capabilities to forces actively involved in combat.

c. Urgent Capability Acquisition. One of six pathways in the DoD AAF in which, due to operational urgency, the normal acquisition, product support and sustainment processes are aggressively streamlined. The imperative is to quickly deliver useful capability to the warfighter in a timely manner.

d. Urgent Needs Process. An event-driven DON process that streamlines and synchronizes abbreviated requirements and resourcing, and acquisition processes to address mission-critical warfighting capability gaps more rapidly than the deliberate processes permit. The UNP typically uses the Urgent Capabilities Acquisition pathway to deliver interim solutions in a timeframe acceptable to operating force commanders.

e. Urgent Operational Needs. Capability requirements identified as impacting an ongoing or anticipated contingency operation. If left unfulfilled, UONs result in capability gaps potentially resulting in loss of life or critical mission failure. When validated by a single DoD Component, these are known as DoD Component UONs. DoD Components, in their own terminology, may use a different name for a UON. See reference (c).

5. Policy

a. It is the DON's highest priority to provide Sailors and Marines involved in conflict or preparing for imminent contingency operations with the capabilities needed to overcome unforeseen threats, achieve mission success, and reduce risk of casualties, as described in reference (ah).

b. The DON shall employ the UNP and the Urgent Capability Acquisition pathway per reference (ck) to respond to UONs as well as to needs assessed by the Navy or Marine Corps that require immediate actions to mitigate current threats, to offset future threats, or to leverage advances in technology, that will enable naval forces to maintain their operational and technological superiority, over potential adversaries.

c. Subject to applicable statutes, regulations, and Department of Defense Instructions (DoDI), the UNP and Urgent Capability Acquisition processes will be optimized for speed and accept reasonable risk with regard to cost, performance and other doctrine, organization, training, materiel, leadership and education, personnel, and facilities considerations. Authority will be delegated to the lowest possible level to promote speed of decision-making and execution as described in reference (ck). Senior leaders will ensure that staffing processes do not inordinately delay the fielding of critical capabilities.

d. To the extent possible, actions to resolve UONs and other mission-critical capability gaps will be accomplished by using parallel, rather than sequential, processes to refine and prioritize requirements, execute rapid acquisition actions, and allocate resources on a more expedited timetable than the deliberate Planning, Programming, Budgeting and Execution (PPBE) processes.

6. Procedures. The UNP includes three phases: Needs Identification and Certification; Solution Strategy Development and Resourcing; and Solution Execution. The UNP ends with the replacement of an interim solution by an enduring capability or upon the decision to terminate the interim solution by CNO/CMC.

a. Needs Identification and Certification. This phase begins with the identification of an UON via a Service chain of command or upon assignment by the Executive Director, Joint Rapid Acquisition Cell (JRAC), via ASN (RD&A), IAW reference (ah). The UON will be certified by the Navy Component Commander (NCC) supporting a CCMD for a fleet identified urgent need or the supported CCMD-level Marine Corps component commander. For Navy-specific needs, Commander, US Fleet Forces Command will endorse urgent needs requests before they are evaluated for inclusion in the UNP. For DON urgent needs, the Service component commander conducting the combat or contingency operation is responsible for ensuring each meets the definition of urgency and cannot be solved internally with organic resources. CNO and CMC may also establish procedures to employ the UNP to address mission-critical capability gaps assessed by the Navy or Marine Corps as requiring immediate action.

b. Solution Strategy Development and Resourcing. This phase begins upon the receipt of a certified Navy or Marine Corps UON; upon assignment of a JUON, JEON, or Warfighter Senior Integration Group (W-SIG) interest item via ASN (RD&A); or upon identification of a Service-level mission-critical capability gap. The Services establish a cross-functional team to refine the details of the capability gap, support the PM's course of action analysis as described in reference (ck) (if not already performed), and develop a solution strategy that identifies one or more interim solution options that can be delivered in a timeframe acceptable to the supported commander. It incorporates both materiel and non-materiel elements and may

include longer-term solutions. The solution strategy shall include: a cost estimate for potential materiel and non-materiel elements of the solution; funding source(s) and potential offsets with respect to other capabilities and available resources; and cost implications for sustainment, including transition to the deliberate process. The solution strategy defines the quantities of each materiel solution element and level of Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, Facilities, and Policy (DOTMLPF-P) support provided with each element. The solution mix shall optimize the balance between rapid response, technical development, and desired capability. Pre-development phase activities of the Urgent Capability Acquisition pathway are typically performed during this UNP phase. This phase ends with the approval of an authoritative requirements memorandum.

c. Solution Execution. This phase begins with receipt of an authoritative requirement memorandum by a PEO, SYSCOM Commander, or DRPM, and is typically executed via the development, production and deployment, and Operation and Support (O&S) phases of the Urgent Capability Acquisition pathway per reference (ck). This phase ends with the replacement of the interim solution by an enduring capability or upon the decision to terminate the interim solution by CNO/CMC.

7. Responsibilities

a. ASN (RD&A)

(1) Represents the DON at the W-SIG, per reference (ah).

(2) Represents the DON to the Executive Director, JRAC per reference (ck).

(3) Assigns the MDA and PM for urgent capability programs in response to JUONs, JEONs, or W-SIG identified urgent issues assigned to the DON (unless MDA has been reserved by the DAE).

b. CNO and CMC

(1) Establish procedures to rapidly anticipate, identify, validate, and prioritize UONs and other mission-critical capability gaps.

(2) Align the requirements and resourcing communities, and coordinate with the acquisition community, in order to rapidly develop and deliver solutions within two years.

(3) Support the Joint Staff and the Director, JRAC in validating, and assigning responsibilities for the resolution of, JUONs, JEONs, and other W-SIG urgent issues.

(4) Provide an authoritative requirements memorandum in order to initiate development of capabilities under the Urgent Capability Acquisition pathway.

(5) Appoint an official to conduct a disposition analysis for each solution to a UON or other mission-critical capability gap IAW reference (ck).

(6) Maintain records of all actions in the UNP from Needs Identification through disposition decisions and make them available to ASN (RD&A) to enable process improvement, audits, and investigations.

(7) Ensure appropriate resourcing strategies are provided in order to support the development and delivery of solutions to UONs and other mission-critical capability gaps.

c. PEOs, SYSCOM Commanders, and DRPMs

(1) Serve as the MDA for urgent capability acquisition programs within their cognizance that respond to DON Component UONs, unless ASN (RD&A) specifically designates a different MDA.

(2) Assign the PM and program office for urgent capability acquisition programs for which the PEO, SYSCOM Commander, or DRPM is the MDA.

(3) Support the development of solution strategies in order to resolve UONs and other quick reaction capabilities that can be fielded in less than 2 years.

(4) As MDA, provide execution direction for urgent capability acquisition programs via Acquisition Decision Memorandums (ADM) as described in reference (ck).

(5) Report ADM, contract award, first delivery, disposition, and other key elements of information to both ASN (RD&A) and CNO/CMC.

**MIDDLE TIER OF ACQUISITION**

1. Purpose. This enclosure supplements reference (af) with Middle Tier of Acquisition (MTA) guidance for DON acquisition programs under reference (cx).

2. Decision Authority (DA)

a. For any MTA program or project that exceeds the Acquisition Category (ACAT) I threshold, ASN (RD&A) will be the Acquisition Decision Authority (ADA). ASN (RD&A) will obtain prior Under Secretary of Defense, Acquisition and Sustainment (USD (A&S)) approval to initiate such MTA IAW reference (af).

b. For all other MTA programs or projects, the cognizant PEO, DRPM, or Commander of the SYSCOM shall be the ADA. The PEOs, DRPMs, and SYSCOM Commanders are authorized to designate and initiate such MTA programs and projects that meet the criteria for approval in reference (af).

3. Designation. An MTA program or project shall be designated in an ADM approved by the prospective ADA. For programs and projects with an ADA other than ASN (RD&A), the ADM shall also be provided to ASN (RD&A).

4. Program Initiation. PMs shall coordinate with appropriate stakeholders in the requirements and acquisition communities prior to the initiation of a MTA. MTA entrance documentation with accompanying approval authorities are documented in Table 4-1. Programs shall develop a total program cost estimate in order to support the appropriate funding resources.

Table 4-1. MTA Entrance Documentation Deliverables.

| Documentation | Approval Authority | Entrance Requirement | |
|---|---|---|---|
| | | Major System[1] | Non-Major[2] System |
| ADM | - ADA | X | X |
| Approved Requirement | - Responsible DCNO or DC, CD&I | X | |
| Acquisition Strategy (AS) | - ADA | X | |

| | | | |
|---|---|---|---|
| *Capability Documentation | - Responsible DCNO –or- DC, CD&I | | X |
| Cost Estimate | - ADA | X | |
| **Life-Cycle Sustainment Plan (LCSP) | - ADA | X | |

DCNO – Deputy Chief of Naval Operations
DC, CD&I – Deputy Commandant for Capability Development & Integration
*Capability Documentation is not uploaded to Acquisition Information Repository (AIR).
**LCSP only needed for Rapid Fielding, unless a Rapid Prototyping program exceeds the ACAT I threshold. LCSP is statutory for all MTA programs that exceed the ACAT I threshold, and LCSPs for such programs must comply with the requirements of reference (be).
1 - Above threshold as defined pursuant to reference (cy).
2 - Equal to or below threshold as defined pursuant reference (cy).

5. Rapid Prototyping. The PM should review the documentation in Table 4-2 and make recommendations to the ADA to identify which documents best support project execution when utilizing the Rapid Prototyping pathway. Statutory documentation requirements, documentation required by the FAR, DFARS, or NMCARS, and the initiation documentation required for a particular MTA program by reference (af) or Table 4-1 above must be included. PMs should engage the operational test community as early as possible to support the required operational demonstration. Rapid Prototyping programs under OT or Live Fire Test and Evaluation (LFT&E) oversight, as determined by the Director of Operational Test and Evaluation (DOT&E), may have additional compliance requirements.

Table 4-2. Rapid Prototyping Documentation.

| Documentation | Elements to Address | Approval Authority |
|---|---|---|
| ADM | | ADA |
| Prototyping Plan | - Prototype AS<br>- Performance Goals<br>- Knowledge Points<br>- System Experimentation | ADA |

| | | |
|---|---|---|
| | and Assessment Plan<br>- Prototype Deployment Strategy | |
| Acquisition Plan (as required by FAR, DFARS, and NMCARS) | See content requirements in reference (gr) and associated Annexes | See reference (gr). |
| Cost Estimate | - Total cost applicable to the MTA to include any sustainment during the MTA phase | Cost Assessment and Program Evaluation (CAPE), or as delegated by CAPE for MDAP Equivalent<br><br>PM Approves, with support from SYSCOM Cost Organization |
| Capability Documentation | - Top Level Requirements Document –or-<br>- JEONS, JUONS, Service ONS –or-<br>- CDD or CPD | Responsible DCNO – or- DC, CD&I |
| MTS (Within 6 months of initiation) | - T&E Activities, Resources, Ops Demo plan, T&E Risks Assumed | ADA/DOT&E (for OT&E and LFT&E oversight only) |
| CDD - Capability Development Document<br>CPD – Capability Production Document<br>MDAP - Major Defense Acquisition Program<br>MTS – Master Test Strategy | | |

6. Rapid Fielding. The PM reviews the documentation in Tables 4-3 (statutory) and 4-4 (regulatory) and makes recommendations to the ADA to identify which documents will best support program execution when utilizing the Rapid Fielding pathway. Statutory documentation requirements, documentation required by the FAR, DFARS, or NMCARS, and the initiation documentation required for a particular MTA program by reference (af) or Table 4-1 above must be included. In order to optimize production and fielding timelines, the PM may tailor timelines for developing program documents that are not required for program initiation. Rapid

Fielding programs under oversight, as determined by the DOT&E, may have additional compliance requirements. PMs should engage the operational test community as early as possible.

Table 4-3. Rapid Fielding Documentation – Statutory.

| Documentation | Elements to Address | Approval Authority |
|---|---|---|
| AS (statutory for programs that exceed the major system (ACAT II) threshold) | - Acquisition Approach<br>- Benefit Analysis and Determination<br>- Business Strategy<br>- Contracting Strategy (including Contract Type)<br>- Cooperative Opportunities<br>- General Equipment (GE) Valuation<br>- Industrial Base Capability Considerations | ADA |
| Acquisition Plan (as required by the FAR, DFARS, and NMCARS) | See content requirements in reference (gr). May be combined with AS. | See reference (gr). |
| Core Logistics Determination/ Workload Estimate | May be summarized in AS. | ADA |
| Frequency Allocation | For all systems/equipment that use the electromagnetic spectrum while operating in the U.S. and its possessions. | DON CIO |
| Low-Rate Initial Production Quantity (statutory for major system programs) | Production Quantities will be addressed in ADM (see regulatory documentation table) | ADA |
| Post Implementation Review | Fulfilled by disposition decision to sustain Rapid Fielding program or transition to Program of Record | ADA |
| Cyber Security Strategy | Statutory for mission critical or mission essential IT systems; | DON CIO |

| | | |
|---|---|---|
| | required by reference (eo) and reference (gl) for all acquisitions of systems containing IT. | |
| MTS/Operational Test Plan | Statutory for programs on DOT&E oversight. See references (z) and (dq). | DOT&E |
| CCA Compliance | Statutory for all programs that acquire IT | DON CIO |
| PESHE and reference (ar)/reference (aq) Compliance Schedule | Not required for software programs with no hardware components | PM |
| CCA – Clinger Cohen Act Compliance<br>DON CIO – Department of the Navy Chief Information Officer | | |

Table 4-4. Rapid Fielding Documentation – Regulatory.

| Documentation | Elements to Address | Approval Authority |
|---|---|---|
| ADM | - Acquisition Decision<br>- Program Cost Estimate<br>- Rapid Fielding Quantities (fulfills Low-Rate Initial Production Quantity statute for major system programs)<br>- Schedule | ADA |
| Cost Estimate | - Total cost applicable to the MTA to include any sustainment during the MTA phase | CAPE, or as delegated by CAPE for MDAP Equivalent<br><br>PM Approves, with support from SYSCOM Cost Organization |
| IT Deployment Strategy | - IT & NSS Interoperability Cert. | DON CIO |

| | | |
|---|---|---|
| | - Spectrum Supportability Risk Assessment (SSRA)<br>- Bandwidth Requirement Review<br>- Cyber Security Strategy<br>- PPP<br>- Waveform Assessment Application | *Authority to Operate granted per reference (u). |
| Capability Documentation | - Top Level Requirements Document –or-<br>- JEONS, JUONS, Service ONS –or-<br>- CDD or CPD | Responsible DCNO –or- DC, CD&I |
| CONOPS | | Responsible DCNO –or- DC, CD&I |
| Course of Action Analysis | Replaces and serves as AoA | ADA |
| Defense Intel Threat Library | | DIA |
| MTS (Within 6 months of initiation)- | T&E Activities, Resources, Ops Demo plan, T&E Risks Assumed | ADA/DOT&E (for OT&E and LFT&E oversight only) |
| Operational Test Plan | | Service OTA |
| Operational Test Report | | Service OTA |
| System Engineering Strategy | | PM |
| Sustainment Strategy | Coordinate with appropriate resource sponsor | ADA |
| Training Systems Strategy | Coordinate with appropriate resource sponsor | PM |
| AoA – Analysis of Alternatives<br>CONOPS – Concept of Operations<br>DIA – Defense Intelligence Agency<br>IT – Information Technology<br>NSS – National Security System<br>OTA – Operational Test Authority<br>PPP – Program Protection Plan | | |

7. Tailoring. PMs will "tailor-in" reviews, assessments, and relevant documentation that results in an AS customized to the unique characteristics and risks of their program. PMs will comply with statutory requirements unless waived IAW applicable statutory waiver authority and regulatory requirements as appropriate.

8. Program Compliance Requirements. PMs will ensure their MTA programs comply with all statutory and regulatory requirements, including those set forth in reference (af). PMs will ensure all Program Identification Data (PID) is entered into the appropriate acquisition reporting system of record. The PID entry shall be for the current MTA program only and not any follow-on program or project. PMs shall also ensure that all required documents mentioned in Table 4-1, with the exception of the capability documentation, are uploaded to the AIR once the PID is published. ASN (RD&A) will verify all PID fields are entered correctly prior to approving submission for Office of the Secretary of Defense (OSD) publication. For any classified Approved Requirements, upload documents to https://www.dodtechipedia.smil.mil/AIR.

9. Operational Needs. In order to initiate MTA programs, each program shall be selected under a Merit Based Selection (MBS) framework. The MBS will review the warfighting problem, the overall capability required, and a solution trade space within which to prototype or field capability. The DON will initiate MTA programs based upon the following factors:

a. Rapid Prototyping

(1) Alignment with a high priority military capability need.

(2) A defined and manageable capability, cost, schedule, feasibility of success, and technical risk.

(3) Available and stable funding through the normal PPBE process, Above and Below Threshold Reprogramming, or through the use of the Rapid Acquisition Special Transfer Authorities.

(4) Opportunity to reduce Total Ownership Costs (TOC).

b. Rapid Fielding

(1) Continued alignment with a high priority military capability need.

(2) A defined and manageable capability, cost, schedule, concept of supportability, and technical risk for a designated number of fielded systems.

(3) Available and stable funding through the normal PPBE process, internal Above and Below Threshold Reprogramming, or through the use of the Rapid Acquisition Special Transfer Authorities.

(4) Opportunity to reduce TOC.

(5) A configuration of the solution that was demonstrated in an operationally relevant environment.

10. Demonstrating and Evaluating Performance. PMs shall work with the T&E community IAW reference (cz) to develop an MTS that documents the test strategy, test resources, and test risks being assumed to expedite capability delivery. The MTS culminates in the operational demonstration as required. While not specifically outlined in reference (af), the expected minimum Technical Readiness Levels (TRL) upon completion of MTA programs are TRL 7 for Rapid Prototyping and TRL 8 for Rapid Fielding.

11. Transitioning Programs. Programs determined by the ADA to transition to the Major Capability Acquisition (MCA) pathway shall follow the guidance under the appropriate reference (b), reference (db), and JCIDS process.

a. Rapid Prototyping. Projects may transition into the Rapid Fielding MTA pathway, into a new or existing acquisition program under the MCA pathway, or the residual capability can be sustained in the field. If the ADA and the capability requirement authority decide to continue to operate the initial rapid prototypes in the field, the PM will develop the appropriate sustainment package to support the items in the field until they are dispositioned.

b. Rapid Fielding. IAW reference (af), PMs will develop a plan for transitioning successful programs to operations and sustainment and, when applicable, to the MCA pathway. This plan will result in a transition plan, included in the AS, which provides a timeline for completion within two years of all necessary documentation required for transition, as determined by the ADA, after MTA program start.

12. Alignment to Total Capability. MTA rapid prototyping and rapid fielding program(s) can be sub-elements of delivering a total capability.

**MAJOR CAPABILITY ACQUISITION**

1. Purpose. This enclosure supplements reference (db) with DON-specific guidance for the MCA pathway. Wholly and majority National Intelligence Program-funded acquisition programs will be executed IAW Intelligence Community Policy.

2. General. Per reference (b), this pathway typically follows a structured analyze, design, develop, integrate, test, evaluate, produce, and support approach. Acquisition and product support processes, reviews, and documentation will be tailored based on the program size, complexity, risk, urgency, and other factors. Software-intensive components may be acquired via the Software Acquisition Pathway (SWP), with the outputs and dependencies integrated with the overall major capability pathway.

3. Acquisition Categories. For all DON acquisition programs, Acquisition Categorty (ACAT) I-III and Abbrieviated Acquisition Programs (AAPs), Table 5-1 of this enclosure supplements Appendix 3A, Table 1 of reference (db). Any increases to dollar thresholds in future issuances of reference (db) shall be deemed incorporated in this instruction. Programs designated as ACAT IVM and IVT prior to the issuance of this instruction shall retain their ACAT designation unless the program scope and baseline is increased.

Table 5-1. Description and Milestone Decision Authority for DON MCA Programs.

| ACAT | Definition | Milestone Decision |
|---|---|---|
| **ACAT I** | **MDAP[1] (reference (bg))**<br>o Dollar value for all increments of the program: estimated by the DAE to require an eventual total expenditure for research, development, and test and evaluation of more than $525 million in Fiscal Year (FY) 2020 constant dollars or, for procurement, of more than $3.065 billion in FY 2020 constant dollars<br>o MDA designation<br>o MDA designation as special interest[3] | ACAT ID: USD (A&S)<br>ACAT IC: ASN (RD&A)<br>ACAT IB[2]: ASN (RD&A) |

| | | |
|---|---|---|
| **ACAT II** | **Does not meet criteria for ACAT I**<br><br>**Major system (reference (cy))**<br><br>o Dollar value for all increments of the program: estimated by the DoD Component head to require an eventual total expenditure for research, development, and test and evaluation of more than $200 million in FY 2020 constant dollars, or for procurement of more than $920 million in FY 2020 constant dollars<br><br>o MDA designation (reference (m)) | ASN (RD&A) or the individual designated by ASN (RD&A) |
| **ACAT III** | **Does not meet criteria for ACAT I or II.**<br><br>o Dollar value for all increments of the program : estimated by the DoD Component head to require an eventual total expenditure for research, development, and test and evaluation of ≥ $75 Million but ≤ $200 Million in FY 2020 constant dollars; or Procurement total expenditures ≥ $250 Million but ≤ $920 Million in FY 2020 constant dollars | PEO, DRPM, SYSCOM Commander or Individual designated by the cognizant PEO, DRPM, or SYSCOM Commander.<br><br>*In commands where ASN (RD&A) has approved Portfolio Managers (PfMs), they may serve as MDAs |
| **AAP** | **Does not breach ACAT III dollar thresholds**<br><br>• Dollar value for all increments of the program estimated to require:<br>o RDT&E total expenditures < $75 Million in FY 2020 constant dollars; and<br>o Procurement total expenditures < $250 Million in FY 2020 constant dollars | PEO, DRPM, SYSCOM Commander or Individual designated by the cognizant PEO, DRPM, or SYSCOM Commander.<br><br>*In commands where ASN (RD&A) has approved PfMs, they may serve as MDAs |

1. Unless designated an MDAP by the Secretary of Defense, Automated Information System (AIS) programs, Defense Business System (DBS) programs, and programs or projects carried out using rapid prototyping or fielding procedures pursuant to reference (cx), do not meet the definition of an MDAP.

2. ACAT IB DA is assigned pursuant to reference (bg). Paragraph 3A.2.b. of reference (db) provides DoD implementation details.

3. The 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 (SoS), or a joint program. Programs that already meet the MDAP thresholds cannot be designated as Special Interest.

4. Major Defense Acquisition Programs (MDAPs). For MDAPs, per reference (e):

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

b. 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.

c. 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.

d. 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.

5. Program Designation

a. All MCA programs will be assigned an ACAT or AAP designation based on the criteria in Table 5-1 and the following:

(1) The cognizant PEO, SYSCOM Commander, DRPM, or the PM 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 PM obtains AAP requirements approval IAW paragraph 9.a below.

(2) When the cost estimate for a proposed program exceeds any MDAP dollar threshold, the cognizant PEO (or equivalent) will submit the MDAP designation request to ASN (RD&A).

(3) When the cost estimate for a proposed program exceeds the ACAT II threshold, the cognizant PEO (or equivalent) will submit an ACAT II designation request to ASN (RD&A) or, if ASN (RD&A) has delegated designation authority, to the individual designated by ASN (RD&A).

(4) When the cost estimate for a potential program is consistent with an ACAT III or AAP designation, the PM 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). If there is no cognizant PEO, DRPM, or SYSCOM Commander, the PM will submit an ACAT III 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.

(5) 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 (db). USD (A&S) or ASN (RD&A) may assign Special Interest ACAT I designations to programs not expected to exceed any MDAP dollar threshold.

(6) 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-III or AAP designation will document the program designation in an ADM. Approval of an ACAT I-III or AAP program designation does not mean the program has reached program initiation.

6. DA. MDA assignments for DON MCA pathway programs will be consistent with Table 5-1. The DA for an ACAT I-III program will also be referred to as the MDA throughout this instruction.

7. Program Initiation. A Materiel Development Decision (MDD) (or the functional equivalent), is a prerequisite to any ACAT I-III program's or AAP's entry into the acquisition system.

a. The MDA may authorize any ACAT I-III program's entry into the 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 (16), the MDA may not approve an MDD (or the functional equivalent), without concurrence from the CNO or CMC, as appropriate.

8. Program Redesignation

a. The PM will prepare and submit to the appropriate MDA, 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 5-1 for a higher or a lower ACAT designation or AAP designation.

b. IAW reference (db) 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 5-1 criteria for ACAT I designation, and will provide the requisite information to USD (A&S). ASN (RD&A) will assign an ACAT I designation to that program, as appropriate.

c. The PM 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 ACAT I designation. After ASN (RD&A) concurrence, ASN (RD&A) will forward this notice to USD (A&S).

9. ACAT Program Compliance Requirements. PMs shall ensure that programs comply with statutory and regulatory requirements identified in Appendix 3B of reference (db). Per reference (db), statutory requirements must be satisfied unless the statute allows the requirement to be waived, and regulatory requirements will follow a "tailored-in" approach.

10. AAP Compliance Requirements

a. AAPs will not be initiated without appropriate phase specific funding from the resource sponsor and a capabilities document that is validated at an appropriate level (e.g., Resources and Requirements Review Board (R3B), Naval Capabilities Board (NCB), or Marine Requirements Oversight Council (MROC) memorandum). AAPs will comply with PPBE processes, configuration management requirements, and applicable reporting procedures. See Table 5-1 for AAP details.

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, PMs for AAPs will prepare the following program documents: Cost Analysis Requirements Description (CARD); estimate of life-cycle cost; tailored Manpower, Personnel, and Training (MPT) Plan; tailored AS; SYSCOM-specific T&E strategy/TEMP (as appropriate); and tailored system safety program to identify Environment, Safety, and Occupational Health (ESOH) hazards, per reference (n). In addition, if the AAP uses the electromagnetic spectrum, PMs will conduct a tailored analysis (e.g., a SSRA) of the system's ability to operate in the intended electromagnetic environment per reference (o).

d. PMs for AAPs that acquire IT will comply with any applicable cybersecurity, IT registration, and CCA requirements. Cybersecurity requirements are listed in the Cybersecurity Enclosure. IT and CCA requirements are listed in Enclosure 13.

11. First Ship in Shipbuilding Program Report. IAW reference (r), the First Ship in Shipbuilding Program Report and associated certifications are required to be submitted by Secretary of the Navy (SECNAV), or designee, to the congressional defense committees at least 30 days prior to the approval of the start of construction of the first ship for any major shipbuilding program.

12. Senior Technical Authority (STA) for Naval Vessel Classes. ASN (RD&A) must designate IAW reference (ak), an STA for each class of naval vessel at or before the first of the following: Milestone A approval, an approval to enter into Technology Maturation and Risk Reduction (TMRR), or an approval to enter into a subsequent DoD or DON acquisition phase.

13. Shipbuilding Unique Considerations

a. Reference (db) provides that shipbuilding programs can be tailored by measures such as combining development and initial production investment commitments and a combined Milestone B and C.

b. If a shipbuilding program does not include a Milestone A decision then requirements development shall be sufficiently mature prior to proceeding with preparation for and conduct of Milestone B.

c. Program tailoring will ensure all statutory reporting, decisions, and sustainment requirements are satisfied by utilizing Gate reviews, in-progress reviews, or other program events, including those typically required at Milestone C. Program tailoring shall include timing of planned Initial Operational Test and Evaluation (IOT&E).

d. Shipbuilding program reviews and decisions might not occur in the same sequence as other MDAPs, for example, Preliminary Design Reviews (PDR) might not occur prior to Milestone B. Program tailoring shall describe the timing of these program reviews and decision points, as well as any required waivers (e.g., national security waiver of the PDR requirement and certification in reference (bu)).

e. When appropriate, the reporting requirements of reference (co) shall be satisfied prior to award of the second ship construction contract.

f. LFT&E is required by statute for covered systems, including ship programs. Alternatives to Full-Up System Level (FUSL) LFT&E, such as Modeling and Simulation (M&S) or component testing may be considered when determining the best LFT&E approach for shipbuilding programs. When this is the case, ship programs must submit an Alternative LFT&E Strategy (LF-TES) to

DOT&E prior to Milestone B. This alternate strategy will provide the basis for a FUSL testing waiver. More details on this process are discussed in Enclosure 10 of this instruction.

14. 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-III programs and AAPs in a reporting status.

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

(2) A program remains in reporting status unless it is cancelled or is approved for entry into non-reporting status IAW paragraph 14 of this enclosure.

(3) The PM may request approval from the Deputy Assistant Secretary of the Navy for Acquisition Policy and Budget (DASN (APB)) for the program's entry into a non-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 a non-reporting status, the program will no longer be subject to RDAIS acquisition reporting requirements.

(5) If a program is divided into blocks or increments, each active block or increment will report separately in RDAIS. Requests for non-reporting status for a block or increment will be IAW Paragraph 15.

b. DASN (APB) is the functional sponsor for RDAIS.

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

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

e. The PM for any ACAT I-III program or AAP will ensure that DASN (APB) is notified in writing of:

(1) The ACAT or AAP designation (or redesignation).

(2) The program's entry into the acquisition process after the DA authorizes it.

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

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

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

15. Non-reporting Programs for Acquisition

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 PM may request that the program be removed from the DON Reporting ACAT I-III programs and AAPs listing. DASN (APB) will approve or deny the request after consultation with appropriate stakeholders. If the request is approved, the program will enter into a non-reporting status for acquisition.

b. Until disposal, all DON managed ACAT I-III programs and AAPs in a non-reporting status for acquisition will continue to have assigned PMs. The PM assigned will serve as the single point of accountability for the life-cycle management of the system that has been acquired under the program, including cybersecurity, until the disposal of the system at the end of its useful life.

c. The PM for a non-reporting program will ensure that its execution remains within the approved program baseline thresholds. The PM also will ensure that the program documents

for an inactive program are kept up to date. For example, the LCSP, including its sections addressing the AS, Cybersecurity Strategy (CSS), and IP strategy, for a non-reporting program is required to be updated when there are changes to the Product Support Strategy (PSS), or every five years, whichever occurs first. Additionally, changes to the program's AS shall be documented as appropriate and approved by the MDA.

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 entered non-reporting status, 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 reporting status.

e. New, improved capability, or capability modifications for a system, regardless of whether additional quantities are procured, will not be acquired under a non-reporting program. The new or improved capability required will be managed as a separate program within an appropriate AAF pathway or as a part of the original program, which returns to a reporting program status and revises the APB and other appropriate program documentation to address the modification.

16. 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:

(1) Acquiring new or improved capability (e.g., upgrades, increments, engineering change proposals, pre-planned product improvements) that materially changes system performance (including but not limited to: capability, effectiveness, suitability, or survivability), or that would pose substantial risk of degrading fielded military capabilities if unsuccessful.

(2) Changing the system's operating environment (e.g., installing a system on a new ship class, changes in system architecture or migrating capability to the cloud).

b. Capability modifications shall be acquired within an appropriate AAF pathway, and only in response to a validated capabilities or requirements document that is appropriate to that pathway.

c. When a capability modification to any active ACAT I-III 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 within an appropriate AAF pathway. The new modification program will leverage the program documents approved for the existing program to the maximum extent practicable.

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

e. If managing a capability modification under an existing ACAT I-III program or AAP causes an anticipated cost increase which results in the program meeting the criteria for a higher ACAT designation, the PM will request a new ACAT designation for the program.

f. Capability modifications to fielded systems will analyze current system energy performance, feasibility of increasing energy efficiency and resilience of the system, reductions in the energy resupply rate pursuant to reference (s), and an Energy Supportability Analysis, if required, by reference (c).

17. Operational Test & Evaluation

a. For DON programs, the scope of OT&E will be determined by the cognizant OTA. For all programs on DOT&E OT&E Oversight, the adequacy of OT&E required will be approved by DOT&E.

b. For programs that are designated as ACAT IVM as of the issuance date of this instruction, their ACAT IVM exemption from OT is grandfathered until the next capability modification.

18. Alignment to Total Capability. MCA program(s) can be sub-elements of delivering a total capability.

**SOFTWARE ACQUISITION**

1. Purpose. This enclosure supplements references (cj) and (ev) to implement the SWP within the DON. This pathway is intended for timely acquisition of custom software capabilities developed for the Navy and Marine Corps.

2. General. The SWP drives the delivery of useful, relevant, and secure software capability to the naval user IAW the requirements of reference (cj). It enables use of modern software development practices such as Agile, Development, Security, and Operations (DevSecOps), and Lean through tightly coupled mission-driven software teams. Programs in this pathway leverage automated tools for development, integration, testing, and continuous cybersecurity certification to iteratively deploy software capabilities to the operational environment. Critical success factors throughout use of the SWP are ensuring active end-user engagement and leveraging readily available and secured enterprise IT services. There are two paths within the SWP, an applications path and an embedded software path, as defined in reference (cj).

3. Applicability. This enclosure applies to DON acquisition of software meeting the requirements set forth in reference (cj).

4. Roles and Responsibilities

a. Decision Authority. As defined in reference (cj) the DA will authorize initial and continual use of the SWP. This authorization shall be based on relevant data, metrics, and determination of whether the program has met its established annual roadmap and/or plan(s).

b. Program Manager. The PM must propose a tailored program structure to ensure that operational capability can be delivered not only within time constraints prescribed in the SWP, but also to increase speed of relevant operational capability delivery to meet warfighter needs. The PM will need to establish integrated working groups and teams at the appropriate levels with the end user community and other subject matter expert communities (e.g., cyber, test) to enable this to occur.

c. User Representative (Sponsor). The sponsor is the capability owner and may be referred to as such in the process.

Based on the ADM outlining direction for execution of the SWP program, the sponsor will determine the appropriate level for requirements-based decision-making. The sponsor will ensure the appropriate user representation and active engagement (to include ashore and afloat, operational command, etc.) throughout the program execution lifecycle, per the User Agreement, in order to improve the quality and operational utility/relevance of the software capability. The sponsor will also resource the program and identify the functional lead, in coordination with the Functional Area Manager.

5. Use of the Software Acquisition Pathway

a. Subject to the exclusions in paragraph 4.b, the authority to approve use of the SWP and DA for programs within the SWP are delegated to the PEO, DRPM, or SYSCOM Commander responsible for the program. Further delegation shall not go below the Senior Executive Service (SES)/Flag Officer (FO)/General Officer (GO) level within the cognizant PEO, SYSCOM, or DRPM organization. The decision shall be documented in an ADM that includes the rationale for using the SWP. The ADM must be submitted to the Office of the DASN APB and the Deputy Assistant Secretary of the Navy for Information Warfare. Data on programs designated into the SWP will also be reported to the USD (A&S) on a semi-annual basis per reference (cj).

b. The delegation in paragraph 4.a does not include the following programs, for which ASN (RD&A) will approve use of the SWP and will assign or retain DA for the program once approved:

(1) Any software acquisition program (or proposed software acquisition program) that itself has a total estimated expenditure across all appropriations of more than $500 million in FY 2020 constant dollars (inclusive of all increments of the program).

(2) Any embedded software acquisition program (or proposed embedded software acquisition program) upon which either: a MDAP depends in order to meet the requirements specified in the approved capabilities document for the MDAP; or a MTA program that exceeds the MDAP threshold depends in order to meet the middle tier program’s approved requirements.

(3) Any software acquisition program (or proposed software acquisition program) upon which a Business Systems Category (BCAT) I program depends in order to meet the BCAT I program's validated requirements (e.g., when using the SWP for custom-developed software).

c. Demonstration of the effectiveness and viability of capabilities for operational use must occur no later than one year after the date on which funds are first obligated to acquire or develop software under the SWP. For programs that transition to the SWP from another pathway, the measure of one year shall begin with the first obligation of funds occurring after the program is designated and approved to use the software pathway through an ADM. PMs should coordinate with the OTA early in the Planning Phase to define the scope of the Operational Capability Demonstration.

d. Use of the SWP requires continual ability to deliver operational capability on at least an annual basis. For programs using the embedded software path, this annual update applies after initial operational acceptance of the system in which the software is embedded and should be aligned with the associated system's schedule. Programs may not be granted approval to use the SWP or continue use of the SWP if: capability cannot be delivered to operations annually; there is lack of delivered value as evidenced through user feedback (at minimum through the Annual Value Assessment); or there is inadequate planning to execute or inadequate resourcing to meet requirements. Use of the SWP may also be disapproved or discontinued at the discretion of the DA. Programs can attempt to re-enter the SWP at any time.

e. Programs that transition into the SWP from sustainment or from other acquisition pathways must have an ADM detailing direction regarding management, tracking, and reporting of prior program capability and funding.

f. The SWP can be used in conjunction with other acquisition pathways (e.g., major capabilities acquisition). In such circumstances, it remains critical that the portion functioning under the SWP be able to deliver operational capability on at least an annual basis. This may require integrated roadmaps, product teams, program reviews, test strategies, etc., to ensure proper configuration control.

g. The acquisition of software services that are not considered to be professional services and are instead technology-based solutions requiring concept refinement, interaction with the DON IT environment, or interface/integration with other IT capability should generally be managed under a life-cycle acquisition pathway, such as the SWP.

h. The ADM which outlines justification for SWP use must detail any delegation(s), tailoring, scope of activities for relevant phase(s), time-boxing, direction regarding the value assessment approach, a documentation approach (to include submission timelines and review frequency), and any other relevant actions and expectations.

i. SWP programs are not subject to the Two-Pass Seven-Gate Governance procedures in enclosure (16), except in the case of embedded software programs for which the associated system program is subject to gate reviews. This does not exclude programs from being subject to program or portfolio reviews by ASN (RD&A) or the DA to track risk and delivery progress. When utilized, such reviews must be timely and purposeful, as reviews (i.e., code, test, engineering, etc.) will occur with regularity as part of the software development and delivery process.

6. Software Acquisition Pathway Phases. The SWP has two basic phases under which all activity occurs: planning and execution, and supports software development and deployment from both an application perspective (i.e., software on hardware or cloud infrastructure) and an embedded perspective (i.e., software insertion on a weapons platform).

a. Conducting a pilot/prototype in the Planning Phase may aid market research, development of a software acquisition strategy, and drive more informed entry into the Execution Phase.

(1) It is recommended that pilot/prototype activity last no more than six months, though they should operate for the duration approved by the decision authority.

(2) Pilots may also be conducted in the Execution Phase as part of ongoing market research, and capability or process performance evaluation and testing. Ability to fund pilot activity in the Execution Phase must be part of the overall SWP initiative or program cost estimate.

b. Planning Phase. The Planning Phase requires a draft Capability Needs Statement (CNS), which must be approved by the requirements sponsor (e.g. Fleet, Office of the Chief of Naval Operations (OPNAV)) prior to entrance into the Execution Phase. Existing programs with approved JCIDS or Business Capabilities Requirements Documents (BCRD) that transition into the SWP may continue to use them as the basis of requirements if they remain relevant. Phase Completion is minimally determined by:

(1) Completion of any actions in previously issued ADMs, unless actions are directed for the Execution Phase or have been otherwise cancelled.

(2) Readiness to execute a Minimum Viable Capability Release (MVCR) or Minimum Viable Product sprint-like activity.

c. Execution Phase. During the execution phase, activity occurs on a rapid cadence to enable delivery of relevant operational capability. It is critical to enter the phase with established user-centered integrated teams in place and initial MVCRs planned. Notably, MVCRs should be small in scope, as to get capability into the hands of users as rapidly as possible. Integrated teams must include qualified test representatives, as a build-test-deploy into operation cycle will begin to occur with frequent regularity, and a more traditional approach to sequential testing will likely be disadvantageous to meeting established timelines and user needs.

(1) During this phase, the PM (or equivalent) must determine how capability is sustained and set on a routine update schedule as it enters operation while new capability is simultaneously being delivered into operation.

(2) Entry into this phase is based on completion of entrance criteria and any additional relevant actions established during the Planning Phase in addition to the documentation requirements outlined in reference (cj) and briefly discussed in paragprah 7a.

7. General Management

a. Documentation. Minimum required documentation requirements are defined in reference (cj) and are discussed briefly in paragraphs a-b. Draft templates, their contents and descriptions are available through the DoD Software Community of Interest and through Defense Acquisition University (DAU), https://aaf.dau.edu/aaf/software/.

(1) The DA may also require additional artifacts or may direct tailoring of artifacts, the approach to which shall be outlined in an ADM. DON SWP programs will produce a MTS, due at the same time as the AS and supporting the cost estimate. The cost estimate will be developed IAW reference (em) and must consider the program's technical approach as described in other key documentation. The MTS is a tailored T&E strategy and will identify planned activities, resource requirements, and risks assumed. Iterative test engagement will be planned to support capability release at least annually. T&E details are in Enclosure 10.

(2) In order to ensure utility and relevancy of the software being delivered, the PM may choose to utilize any number of tools, documents, or artifacts such as backlogs, integrated testing plans, automated test scripts, capability management plans, etc. in addition to the minimum requirements outlined in reference (cj).

b. Metrics. A standard set of metrics is required for all SWP programs and should be collected during the execution phase. Metrics review should become part of the value assessment process. Automation in collection and reporting of metrics shall be prioritized. The metrics approach must be agreed upon with the DA at the time the program is designated into the SWP and will be matured over time. A minimum set of metrics must include:

(1) Average Deployment Frequency.

(2) Average and Minimum/Maximum Lead Time to commit code to production.

(3) Average Cycle Time.

(4) Change Failure Rate.

8. Alignment to Total Capability. SWPs can be sub-elements of delivering a total capability.

**DEFENSE BUSINESS SYSTEMS**

1. Purpose. This enclosure supplements reference (k) with DON-specific guidance for programs managed under the Business Capability Acquisition Cycle (BCAC).

2. General. The BCAC process applies to all DON DBS as defined in reference (j). The DoD and the DON have three categories (BCATs) of programs managed under the BCAC, which are based on the criteria in references (j) and (k). BCAT I, II, and III programs are defined in Table 1 of reference (k).

3. Acquisition Oversight. ASN (RD&A) will exercise MDA when indicated in Table 7-1 of this instruction and will establish acquisition policy and provide acquisition oversight for the business systems life-cycle within the DON.

4. MDA for Acquisition Categories. For all DON BCAT programs, Table 7-1 of this enclosure supplements Table 1 of reference (k) with respect to acquisition MDA. Any increases to dollar thresholds in future issuances of reference (j) or reference (k) shall be deemed incorporated in this instruction.

Table 7-1. Description and Milestone Decision Authority for DON Business System Category Programs.

| **Business System Categories ($ Across the FYDP)** | | **ACQ MDA** | **DoDI 5000.75 Description** |
|---|---|---|---|
| | | **Functions:** MDA | |
| **I** | > $250M | USD (A&S) unless delegated to ASN (RD&A) | Priority DBS (>$250M across current Future Years Defense Program (FYDP)), or OSD Office of the Chief Management Officer (OCMO) designation as priority DBS based on complexity, scope, and technical risk, and after notification to Congress |
| **II** | > $50M and <=$250M | PEO unless otherwise directed by ASN (RD&A) | Does not meet category I criteria, and any of the following: Covered DBS (>$50M across current FYDP), or OSD OCMO or Military |

| | | | |
|---|---|---|---|
| | | | Departments (MILDEP) CMO designation requiring CMO verification |
| **III** | <=$50M | PEO unless otherwise directed by ASN (RD&A) | Does not meet category II criteria |

5. Business System Category Designation

a. All DON BCAC DBS programs will be assigned a BCAT designation based on the criteria in Table 7-1 and the following procedures:

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

(a) A BCAT designation request will be prepared after the approval of a BCRD that validates the need for a new, improved, or continuing materiel solution.

(b) The BCAT designation is approved by the MDA, in coordination with appropriate CMO.

(2) BCAT levels are reviewed annually. Transitions, from lower to higher business system categories based on FYDP cost thresholds, become effective no later than when the President's Budget (PB) is submitted to Congress. However, for the DON, it is expected that all documentation should be appropriately submitted before the budget has been transmitted to OSD.

(3) Business systems will not transition automatically from higher to lower business system category even if FYDP costs no longer exceed thresholds for the higher category. The MDA, in coordination with the appropriate CMO DA, will make the decision to transition from a higher to lower category.

b. The DON official who approves a BCAT I-III designation will document the program designation in an ADM.

6. Program Initiation. BCAC programs are initiated IAW reference (k). The appropriate official per reference (k) will approve the ATP and authorization to enter the next phase.

7. Authority to Proceed (ATP)/Navy Gate Reviews

a. Figure 7-1 maps the DON gate review process to the BCAC process (Figure 7-2). The DON gate review process is applicable to all BCAT I programs and select BCAT II programs where ASN (RD&A) is the MDA. The goal of the DON gate review process is to align DON capability requirements and system acquisitions, while improving senior leadership decision-making through better understanding of risks and costs throughout a program's development cycle.

Figure 7-1. Business Capability Acquisition Cycle to DON Gate Review Process Crosswalk.

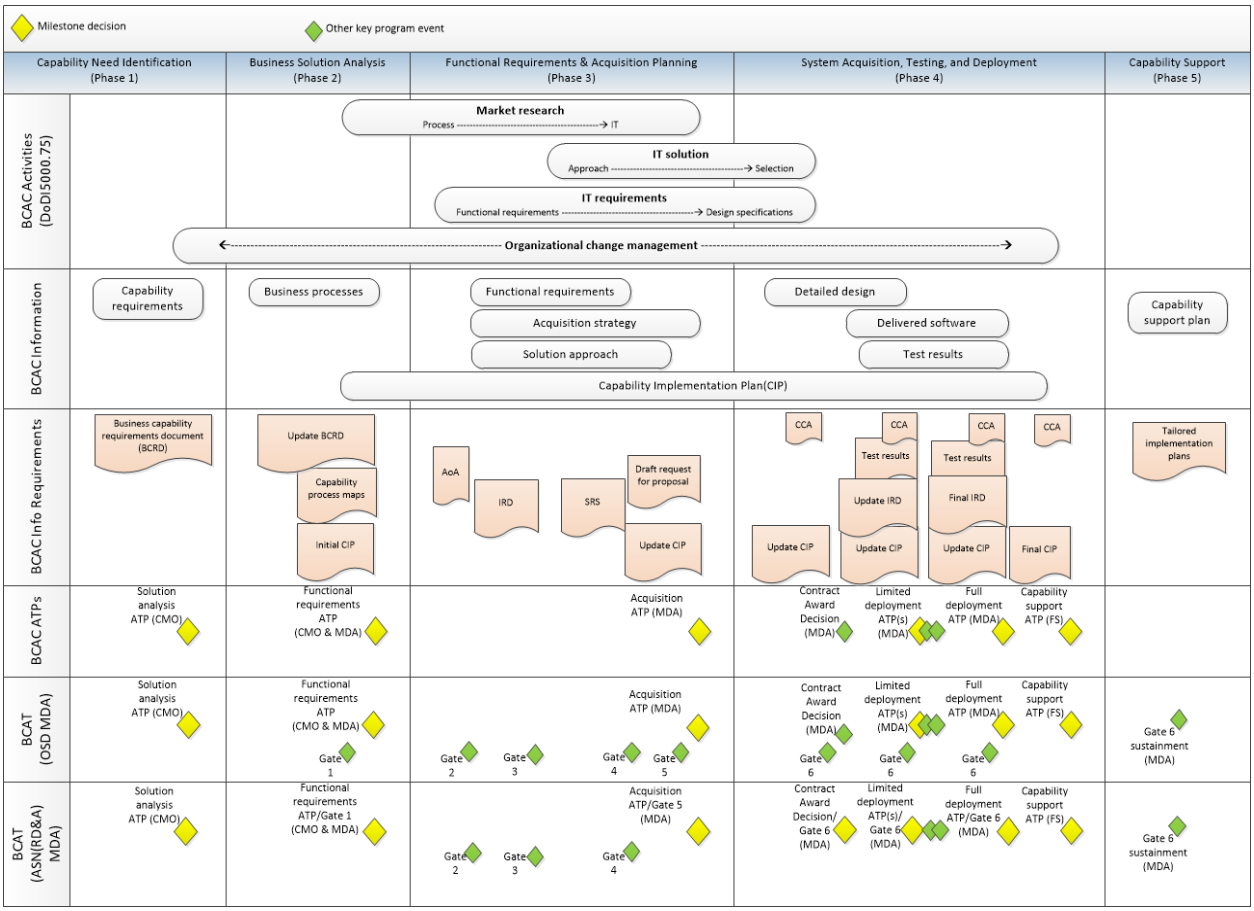
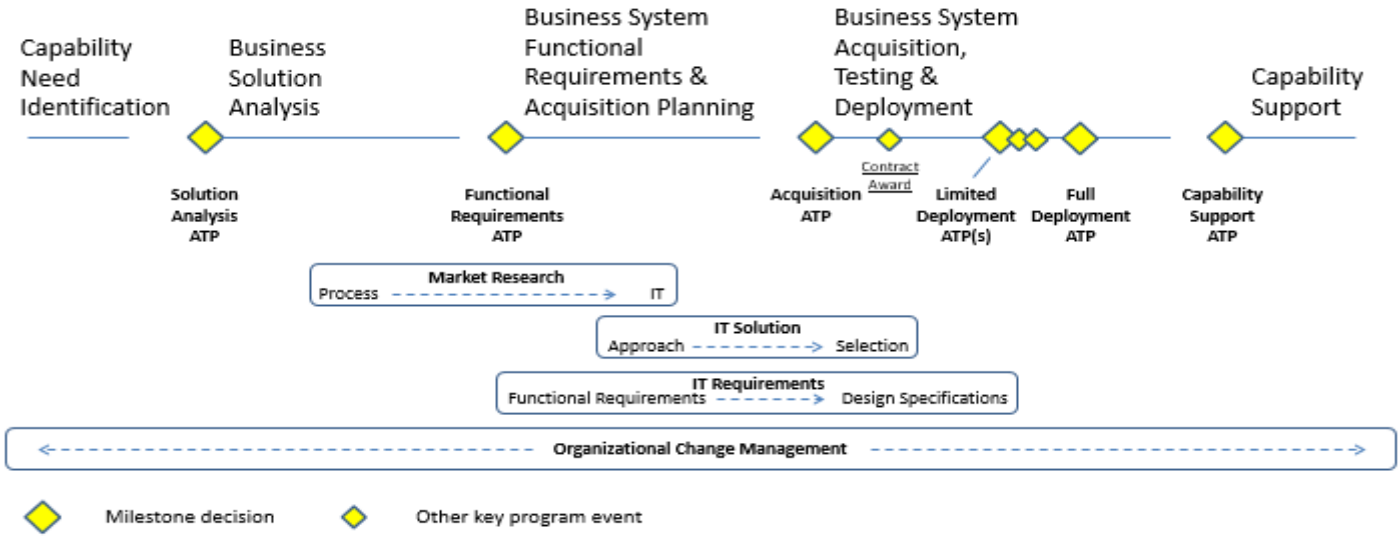


Figure 7-2. Business Capability Acquisition Cycle Process.




b. Authority To Proceed Decisions:

(1) If USD (A&S) is the MDA, DON gate reviews are required before the functional requirements ATP, acquisition ATP, contract award decision, limited deployment ATP(s), and full deployment ATP.

(2) If ASN (RD&A) is the MDA, DON gate reviews and the corresponding ATP will be combined: functional requirements ATP/gate 1; acquisition ATP/gate 5; contract award decision/gate 6; limited deployment ATP(s)/gate 6; and full deployment ATP/gate 6.

(3) If the PEO is the MDA, ATP meetings will be held by existing governance structures.

8. ASN (RD&A) Reporting

a. RDAIS will be the authoritative source for programmatic information for all DON managed BCAT I-III programs throughout its life-cycle.

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

(2) A program remains active for reporting unless it is cancelled.

(3) BCAC programs rarely end since they are usually in continuous engineering and thus will always report in RDAIS. DASN APB will determine when data should be reported to OSD, IAW applicable DoD policy.

b. DASN (APB) will maintain the DON Active BCAT I-III programs listing in RDAIS.

c. PEOs, DRPMs, and SYSCOM Commanders will monitor the BCAT I-III programs under their cognizance for compliance with RDAIS reporting requirements.

d. PMs for BCAT I-III programs will ensure their respective programs are compliant with RDAIS reporting requirements as determined by ASN (RD&A).

**DEFENSE ACQUISITION OF SERVICES**

1. Purpose. This enclosure supplements reference (l) with DON specific guidance.

2. Roles and Responsibilities

a. DON Senior Services Manager (SSM). The DON SSM is the procurement expert responsible for governance in planning, Category Management (CM), execution, strategic sourcing, and management of services acquisitions within the DON. The Deputy Assistant Secretary of the Navy for Procurement (DASN (P)) Executive Director serves as the DON SSM. In the absence of an Executive Director, DASN (P) serves as the SSM. In addition to the responsibilities outlined in Section 3.2 of reference (l), the SSM:

(1) Serves as ASN (RD&A) principal advisor to the SAE for contractual services.

(2) Holds the rank/grade no lower than FO/GO/SES member.

(3) Ensures the proper functioning of the Contractual Services Working Group (CSWG).

(4) Serves as the Services Acquisition Category (S-CAT) ADA for S-CAT I and II services acquisitions. See Table 8-1, DON S-CAT Acquisition Authorities below.

(5) Conducts oversight to ensure compliance with this enclosure and the health of services acquisition across the DON through Procurement Performance Management Assessment Program audits, Services Acquisition Review and Training visits, and other opportunities for command inspection.

b. Head of Contracting Activity (HCA), PEO, and DRPM. Each HCA, PEO, and DRPM is accountable for a portfolio of service acquisitions, and may designate a Services Designated Official (SDO) for that portfolio. Upon designation of an SDO, the HCA, PEO, or DRPM shall notify the DON SSM of the designation at SeniorServicesManage.fct@navy.mil. When no SDO is designated, the HCA, PEO, or DRPM is accountable for the responsibilities outlined in paragraph 2.c. Subject to the limitations in paragraph 2.c.(6), when no SDO is designated, the HCA, PEO, or

DRPM, may delegate all, some, or none of its authorities for S-CAT V acquisitions, and delegation shall remain consistent with this enclosure.

c. Portfolio Services Designated Official. When so designated, the SDO is the senior leader responsible for services acquisition requirements development and planning for the portfolio's services acquisitions in S-CATs III, IV, and V, and serves as the ADA for those services acquisitions. DA for S-CAT III and IV services acquisition may not be further delegated. Subject to the limitations in paragraph 2.c.(6), the SDO may delegate all, some, or none of its authorities for S-CAT V acquisitions, and delegation shall remain consistent with this enclosure. The SDO retains responsibility for such SCAT-V services acquisitions managed through a delegated authority and for those responsibilities further outlined in this enclosure regardless of the delegation.

d. The SDO shall:

(1) Execute S-CAT III-V acquisition authorities.

(2) Manage and oversee a portfolio of service acquisitions to include managing risk and assessing the progress of the portfolio against cost, schedule, and performance metrics.

(3) Ensure the development and approval of Services Requirements Review Board (SRRB) processes and serve as the senior SRRB Chair in the organization.

(4) Evaluate and coordinate opportunities with the SSM and DASN (P)/Services Acquisition staff to meet CM objectives.

(5) Hold the rank/grade no lower than FO/GO/SES and delegate authorities for SCAT V acquisitions to no lower than O-6/GS-15 (or equivalent). In special circumstances, the SSM may waive the grade requirement if the SDO is a mission owner who is knowledgeable of the service acquisition process and has direct access to FO/GO/SES member organizational leadership; or when the qualifications of any proposed designee demonstrate significant experience as determined by the SSM in managing services requirements in both pre- and post-award stages, and

there is a structure in place to support management and oversight of services acquisition.

(6) Ensure Functional Services Managers (FSM) and Multi-Functional Teams (MFT) are qualified to manage contractual services requirements.

(7) Ensure an adequately planned management approach for monitoring contractor performance utilizing quality assurance surveillance and tracking procedures.

(8) Ensure internal governance policies and procedures are in place to measure the success of the service acquisition processes.

(9) Provide an empowered representative to serve on the CSWG.

Table 8-1. DON Services Category Acquisition Authorities.

| **Category** | **Threshold**[1] | **DON S-CAT Acquisition Authority (based on proposed/estimated value of requirement)** |
|---|---|---|
| S-CAT I | Acquisitions of services with an estimated total value of $1 billion or more, or with an estimated total value in any one year of more than $300 million | DON SSM |
| Special Interest[2] | As designated by the Assistant Secretary of Defense for Acquisition | USD (A&S) or designee |
| S-CAT II | Acquisitions of services with an estimated total value of $250 million or more, but less than $1 billion | DON SSM |
| S-CAT III | Acquisitions of services with an estimated total value of $100 million or more, but less than $250 million | HCA, PEO, or DRPM (or their Designated SDO) |
| S-CAT IV | Acquisitions of services with an estimated total value of $10 | HCA, PEO, or DRPM (or their Designated SDO) |

| Category | Threshold[1] | DON S-CAT Acquisition Authority (based on proposed/estimated value of requirement) |
|---|---|---|
| | million or more, but less than $100 million | |
| S-CAT V | Acquisitions of services with an estimated total value above the simplified acquisition threshold, but less than $10 million | HCA, PEO, or DRPM (or their Designated SDO or SDO designee) |

1. Dollar threshold is determined based on the independent government cost estimate in current-year dollars, IAW the DoD Handbook for Services Acquisition, Independent Government Cost Estimate. Dollar threshold includes options and the ceiling of Indefinite Delivery and Indefinite Quantity contracts.
2. The "Special Interest" designation is based on one or more of these factors: technological complexity; congressional or administration interest; a large commitment of resources; or whether the program is critical to the achievement of a capability or set of capabilities, part of a SoS; or a joint program.

e. Contractual Services Manager (CSM). CSMs facilitate and help oversee the processes for services acquisition. CSMs act as an action officer on all matters related to contractual services within their organization. The CSM shall:

(1) Participate on the CSWG.

(2) Analyze services acquisition trends within the organization and assist in the implementation and oversight in all applicable contractual service policies and regulations.

(3) Help develop and facilitate specific SRRB policy and procedures for the organization.

(4) Record and report/brief on SRRB results to command leadership and higher authority as directed.

(5) At the direction of the SDO, conduct oversight to ensure compliance with this enclosure and the health of services acquisition across the command.

3. Contractual Services Working Group. Chaired by the SSM or designee, the CSWG serves as a cross-functional team of representatives (to include CSMs and Financial Managers (FMs))

from across the DON to include the Secretariat, OPNAV Staff, Headquarters Marine Corps (HQMC) Staff, HCAs, BSOs, and other services acquisition stakeholders. Appointed representatives are expected to provide timely feedback to appropriate leadership within their organizations on issues discussed and decisions reached at CSWG meetings. The CSWG:

a. Helps provide governance, oversight, and support for the DON contractual services enterprise.

b. Recommends the establishment and implementation of services acquisition policy.

c. Works to improve the tradecraft of the services acquisition workforce.

d. Evaluates and makes recommendations on the use of services acquisition tools.

e. Provides and reviews metrics.

f. Shares best practices.

4. Services Requirements Review Board

a. All BSOs, PEOs, and DRPMs shall conduct SRRBs as a means of reviewing, validating, approving, and prioritizing all applicable DON-funded and unfunded services requirements with an estimated total cumulative value at $1 million or above. Service contracts are defined in reference (fa).

b. The SRRB process does not apply to and there is no need to report the following types of contractual services:

(1) Services listed in reference (fb) and services obtained under contracts with a total value of less than $1 million.

(2) Services in direct support of a contingency, humanitarian, or peacekeeping operation. This exemption shall apply to the response and initial deployment phase, but shall terminate as soon as practical based on conditions on the ground and a determination by the DA.

(3) Services that are required to respond to and recover from an emergency or disaster directly supporting an emergency declaration or a major disaster declaration by the President. This exemption shall apply to the response and initial recovery phase, but shall terminate as soon as practical during the sustainment phase managing reconstruction and recovery efforts based on conditions on the ground and a determination by the DA.

(4) R&D services (Product and Service Code (PSC) Category "A").

(5) Services from DoD Federally Funded Research and Development Centers, which are acquired IAW the management structure described in references (fd) and (fe) and from DoD University Affiliated Research Centers (UARC), which are acquired IAW the management structure described in the DoD UARC Management Plan.

(6) Construction services (PSC Category "Y").

(7) Services that are managed and reviewed as part of defense acquisition programs under other AAF pathways. Reference (l) and SRRB requirements may apply to services in the operations and support phase of these programs at the discretion of the MDA.

(8) Utilities services (PSC Category "S1").

(9) Commercial subscription services including database and information systems, periodicals, publications, and educational course subscriptions.

c. SRRBs should be cross-functional, with representation from the requiring, contracting, and financial management communities as they are available, and chaired by a FO/GO/SES member. Contractual services requirements at or above $1 million must be approved via a SRRB chaired by a FO/GO/SES or, for activities that do not have a FO/GO/SES member assigned, the first FO, GO, or SES member in the requiring activity's chain of command. Chairmanship of SRRBs for contractual services requirements below $10 million may be delegated in writing to the O-6 or GS-15 level.

d. As there are equivalent boards and processes in place that also serve to review, validate, prioritize, and approve contractual services requirements, these boards may be utilized as an SRRB so long as they yield the required results, capture required SRRB data, and are chaired at the appropriate level as determined by the SDO.

e. Examples of SRRB equivalent boards or processes include:

(1) Husbanding services requirements contracts executed based on the Naval Supply Systems Command (NAVSUP) approved port visit contracting processes. Port visit requirements shall be reviewed, validated, prioritized, and approved via the Fleets Port Visit Management Cost Avoidance process, coordinated by the Fleet Staffs, in conjunction with the Type Commanders, Numbered Fleet Commander staffs, NAVSUP Fleet Logistics Center contracting staff, and associated fleet comptroller personnel. Except as identified in this paragraph, all other provisions of this enclosure apply to husbanding requirements.

(2) Fleet/Shore Environmental programs that are reviewed via the Environmental Program Requirements Web process.

(3) Services associated with ship maintenance, overhaul and repair of vessels that are reviewed, validated, prioritized, and approved via reference (ff).

(4) Reviews boards that review and approve classified, cryptologic and intelligence programs or projects.

f. Additional requirements for SRRBs include the following:

(1) SRRB and SRRB-equivalent board approvals shall be documented.

(2) Indication of SRRB approval will be clearly annotated on funding documents or in the financial system of record through the use of a Services Identification Number (SID #). For exempted services (see Section 4.b), SID #s or other documentation are not required. For SRRB-equivalent boards (see Section 4.e), documentation is required, but may be done by SID # or by any other documentation certifying an SRRB-equivalent board was completed, including email. FMs will not release funding documents for the execution of service contracts without

documentary evidence of SRRB or equivalent board approval for all services requirements valued at or above $1 million.

(3) All BSOs, PEOs and DRPMs shall submit consolidated SRRB reports to include all subordinate activities, and any SRRB-equivalent boards, on all individual services requirements, valued at or above $1 million, no later than October 31 of each FY, utilizing the SRRB Results Data Template provided by DASN (P). These consolidated SRRB results shall be submitted to the DON SSM at SeniorServicesManage.fct@navy.mil. Classified data shall not be submitted to the DON SSM, but shall be captured and maintained in a secure environment consistent with its classification level and made available upon request by appropriately cleared officials.

5. Services Acquisition Workshops. See reference (fg).

6. Bridge Contract Avoidance. Requirements owners must, to the extent practicable, plan appropriately before the date of need for a service to avoid the use of a bridge contract to provide for continuation of same/similar service. It is imperative that requirements owners familiarize themselves with their respective contracting activity's lead times early on in the planning process in order to allow for time for requirements to be validated, a services acquisition workshop to be conducted (if applicable), funding for the services contract to be secured, and for a services contract to be executed well in advance of the end date of the previous contract's period of performance.

7. Independent Management Review (IMR). All HCAs, PEOs, DRPMs shall conduct IMRs periodically, but no less than once every three years, for service contracts with an estimated total value of $100 million or more or those deemed by the DON SSM as requiring IMRs. At a minimum, elements to be reviewed during an IMR include:

a. Contract performance in terms of costs, schedule, and improvements to mission capability to include discussions of challenges and best practices.

b. The contractor's use, management, and oversight of subcontractors and the extent of pass-through charges.

c. The staffing of contract management and oversight functions.

d. Adherence to the prime contractor's small business subcontracting plan and adherence to teaming agreements.

8. Services Acquisition Training

a. Those who are not members of the Defense Acquisition Workforce (DAW), but who have significant responsibilities in services acquisition (such as being a member of a MFT in Services Acquisition or a Services Acquisition COR) are highly encouraged to complete the DAU credential for CACQ 001, "Services Acquisition for Non-Acquisition Professional Team Members" or succeeding credential.

b. Members of the DAW with significant responsibilities in services acquisition (e.g., PMs, FSM, CORs) are highly encouraged to obtain the DAU credential for CACQ 002, "Services Acquisition for Acquisition Professional Team Members" or succeeding credential. In addition to the credential for Services Acquisition Team Members, senior leaders of the DAW and FSM with significant responsibilities in services acquisition are also highly encouraged to complete the DAU FSM credential(s) or services acquisition upper-level courses as they become available.

9. Product Service Code and Object Class Codes (OCC)

a. Correct PSCs and OCCs are required and reported at the Contract Line Item Number level. PSCs and OCCs are essential for spend and budget analysis and as such, all personnel must ensure the accuracy of PSCs and OCCs in both contracting and accounting systems.

b. There are a number of tools which are available to help with selecting the appropriate PSCs. The Defense Pricing and Contracting PSC Selection Tool (https://psctool.us) and the Air Force's PSC Selection Tool (https://www.fscpsc.com) are two of the available resources to aid in PSC selection. To ensure PSC/OCC alignment, the DON Object class Question Tracker crosswalk (https://fmbweb1.nmci.navy.mil/cfdocs/mkt/mkt.cfm) contains PSC/OCC data and other DON specific PSC/OCC adjudications.

10. CM for Contractual Services

a. All HCAs, PEOs, and DRPMs shall employ management actions that align with CM principles. CM refers to the business practice of buying common goods and services as an enterprise to help the DON eliminate redundancies, increase efficiency, and deliver more value and savings from the government's acquisition programs. CM requires participation during all phases of the acquisition process and includes collection and sharing of data within and across organizations, employing cross-departmental teams, and identification and distribution of best practices and lessons learned. Ongoing collaboration between requirement owners and contracting professionals is critical for the DON to improve how it leverages its resources, maximizes its buying power, and provides a positive impact on the mission.

b. DON requirements owners and contracting professionals shall monitor their progress in bringing common spending under management. To help evaluate progress in aligning common spending activities with CM principles, the Office of Management and Budget and the Category Management Leadership Council approved a Spend Under Management (SUM) tiered maturity model. The tiered maturity model assigns tiers to agency spending activity based on attributes demonstrating the agency's progress and sophistication in adopting SUM practices.

c. The tiers are summarized as follows:

(1) Tier 0 - Unaligned spending by the DON, which involves purchasing in a decentralized manner and not conforming to CM principles. (Any common spend not allocated as Tier 1, Tier 2 or Tier 3/Best in Class (BIC)).

(2) Tier 1 - Spending managed at the DON-wide level with supporting mandatory-use policies and contract management principles, including data analysis, information sharing, and use of metrics that are defined, tracked and publicized. (e.g., DON SeaPort).

(3) Tier 2 - Spending managed at the government-wide level through multi-agency or government-wide solutions. (e.g., DON Wireless Spiral 3 Contracts).

(4) Tier 3 - Spending managed at the government-wide level through the use of BIC solutions that have been identified through a collaborative interagency process. (e.g., Federal Supply Schedule 70, General Services Administration Alliant).

d. DON requiring and contracting activities shall ensure requirements are acquired efficiently, to include:

(1) Supporting efforts by DASN (P) and the DON Category Management Program Office to improve the acquisition process by facilitating and developing strategies to support stakeholders.

(2) Conducting and documenting market research to identify service providers within the marketplace for specific services based upon their demonstrated competencies, performance, and cost competitiveness. This also includes evaluating whether to use common CM solutions already in place or whether to establish a new contract vehicle to ensure the DON achieves the best value and avoids any potential costs or burdens of unnecessary redundant activities.

(3) Maximizing small business participation in meeting CM goals.

(4) Reducing contract redundancy and duplication for similar type requirements by promoting mandatory consideration for existing contracts, government-wide acquisition contracts, DON SeaPort, or BIC contracts to reduce unaligned spending and increase the use of BICs for common services.

11. IT Services. The acquisition of IT services that are not considered to be professional services and are instead technology-based solutions requiring concept refinement, interaction with the DON IT environment, or interface/integration with other IT capabilities should be managed under a life-cycle acquisition pathway such as Software (Enclosure 6) or Business systems (Enclosure 7).

**SYSTEMS ENGINEERING**

1. Purpose. This enclosure supplements references (b) and (da) 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 TOC. DON acquisition programs shall be designed and developed to meet the requirements of reference (al) to the maximum extent practicable. Program capability documents, analyses of alternatives, acquisition strategies, and requests for proposals for ACAT I programs shall address the requirements in reference (ga).

3. Model-Based, Digital Systems Engineering and Open Systems Architecture. For all acquisition programs, the PM shall ensure opportunities for application of Digital Systems Engineering approaches, including Model-Based Systems Engineering are identified, applied, resourced, and executed throughout the acquisition life cycle. Programs shall digitally represent the system of interest in a model that describes and defines major system components and interfaces, to the maximum extent practicable, to support integration, interoperability and future upgradeability. PMs shall also follow Modular Open Systems Approach (MOSA) design principles and incorporate MOSA requirements when developing contract requirements and source selection criteria, as appropriate.

4. Systems Engineering Plan (SEP). For all acquisition programs, the PM shall prepare a SEP, as required by reference (da). The SEP are tailored for each program, addressing the program technical approach, products, processes, risks, resources, organizations, metrics, and specific design considerations. The SEP shall address Human Systems Integration, ESOH, facilities and infrastructure, Corrosion Prevention and Control (CPC), energy, configuration management, cybersecurity, and proper operation in the electromagnetic environment per reference (bc). For acquisition programs that also include software, the SEP shall also address software-unique risks, software development methodology, inclusion of software in technical reviews, software safety and security considerations, software development resources, and identification, tracking, and reporting of metrics for software technical performance and quality.

5. Software. For all acquisition programs that include software, the PM shall incorporate automated software cybersecurity and vulnerability analysis tools throughout the life-cycle when feasible. The PM shall also address remediation of software vulnerabilities in the PPP, test plans, and contract requirements.

a. For programs acquiring a software-intensive system, the PM shall follow software development guidance in reference (cj) to the extent consistent with the requirements of the AAF pathway being used.

b. For programs that include software development or modification, the PM shall support continuous software development, testing, and delivery upgrades performed in a DevSecOps environment as described in reference (cj). The PM shall implement Agile software approaches wherever feasible, maximize use of DoD and DON Cloud computing marketplace resources and enterprise services, and deliver capability through a series of testable and fieldable software increments. The PM shall execute efforts IAW the DON Cloud Policy in reference (gv).

6. Technical Reviews. For all acquisition programs, the PM shall provide for independent Systems Engineering Technical Reviews (SETRs), tailored to the program. SETRs may be either event-driven or activity-driven. SETRs shall be led by a senior technical government official, and include technical Subject Matter Experts from respective SYSCOMs who are independent from the program being reviewed. SETRs shall consider all technical requirements for the system under review; these include real property, facilities, infrastructure, built-in equipment, and land rights requirements. For programs acquiring a software intensive system, the PM shall also follow the SETR guidance in reference (an).

7. M&S. For all acquisition programs, the PM shall identify and fund required M&S resources early in the acquisition process, including those to address shore interface and infrastructure integration requirements and M&S testing and evaluation activities in enclosure (10).

8. Manufacturing and Production. For all acquisition programs, the PM shall identify manufacturing and production

considerations early in the acquisition process. Such considerations include long-lead material, parts and material obsolescence, common and standard equipment, unique processes, unique identification (including radio frequency identification), tooling, calibration, and required technical data to support the program throughout the life-cycle. The PM shall ensure that processes are designed to identify key product and management characteristics, and that validated process controls are implemented prior to production.

a. For aviation programs, the PM shall ensure that processes are implemented to comply with applicable requirements for the manufacturing and production planning of Critical Safety Items (CSI) and associated critical and major characteristics and processes as required by reference (am).

b. For acquisition programs with embedded microelectronics, the PM shall implement a Diminishing Manufacturing Sources and Material Shortages (DMSMS) Plan to proactively identify and eliminate negative impacts from DMSMS throughout the program's life-cycle, as required by references (ao), (ap), and (et).

9. Quality. For all acquisition programs, the PM shall ensure quality assurance processes are implemented during the system's design, development, manufacturing, production, and sustainment. The PM 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 (R&ME). For all AAF programs other than provision of services, the PM will implement a comprehensive R&ME program. The R&ME program will include government and contractor efforts that address reliability, maintainability, diagnostics, Health Management (HM) specifications, and other engineering tasks and activities necessary to resolve operational requirements, design requirements, and government and contractor R&ME activities. For ACAT I and II programs, the PM shall ensure that solicitations and resulting contracts include R&ME factors and requirements unless justified in the acquisition strategy IAW reference (da). The government R&ME program shall be documented in an R&ME Program Plan that shall be approved by the SYSCOM R&ME Tech Authority or SME.

a. For urgent capability, MCA, or MTA programs, R&ME programs will consist minimally of the following:

(1) Warfighter requirements, including an availability Key Performance Parameters (KPP), Energy KPP, Sustainment KPP as applicable, Reliability, Operations and Support Cost Key System Attributes (KSA), and the Reliability, Availability, Maintainability – Cost (RAM-C) rationale report.

(2) A CONOPS/Operational Mode Summary/Mission Profile.

(3) Allocation of Key Performance Parameters (KPPs) and Key System Attributes (KSAs) to contract specifications for reliability, maintainability, diagnostics, and HM, which supports a portion allocated to government risk.

(4) Failure Definitions and Scoring Criteria (FDSC) for both warfighter and contractor specification requirements. There will only be one set of warfighter requirement FDSC utilized by engineering, DT&E, and OT&E.

(5) Government and contractor R&ME program plans documenting personnel, planning and activities, and reliability and HM growth strategies.

(6) Failure Modes Effects and Criticality Analysis commencing early in the design process to impact design.

(7) Reliability and maintainability allocations, block diagrams, and predictions.

(8) Testability analyses, including HM functionality and design description documents.

(9) Failure Reporting, Analysis, and Corrective Action System (FRACAS) maintained through design, development, production, and sustainment.

(10) Maintainability considerations, including design for maintainability, reliability-centered maintenance planning, integrated diagnostics (fault detection, fault isolation, and false alarm), access and removal analysis, maintainability demonstrations, and required technical data and computer software.

b. The government R&ME program will be conducted under the direction of the program's SYSCOM Chief Engineer (Program CHENG) or other Technical Authority (TA), as designated. The R&ME systems engineer will operate under the purview of the Program CHENG, Ship Design Manager, or System Integration Manager.

c. Each SYSCOM CHENG or designee will designate an R&ME manager responsible for SYSCOM R&ME policy, standards, guidance, oversight and implementation for their designated platforms, environments and command structure.

d. Software-only programs will use Availability and Restore Time parameters, measures, and maturity metrics. Software quality should be assessed during development to predict software reliability cost when fielded. Programs that are primarily software can be treated as software programs; however acquisition of the limited hardware components will include R&ME requirements, activities, and technical specifications as appropriate.

e. Programs will maintain a R&M associated risks and risk mitigations list, including deviations from the R&M Program Plan. Future impacts such as, cost, availability, and mission effectiveness should be primary factors considered in risk acceptance. Internal control oversight of R&M risk acceptance will be conducted during SETRs, Technical Review Boards (TRBs), Independent Logistics Assessments (ILAs), Independent Technical Review AssessmentsITRAs, and Gate Reviews as appropriate.

11. Program Protection. PMs and Science and Technology (S&T) managers will prepare PPPs and S&T Protection Plans (S&TPP) to guide their protection activities, as required. Protection Plans that include critical technology or modernization priority areas will be consistent with applicable Technology Area Protection Plans and available horizontal protection guidance, IAW reference (dn). S&T managers, PEOs and SYSCOMs will coordinate with Resource Sponsors to maintain a Critical Program and Technologies (CP&T) list. PMs will perform technical decomposition and apply risk management processes in the implementation of OSD identified protection measures for programs on the CP&T list. PPP approvals are defined in Table 9-1 below.

Table 9-1. PPP Approval Authority.

| | SYSCOM RTP Office | PM | PEO/Equivalent | DASN(RDT&E) | USD(R&E) |
|---|---|---|---|---|---|
| ACAT ID/Special Interest | C | C | C | C | A |
| ACAT IB/IC | C | C | C | A | N/A |
| ACAT II | C | C | A | N/A | N/A |
| ACAT III | C | C | A | N/A | N/A |
| AAP | C | C | A | N/A | N/A |
| MTA | C | C | A* | A* | N/A |
| Software | C | C | A | N/A | N/A |
| UONs | C | C | A | N/A | N/A |
| Programs with no CPII and no Mission Critical Functions or Components | C | A | N/A | N/A | N/A |

* - Approval for ACAT I equivalent MTA's resides at DASN(RDT&E)
Approval – A
Concurrence – C
Not Applicable – N/A

12. Environment, Safety, and Occupational Health. For all acquisition programs, the PM shall comply with applicable ESOH statutory and regulatory requirements. It is DON policy to fully comply with applicable federal, state, local, DoD, and DON ESOH policies, which include but are not limited to references (aq), (ar), and (bv) through (ca).

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

b. The PM shall integrate ESOH risk management into the overall systems engineering process throughout the system's life-cycle as required by reference (da), using the methodology in reference (n).

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

d. The PM will focus resources on the areas of greatest return on investment as required by reference (as). Human factors, hazardous energy and materials, flight safety, confined spaces, survivability factors, and physical, chemical, and biological hazards require consideration of adequate controls.

(1) Controls include but are not limited to isolation, ventilation, personal protective equipment, and process controls.

(2) Physical stressors include but are not limited to noise, vibration, pressure and blast impulse, heat, radiation, ergonomic considerations, infrastructure integration, and fall protection.

(3) Chemical and biological concerns include but are not limited to toxic gases control, physical exposure, and hazardous material reduction, management, and control.

e. For all acquisition programs, ASN (RD&A) shall be the risk acceptance authority for high ESOH risks. PEOs and SYSCOM Commanders, FO/GO or SES designees, DRPMs, and Chief of Naval Research (CNR) shall be the risk acceptance authorities for serious ESOH risks. PMs shall be the risk acceptance authorities for medium and low ESOH risks. The PM shall collaborate with the user representative during the ESOH risk mitigation process and throughout the life-cycle. Formal user concurrence 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 has significant potential to cause permanent partial disability. Steady-state noise levels should be designed not to exceed the Navy Occupational Exposure Limits or the Marine Corps Occupational Exposure Limits established in references (at) and (au), and not to exceed impulse noise sound pressure levels of 140 decibels of pressure or greater. Follow guidance in reference (dl) for impulse noise of 140 to 180 dBP. A risk assessment must be performed and coordinated with the Deputy Assistant Secretary of the Navy for Research Development Test and

Engineering (DASN (RDT&E)) for consideration of waiver by ASN (RD&A) for any impulse noise above 180 dBP. Requirements should incorporate platform-appropriate KSAs or other requirement to address hazardous noise, for DON PMs to consider design options that reduce hazardous noise, and for DON TAs to implement internal management controls during the design, testing, and fielding of DON acquisition systems to reduce hazardous noise. Table 9-2 provides guidance and recommendations across the MCA life cycle, but is applicable to any adaptive acquisition pathway.

Table 9-2. Hazardous Noise.

| | JCIDS Process | MSA | Technology Development | Eng. And Mfg. Development | Production and Deployment | Operations and Support |
|---|---|---|---|---|---|---|
| **System Requirements** | • Safety and Occupational Health endorsement(s) are provided to the CDD<br>• CONOPS, KSAs, Requirements include HN / ESOH (must / shall)<br>• HN is considered in MSA options<br>• HN costs are identified and allocated to MSA options | | • HN requirements are clearly derived, allocated and understood<br>• Program Documents clearly assign roles and responsibilities including HN<br>• Lowest HN option is identified; costs to lower HN are estimated and resources identified | | • Clear, consistent HN requirements are identified for MDA | • New or additional HN risks are identified by Operational and Sustainment community<br>• Additional resources to address new HN risks are estimated and identified |
| **Design and Engineering Reviews** | • HN is considered in design strategy<br>• HN is considered in development strategy<br>• Transition of HN S&T is considered in approaches and program plans | | • HN is addressed in Design Trades and Design Reviews<br>• Hazard Tracking System specific to HN is included in Program Plans<br>• HN is included in Test Plans<br>• User participation is included in Testing | | • Required HN tests are identified, performed, evaluated<br>• HN mitigations are assessed and documented | • HN maintenance impacts are identified |
| **Design and Engineering Reviews** | • HN Thresholds/Objectives are identified | | • Solicitation /Award prioritizes HN reduction or mitigation<br>• HN Thresholds/Objectives are addressed by Solicitation and/or Deliverable | | • DoD Units affected are identified<br>• Training methods of provision are identified | • HN Thresholds/Objectives are considered in subsequent contracts |
| **HN Evaluation Criteria** | • Use of MIL-STD-1474E is mandated<br>• Identify needed SOH capabilities in the JCIDS process<br>• Critical Safety Items are considered | | • HN Training Impacts are identified<br>• HN PPE fitting needs are identified<br>• HN High/Serious Risks, mitigations, or waiver requirements identified | | • Lacking means of mitigation, appropriate HN High or Serious Risk Acceptance is provided, as required | • Service Personnel monitoring is performed and maintained |

g. The PM shall submit risk assessments and risk mitigation plans for risk acceptance for legacy systems undergoing a major upgrade that includes associated ESOH risks. The PM shall reassess risks associated with a hazard following a mishap, and when the Mishap Investigation indicates a material causal factor or deficiency.

h. The PM shall ensure that system designs integrate environmental requirements IAW environmental regulatory schedules applicable to upgraded, modified, and future versions of legacy systems.

i. The PM 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 and oversight of ESOH hazards, risk mitigation plans, and risk acceptance will be performed during SETRs, TRBs, ILAs, and Gate Reviews.

j. Environmental Planning for Weapon Systems Acquisition Programs. For all acquisition programs, the SEP shall include National Environmental Policy Act (NEPA) and EO 12114 compliance schedule. Per references (aq), (ar), and (cp), the action proponent must assess potential impacts of specific program activities (referred to as proposed actions) before actual execution of an activity.

k. The proponent for each proposed action shall prepare the 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. The PM is responsible for environmental planning for all testing and evaluation activities associated with the system, to include Commander, Operational Test and Evaluation Force (COMOPTEVFOR) and Marine Corps Operational Test and Evaluation Activity (MCOTEA) testing. The PM shall also provide system-specific analyses and data to support Navy and Marine Corps-required environmental planning analyses and activities, such as those associated with Military Construction (MILCON), basing, operations, sustainment and disposal. Final approval authority for acquisition program-related environmental documents is provided in Tables 9-3 and 9-4.

(1) The CNR shall be the final approval authority for S&T project Environmental Assessments (EAs) and reference (aq) overseas EAs.

(2) 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.

(3) 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 9-4.

l. All acquisition programs shall follow the environmental documentation process tables for environmental analyses herein whenever a PESHE or other evaluation determines a need for reference (aq) or (ar) documentation. PEOs, SYSCOMs, and DRPMs for assigned programs must review environmental analyses documentation as a part of the references (aq) and (ar) process prior to receiving OPNAV N45 endorsement.

Table 9-3. Environmental Documentation Process—NEPA.

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

SYSCOM - Systems Command
ASN (EI&E) – Assistant Secretary of the Navy (Energy, Installations and Environment)

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 9-4. Environmental Documentation Process -- Executive Order 12114, Environmental Effects Abroad.

| DOCUMENT | PREPARED BY ACTION PROPONENT | REVIEW | CONCURRENCE / ENDORSEMENT | APPROVAL/ SIGNATURE |
|---|---|---|---|---|
| Reference (aq) Negative Decision (Citing a previously approved OEA, OEIS, ER, or ES; an Overseas CATEX; or exemption) | PM, CNR, or designee | PEO/SYSCOM/DRPM<br>CNO (N00N)[1]<br>Host Installation CO[2]<br>Office of Counsel<br>ASN (EI&E), Info Copy | | PM, CNR, or designee, Sign |
| Overseas Environmental Assessment (OEA)[6] | PM, CNR, or designee | PEO/SYSCOM/DRPM<br>CNO (N00N)[1]<br>Host Installation CO[2]<br>Office of Counsel<br>ASN(EI&E), Info Copy | CNO/CMC[3]<br>USFLTFORCOM[10]<br>COMPACFLT[10]<br>DON REC[10] | PEO/SYSCOM COMMANDER/ DRPM, CNR, or designee, Approve |
| Overseas EIS (OEIS) | PM, CNR, or designee | PEO/SYSCOM/DRPM<br>CNO (N00N)[1]<br>Host Installation CO[2]<br>Office of Counsel | CNO/CMC<br>FLTFORCOM[10]<br>COMPACFLT[10]<br>DON REC[10]<br>ASN(EI&E)[7] | ASN (RD&A), Approve[4]<br>ASN(EI&E), Approve[7] |
| Environmental Review (ER)/ Environmental Study (ES) | M, CNR, or designee | PEO/SYSCOM/DRPM<br>CNO (N00N)[1]<br>Host Installation CO[2]<br>Office of Counsel | CNO/CMC<br>FLTFORCOM[10]<br>COMPACFLT[10]<br>DON REC[10]<br>ASN(EI&E)[7] | ASN (RD&A), Approve[4]<br>Assistant Secretary of the Navy (Energy, Installations and Environment) (ASN (EI&E)), Approve[7] |
| ER or ES Concluding No Significant Impact | PM, CNR, or designee | PEO/SYSCOM/DRPM<br>CNO (N00N)[1]<br>Host Installation CO[2]<br>Office of Counsel<br>ASN(EI&E), Info Copy | CNO/CMC[3]<br>FLTFORCOM[10]<br>COMPACFLT[10]<br>DON REC[10] | PEO/SYSCOM COMMANDER/ DRPM, CNR, or designee, Approve |

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 FONSIs or corresponding reference (aq) documents.
4. ASN (RD&A) approves/signs all weapon systems acquisition EISs/RODs. For other systems, this authority may be delegated to the ASN (RD&A) PMD.
5. The PM is responsible for ensuring public notification of FONSIs 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 home basing 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 home basing/homeporting actions in the OCONUS-Pacific.
9. FLTFORCOM is the action proponent for Navy CONUS home basing/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. Programmatic Environmental Safety and Occupational Health. For all acquisition programs, the PM 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, a review of all applicable ESOH statutory and regulatory requirements, identification of ESOH risks and their status, the identification of Hazardous Materials (HAZMATs), 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 references (ar) and (aq).

(1) The PESHE will be coordinated with affiliated SYSCOM Technical Warrants as applicable, and ESOH subject matter experts before being approved by the PM.

(2) The PESHE shall be updated to include full consideration of fleet input associated with environmental issues relative to post-Initial Operational Capability (IOC) operations at Navy/United States Marine Corps (USMC) training ranges and operating areas.

(3) The PESHE is required at program initiation for ships, Milestones B and C, and full-rate production decision

review (or equivalent) for all programs. The PM shall present the program's ESOH requirements and risk management assessments at Gate 2 and following reviews for programs subject to Gate Reviews.

n. Mishap Investigation Support. The PM shall support Class A and B mishap investigations, as required by references (b) and (da). 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 PM shall ensure compliance with relevant pollution control regulations and conduct appropriate pollution prevention planning for the system being developed.

a. DON policy requires the PM to ensure that all specifications and standards that contain Ozone Depleting Substances (ODS) are revised as environmentally compliant and mission acceptable substitutes become available. The PM shall minimize the use of ODS to the greatest extent practical, and ensure that any unplanned use of Class I ODS is reviewed in coordination with ASN (EI&E) and OPNAV N45 IAW DON policy.

b. DON policy requires that PMs will ensure that all specifications and standards that include Hydrofluorocarbon compounds listed in reference (er) are revised as environmentally compliant and mission acceptable substitutes become available.

c. For all acquisition programs, the PM shall promote energy efficiency per reference (gk), 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 PM shall comply with

the requirements and processes to conduct Joint reviews as defined in reference (ay).

16. Weapon 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, and their associated ammunition, non-lethal weapons and their associated ammunition, and those systems (software, firmware, hardware or procedures) that manage and control weapons used, handled, stored, tested on or transported by a Naval Unit. The WSESRB is the advisory authority to the responsible Navy, Marine Corps commands, MDAs, PEOs, and PMs on the adequacy of compliance.

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. For designated Military Exempt lasers, the LSRB is the advisory authority to the responsible Navy, Marine Corps commands, MDAs, PEOs, and PMs on the adequacy of compliance of lasers designated Military Exempt per reference (cl).

18. HAZMAT Management

a. For all acquisition programs, the PM shall implement proven HAZMAT management procedures and processes. The PM shall identify HAZMAT inherent in the system and HAZMAT required to operate and maintain the system throughout its life-cycle, to ensure safe handling and disposal. The PM shall document HAZMAT management processes in the SEP and LCSP.

b. The PM shall utilize the NAS 411 and corresponding NAS 411-1 Hazardous Materials Target List or the respective SYSCOM-approved list of targeted HAZMAT, when addressing HAZMAT during design. HAZMATs that could not be eliminated during design shall be identified in 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 PM shall ensure that energy criteria specified in capability requirements are integrated in the systems design criteria and addressed in the SEP. Energy criteria are defined as any system component that

generates, stores, or uses energy in any form such as liquid fuel, electrical power, or batteries. PMs shall ensure the system's energy criteria are defined with measurable resolution such that their program's overall impact can be analyzed in terms of requirements and sustainment. Design alternatives, including materials and components that may contribute to improved energy-related capability, shall be identified as targets for improved performance and used to inform trade-off decisions. The PM shall ensure an Energy Supportability Analysis is developed for specified energy criteria, to include all systems, sub-systems and systems-of-systems that employ and deploy from a host platform, if applicable, at IOC, modernization and end-of-life.

20. Corrosion Prevention and Control (CPC). For all acquisition programs, the PM shall incorporate CPC management and design considerations starting early in the design process and continuing throughout the acquisition life-cycle. CPC processes shall be implemented in the SEP and LCSP as required by reference (ab), utilizing references (dc) and (dd) as guidance. The PM shall ensure CPC requirements are specified in the system design and validated in test and acceptance programs.

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

22. Item Unique Identification (IUID). For all acquisition programs, the PM shall prepare an implementation plan for IUID to identify and track applicable major end items, configuration-controlled items, and government-furnished property as required by references (y), (do) and (dp). The SEP must contain a link to the IUID implementation plan.

23. Spectrum Supportability. For acquisition programs with equipment using electromagnetic spectrum:

a. The PM shall ensure the program complies with references (b) and (da), statutes and regulations governing electromagnetic spectrum usage, and shall follow the guidance on Electromagnetic Environmental Effects and Spectrum Supportability in references

(bb) and (bc). The PM shall submit written determinations (e.g., SSRAs) at Milestones A, B, and C (or equivalent) to the 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 IAW reference (bb).

b. Electromagnetic radiation has the potential to directly injure personnel, activate ordnance, and ignite combustibles such as fuel. The following required assessments must be performed per reference (bc) and enclosure 2 of reference (gw): Hazards of Electromagnetic Radiation to Personnel, Hazards of Electromagnetic Radiation to Ordnance, and Hazards of Electromagnetic Radiation to Fuel.

24. Coordination of Real Property Requirements. Program Offices and SYSCOM Commanders will coordinate new program facility and infrastructure requirements with Naval Facilities Engineering Systems Command (COMNAVFACSYSCOM).

a. PMs shall consult with Commander, COMNAVFACSYSCOM during the material solution analysis (or similar early acquisition phase) to develop an infrastructure integration support strategy and assessment plan. The PM shall include real property requirements in the SEP and throughout the system design and integration process to improve affordability, supportability, training, and maintenance planning. Per reference (i), COMNAVFACSYSCOM shall exercise authority for construction and facility engineering programs, including those in support of other SYSCOM Commanders, PEOs, DRPMs, PMs and their assigned acquisition programs.

b. Platform Range Requirements. PMs shall identify range requirements, ashore and afloat, needed to achieve program capability, including all airspace, land, water, or spectrum requirements necessary for system testing and fielding. PMs shall also ensure that requirements and training for new capabilities are addressed prior to fielding. Range requirements may require land acquisition or marine rights. Additionally, most will also require an Environmental Planning analysis, conducted by NAVFACENGSYSCOM, IAW NEPA.

c. Platform Real Property Requirements. PMs shall consider real property requirements early in the acquisition process and throughout system design and development to ensure critical ashore interface and support are ready for system testing and

fielding. If a real property solution is required, PMs will use reference (cb) for the classification, preparation, submission, review, programming, approval, and reporting of real property facilities work at Navy shore sites and installations, and reference (cc) for the preparation, submission, review, approval, and reporting of facilities projects at Marine Corps sites and installations.

d. Acquisition, Management and Disposal for Real Property. PMs will use reference (cd) for the acquisition, management, and disposal of real property (land) and real property interests (land rights), to assign responsibility and to delegate authority.

(1) When the DON has jurisdiction of the real property facility, DoD Agencies and activities on Navy installations will utilize COMNAVFACSYSCOM for design, PMs shall follow the Weapon System Facilities and Infrastructure Planning (WSFIP) Consistency Guide (reference (gc)). The WSFIP includes Facilities Planning Characteristics, Platform Basic Facilities Requirements, Site Survey Evaluation Report, and the Facilities Management Plan.

(2) If it is determined that no real property, MILCON, or new facility or infrastructure requirements are required, then the decision will be documented in the PSS. Program Office and SYSCOM Commanders will utilize existing organizational and site specific policies, as required.

e. Real Property Funded by MILCON Appropriations. If funded by MILCON appropriations, PMs shall address all MILCON development requirements per reference (ce). In order to ensure timely provision of MILCON funding, PMs should provide a DD 1391 with well-defined requirements endorsed by Commander, Navy Installations Command or USMC to the COMNAVFACSYSCOM CHENG. Allow five to seven years, depending on project size, to plan, budget, acquire or modify real property facilities, infrastructure, and land to ensure their timely availability.

f. Real Property Funded by Operation and Maintenance, Navy Appropriations. If funded by Operations and Maintenance funding, PMs should allow three to five years to plan, budget, acquire or modify real property facilities, infrastructure, and land to ensure their timely availability.

g. Construction and Fit Out Scheduling. Unless otherwise identified by COMNAVFACSYSCOM, assume construction will be awarded in February of the Budget Year. After construction completion, allow 12-24 months for fit-out prior to IOC. Weight handling equipment shall be acquired with acquisition support from the NAVFACENGSYSCOM Navy Crane Center.

**TEST AND EVALUATION**

1. Purpose. This enclosure supplements reference (en) and establishes DON - Developmental, Operational, (DT&E and OT&E) and LFT&E policy for the various AAF acquisition pathways, and implements references (cz), (dm), (do), (bp), (z), (dq), (av), (dm), (ds), (dt), (ar), (aq), (u), (cv), (t), (u), (du), (dv), (dw), (dx), (dy), and (dz). It establishes a capabilities-based approach to T&E planning and execution, providing acquisition and resource sponsor leadership with an operational context to the data generated and deficiencies discovered during a program's development and testing.

a. This enclosure will be supplemented by reference (eb) that provides amplifying guidance and implementation. Reference (eb) will be reviewed annually and updated, as required to maintain relevance and to ensure alignment with statute, DoD and DON policies. Reference (eb), a Capability-Based T&E (CBT&E) guidebook, and T&E best practices are located at the DON Acquisition T&E Collaboration SharePoint site: https://intelshare.intelink.gov/sites/ACQTEMTGS and Naval Test and Evaluation DON T&E Policy site: https://www.dau.edu/cop/navaltest/Pages/Topics/TopicsMap.aspx respectively.

b. Deviations from policy shall be addressed by Working Integration Product Team (WIPT) stakeholders using the DON T&E Coordination Process (TECP).

2. Applicability. This enclosure applies to all DON AAF acquisition programs as well as technical development and prototyping efforts being performed under R&D authorities other than the DAS (e.g., reference (gs)).

a. The following items are tested by other organizations and are exempt from the provisions of this instruction:

(1) Cryptographic equipment.

(2) Naval nuclear reactors and associated systems. The Director, Naval Nuclear Propulsion (Naval Reactors) has sole authority and cognizance for the propulsion plant and associated support systems. Naval Reactors oversees all aspects of the propulsion plant: research, development, design, procurement,

specification, construction, inspection, installation, certification, testing, overhaul, refueling, operating practices and procedures, maintenance, supply support, and ultimate disposition of naval nuclear propulsion plants, including all components and related facilities.

(3) Nuclear Weapons (warhead components).

(4) Medical and dental systems.

b. T&E Considerations that apply to Exempt Items. The exemption herein does not apply to the following aspects of these items:

(1) Ships, aircraft, or ground vehicles that carry these systems.

(2) When the performance of these exempted items affects the effectiveness, suitability, survivability, or lethality of a system not exempt (e.g., 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., Naval Reactors for naval nuclear propulsion systems).

3. DON T&E Organizational Roles and Responsibilities. This section establishes organizational roles and responsibilities common across the DON T&E Enterprise (USMC and United States Navy (USN)) as well as Service-specific organizations and responsibilities.

a. DON T&E Executive/OPNAV N94 (DON T&E/OPNAV N94). To foster improved coordination and collaboration between the CNO, CMC, and ASN (RD&A), a single Senior Executive will perform the following tasks with the following responsibilities:

(1) As the DON T&E Executive, report to DASN (RDT&E) and be responsible for development and implementation of T&E policy, act as the functional lead of the DON T&E acquisition workforce, and be the single point of contact with OSD for all DON T&E matters. The DON T&E Executive will also provide advice to and coordinate with OPNAV N9 on all T&E policy and requirements.

(2) As OPNAV N94, (Director, Innovation, Technology Requirements and Test and Evaluation) report directly to OPNAV N9 for all requirements and resource sponsor duties associated with S&T, T&E, targets and training ranges.

b. DON T&E. For the purpose of this instruction, "DON T&E" will be used to indicate responsibilities for both the DON T&E Executive and OPNAV N94. Specific DON T&E responsibilities include:

(1) Establish and implement DON DT&E, LFT&E, and OT&E policy for the various DoD-defined AAF pathways within the DON.

(2) Coordinate development and implementation of CBT&E processes to integrate T&E phases into a single T&E continuum.

(3) Endorse DON TEMPs and MTS for Navy and Marine Corps programs as stated in Table 10-1.

(4) Act for the SECNAV, CNO, and CMC as the senior DON representative responsible for coordination with DOT&E and Director, Developmental Test, Evaluation and Assessment (D,DTE&A) for T&E policy issues and acquisition program TEMP, DT, OT, and LFT&E matters.

(5) Establish the TECP for identifying, tracking and resolving program T&E issues.

(6) Determine, with SYSCOM and Service OTA support, the adequacy of T&E infrastructure and coordinate infrastructure investment required to support systems testing.

(7) Coordinate DON participation in testing of Joint programs.

(8) Review requirements capabilities documents (e.g., Initial Capabilities Document (ICD) CDD and CDD updates, CNS) and other AAF requirements documents to:

(a) Ensure requirements are clear, testable, and operationally relevant.

(b) Assess the T&E implications of the initial CONOPS.

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

(9) Establish process for coordinating fleet assets for T&E support.

(10) Oversee testing matters associated with Marine Corps equipment, and ensure integration of Navy and USMC testing for USMC systems deployed on Navy ships.

(11) Manage the development, requirements, implementation, training, and support of the web-based T&E cost planning tool, TEMP Part 4 (TP4) (https://nicap.navair.navy.mil/tp4).

(12) Support scheduling fleet resources for RDT&E efforts, to include assigning T&E Identification Numbers (TEIN) and designating CNO RDT&E Priority programs.

(13) Coordinate target resource planning with program resource sponsors, procure and allocate Naval targets for training and T&E claimants IAW reference (gy).

(14) Assist CDT/T&E leads in implementation of elements of this instruction and accompanying guidebook. Each DON acquisition program is assigned to a specific N942 Action Officer who is responsible for assisting the CDT/T&E lead with implementing elements of this instruction and the guidebook and obtaining RDT&E resources to support their T&E efforts. The list of Authorizing Official (AO) portfolios can be found at the DON Acquisitions T&E Collaboration SharePoint Site: https://intelshare.intelink.gov/sites/ACQTEMTGS.

(15) Chair a T&E Requirements and Resources Board (TERRB) for MCA programs prior to Gate 3/MDD and each program/capability modification initiation to support the Gate/initiation. The TERRB will use System Capability Requirements, and OTA-developed system-specific mission tasks/conditions analysis to assess the availability and resourcing of required T&E infrastructure (including a gap assessment) as well as establishing the demand and funding for

resources such as targets, missiles, ranges and modelling & simulation. Assessment of adequacy of resources and identification of gaps will be briefed at the Gate/Program initiation brief, and support initial TEMP development.

c. SYSCOMs and Warfare Center Commands (WC). DON SYSCOM Commanders and WC Commanders shall manage assigned infrastructure, resources, workforce and policy (facilities, test ranges and personnel) to ensure efficient and effective T&E that supports the DT&E, OT&E, and LFT&E requirements of systems within the SYSCOM's domain. Specifically, SYSCOM Commanders shall:

(1) Provide technical oversight, T&E policy and process alignment, and TP4 Cost estimation of T&E implementation.

(2) Consider developing a peer review process to review program T&E DT&E/OT&E/LF-TES, plans, schedules, assumptions and resource requirements to ensure organizational process alignment, unbiased technical rigor, Scientific Test and Analysis Techniques (STAT)-efficient resource utilization and accurate characterization of the probability of execution success and overall program risk.

(3) Support DON T&E in conducting Milestone (MS) B and C Developmental Test Sufficiency Assessments (DTSA) for ACAT IB and IC programs.

(4) Support programs with the resources needed to coordinate planning, scheduling, and executing T&E throughout the continuum of system development.

(5) As the DON's LFT&E TAs, support development and execution of LF-TES and Live Fire Test Plans (LFTP). Establish and implement SYSCOM LFT&E TA policy. Provide "concur" signature on LF-TES and LFTP to indicate adequacy of technical rigor.

(6) Coordinate SYSCOM-affiliated program offices' RDT&E fleet support requirements with the COMOPTEVFOR Fleet Resources Coordinators. Review and validate all Fleet Support Requests submitted within the Unclassified T&E Support site. Disseminate CNO N94 Quarterly Fleet Support solicitations to applicable SYSCOM RDT&E directorates. Provide inputs to COMOPTEVFOR Fleet

Resources Coordinators for process improvements and efficiencies as required, and perform periodic Fleet Support Process familiarization training for applicable SYSCOM RDT&E directorates. Marine Corps Systems Command (MARCORSYSCOM), PEO LS, and MCOTEA follow stipulations of reference (dw) in securing Fleet Marine Support.

(7) Ensure all programs and projects that require T&E resources external to their organization obtain a TEIN at inception to support resource scheduling.

(8) Coordinate target presentation requirements. Solicit program office target requirements (type, quantity, payloads/configurations, test event, and planned test date) across the FYDP from all claimants (i.e., COMOPTEVFOR) and provide this information to OPNAV N943 on a quarterly basis. Sub-allocate the SYSCOM's annual target allocation to individual program offices and test events.

(9) Develop skills to support program office integration of STAT into DT&E and OT&E planning and execution (when appropriate) to support efficient and effective planning and execution.

(10) Execute SECNAV Operational Test Readiness Review (OTRR) process chair responsibilities for programs under SYSCOM cognizance and ensure PM implementation.

(11) Ensure that programs within the SYSCOM are documenting T&E cost data, which comply with reference (gt) in TP4.

(12) Develop a format for AAP T&E Strategies that meets Table 10-1 requirements.

d. PEOs shall:

(1) Execute the SECNAV OTRR described in this instruction, and ensure that PMs adhere to the process.

(2) Ensure that programs within the PEO are documenting T&E cost data that complies with reference (gt) using TP4.

(3) Review T&E infrastructure Cost-Benefit Analysis (CBA) prior to the PM allocating more than $1M to support external capability development (see paragraph 3.e.(9) of this enclosure).

(4) Endorse/Approve Live Fire T&E Strategies and LFTPs as appropriate.

e. The PM shall:

(1) Plan and resource an integrated testing program, using a Capability Based Test and Evaluation (CBTE) process, to support independent DT, LFT&E, and OT evaluations throughout the program life-cycle.

(2) Document T&E requirements, planning, costs, and funding, including Cybersecurity and LFT&E, in a TEMP or MTS for each program or capability upgrade.

(3) Document LFT&E requirements, planning, costs, and funding, Live Fire T&E Strategy (LFTES) and support development of LFT&E Test plans with SYSCOM Technical Warrant Holder (TWH).

(4) Provide for the appropriate safety releases (to include formal ESOH risk acceptance) and materiel certification prior to any DT/OT/LFT&E efforts.

(5) Advise the SYSCOM Commander/PEO and MDA as to whether the program is ready for OT and initiate an OTRR to certify the program readiness for OT.

(6) Designate Chief Developmental Testers (CDT) and T&E leads in writing as follows:

(a) Designate a CDT as one of the program's Key Leadership Positions for each ACAT I and BCAT I program, and programs on OSD T&E Oversight

(b) Designate a “T&E Lead” for ACAT II-II/BCAT II-III programs, other AAF pathways, and prototype efforts under authorities other than the DAS (e.g., reference (gs)).

(7) Develop and approve T&E WIPT charter to provide high level T&E direction (including OSD T&E oversight) and an

Integrated Test Team charter to support daily CBTE planning and implementation.

(8) Designate a government Lead Developmental Test Organization (LDTO), independent from the Program Office (if possible), that has responsibility to conduct and provide technical expertise on DT activities and provide unbiased technical assessments to the program.

(9) Ensure that any proposal that develops non-government facilities to support system development or test must include a CBA, if the same capability exists at a government facility. The SYSCOM Commander, PEO, and DON T&E/N94 shall review and concur with the CBA prior to PM allocating over $1M to support external capability development.

(10) Ensure that program and project T&E planned and estimated cost data that complies with reference (gt), is input into TP4.

(11) Plan for and execute Verification, Validation and Accreditation (VV&A) of any M&S used to support DT&E, and support OTA accreditation of any M&S used for OT&E.

(12) Keep DON T&E/OPNAV N94 informed of correspondence and discussions with DOT&E/D,DTE&A that concern T&E policy issues and acquisition program TEMPs/MTSs, DT&E, OT&E, and LFT&E.

f. Direct Reporting Program Manager. DRPM T&E roles include each of the roles assigned to SYSCOM Commanders, PEOs and PM, including coordination with DON T&E/N94 and the cognizant OTA, TEMP/MTS development, and implementation of OTRR policy.

g. Chief Developmental Testers/Test & Evaluation Lead. As the PM’s representative, CDT/T&E Lead will normally chair the T&E WIPT, and be responsible for developing the TEMP/MTS. The CDT/T&E Lead shall:

(1) Develop and execute an integrated DT&E/OT&E/LF-TES using a CBTE methodology, where appropriate, to develop a resource plan to execute that strategy, and manage those resources.

(2) Coordinate the planning of all DT&E activities, manage and oversee all DT&E program activities, and oversee the T&E activities of participating government activities.

(3) Maintain insight into contractor activities under the program, and support the PM in making technically informed and objective decisions about contractor DT&E results.

(4) In coordination with program system engineers and contracting officers, ensure that measurable and testable requirements are included in the RFPs, specifications, and Statement of Work (SOW).

(5) Evaluate and report during the TMRR, Engineering and Manufacturing Development (E&MD), and Production and Deployment phases of development on the program's status towards achievement of the Required Operational Capability (ROC). This will be accomplished using the evaluation methodology specified in the TEMP, MTS, or other program requirements document.

h. Lead Developmental Test Organization. When a government agency, such as a group within an Echelon III WC, is the principal developer or Lead Systems Integrator, the LDTO shall be separate and independent of the development/integration group if possible. The LDTO shall:

(1) Assist the CDT/T&E lead in leading test activities and in reaching technically informed, objective judgments about DT&E results.

(2) Participate in the OTRR and provide a technical assessment of program performance and Critical Operational Issue (COI) risk, separate from the PM’s assessment.

i. Test & Evaluation Working Integration Product Team. The purpose of the T&E WIPT is to increase the overall efficiency of test planning and execution by creating and managing the integrated T&E strategy documented in the tailored TEMP/MTS. The T&E WIPT shall:

(1) Be established as early as possible in the acquisition life-cycle (but no later than Milestone A or initial

entry into the acquisition process (including entry into rapid prototyping)).

(2) Develop a WIPT charter that identifies core members of the T&E WIPT.

(3) Include contractor participation as appropriate and per contract requirements.

j. Weapon System Explosive Safety Review Board/Laser Safety Review Board. DON programs that develop, utilize or interface with energetic or laser elements or systems shall consult with the WSESRB/LSRB in the TMRR phase or earlier to avoid delays in installing systems onboard ship and to support development and T&E. Tests intended to demonstrate the safety and acceptability of weapons for shipboard use must be approved by WSESRB. Test considerations for the safe use of military lasers and laser systems on DoD ranges can be found in reference (gd).

k. Navy-Specific T&E. The following organizations have roles in all Navy T&E programs:

(1) CNO Requirements Officers (RO)/Resource Sponsors (N2N6, N4, and N9). CNO ROs/Resource Sponsors shall:

(a) Participate in program T&E WIPTs to provide clear focus on OPNAV priorities and obtain situational awareness of system performance and deficiencies.

(b) Fully support the program/COMOPTEVFOR during the Mission Based Test Design (MBTD) process, attending In-Process Review and Design of Experiments Working Group events to provide requirements clarification and concur with the scope and resources required for all phases of testing.

(c) Provide concurrence with the program TEMP/MTS. RO and resource sponsor concurrence with a program TEMP/MTS constitutes commitment to fund the resources identified in the TEMP/MTS, and concurrence that the work identified is the minimum required to support program decisions and inform warfighters of capabilities and limitations. This includes targets, models, and simulation.

(2) COMOPTEVFOR. Unless otherwise specified in the TEMP for the system under development, COMOPTEVFOR is the designated OTA for the USN and for USMC aviation programs assigned to CNO sponsorship. COMOPTEVFOR shall:

(a) Plan, conduct, evaluate, and report the OT&E of acquisition programs in the MCA, MTA, Urgent Capability Acquisition, DBS, and SWPs.

(b) Develop an Integrated Evaluation Framework in collaboration with program office, CNO resource sponsors, and other stakeholders as required.

(c) Develop and validate initial procedures and tactics for systems that undergo OT&E.

(d) Make fleet release or introduction recommendations.

(e) Prepare the OT&E content and a listing of test resources needed to execute operational test for the TEMP/MTS.

(f) At each DON AAF program initiation, and for each capability modification, determine necessity for OT and scope of required OT. Document required scope in program TEMP/MTS/SYSCOM Test Strategy.

(g) Coordinate for multi-service and joint OT&E, and serve as the lead OTA when the Navy is the assigned lead.

(h) Serve as the designated Navy RDT&E fleet-support scheduling agent for DON T&E/OPNAV N94. Coordinate scheduling of T&E fleet support resources.

(i) Serve as advisor to CNO on Navy OT&E matters.

(j) Identify significant test limitations and advise ASN (RD&A), CNO resource sponsors, DON T&E/OPNAV N94, and the MDA of risk associated in the procurement decision.

(k) Ensure that operations and system security requirements are met for all OT&E evolutions.

(l) Conduct and report on Quick Reaction Assessments (QRA) to support Urgent Capability Acquisition programs.

(m) Provide program offices with OT target requirements as part of TEMP/MTS development. Validate target allocation requirements and prioritization in support of the N943/SYSCOM annual allocations.

(n) Publish OT reports to support decisions. The timelines for publishing COMOPTEVFOR test reports are based on the receipt of all validated test data. When appropriate, COMOPTEVFOR may publish an Interim Report, accelerating delivery of vital information to enable informed decisions. An Interim Report does not replace the requirement for complete and conclusive reporting.

1. ACAT I, BCAT I, and all Multi-Service OT&E test reports will be published within 90 days.

2. All QRA test reports will be published within 60 days.

3. All other test reports will be published within 60 days.

(o) Coordinate with MCOTEA to ensure Marine vehicles are tested for shipboard integration such as on- and off-loading height restrictions and maneuverability on existing naval vessels, and new vessels that transport Marine vehicles are assessed against existing Marine vehicles.

(p) Plan, conduct, evaluate, and report findings of naval systems and assigned CCMD elements in support of the DOT&E Cybersecurity Assessment Program.

(q) Support DON T&E review of requirements capabilities documents (e.g., ICD, CDD and CDD Updates, and other AAF documents) for clarity, testability and operational relevance.

1. Marine Corps Specific T&E. The following organizations have specific roles in Marine Corps acquisition T&E.

(1) DC, CD&I shall:

(a) Develop CDD and CDD Updates for USMC ACAT programs, as well as capabilities documents for other AAF programs. Before staffing with MROC/JROC, coordinate a review of draft language with MCOTEA.

(b) Develop the Concept of Employment (CONEMP), OMS, MP, and mission essential functions for proposed non-AIS and interoperability and standards requirements for CDDs and CDD updates.

(c) In coordination with the materiel developer and Director, MCOTEA (when OT is required), provide a representative to assist in determining program FDSC for each program and project under development and provide a voting member for scoring conferences.

(d) Support T&E WIPTs, TEMP development, and provide concurrence on TEMPs as the RO.

(2) Deputy Commandant for Manpower and Reserve Affairs (DC, M&RA). DC, M&RA assigns:

(a) A Test Director (TD) for OT&E of ACAT I and designated ACAT II programs.

(b) A Deputy TD for multi-service OT&E of ACAT I programs.

(c) When the required structure for items (a) and (b) above is not on the Joint Duty Assignment List, a compensated structure validation should be completed through Marine Corps Combat Development and Integration Department Total Force Structure Division and the Joint Staff.

(3) Deputy Commandant for Installations and Logistics (DC, I&L). DC, I&L is designated the functional manager for Marine Corps Logistics Systems AIS. DC, I&L is responsible for:

(a) Providing a representative to coordinate with Commander, MARCORSYSCOM, PEOs, the Marine Corps DRPMs, and Director, MCOTEA (when OT&E is required), in determining AIS

program FDSC for each Logistics System's AIS program under development.

(b) Providing a voting member for scoring conferences.

(4) Commander, MARCORSYSCOM and PEO Land Systems (PEO-LS). Commander, MARCORSYSCOM provides oversight of program activities related to T&E for the CMC and HQMC staff to ensure T&E activities directly support the CMC's responsibilities for sustained materiel readiness and mission capability of the Marine operating forces. Commander, MARCORSYSCOM shall represent the Marine Corps in all DT&E matters. Commander, MARCORSYSCOM or PEO-LS for programs under their responsibility:

(a) Certify that systems are safe and ready for DT&E and OT&E.

(b) Serve as the primary interface with Joint Interoperability Test Command (JITC) on joint interoperability testing conducted during DT.

(c) Exercise review and initial approval authority over TEMPs/MTSs for assigned programs and multi-service programs, as appropriate.

(5) Director, MCOTEA. MCOTEA is the designated OTA for the USMC. Director, MCOTEA shall ensure that the OT&E of all programs is effectively planned, conducted, and reported; and shall coordinate the scheduling of resources for OT requiring Marine operating forces support through the Marine Forces Synchronization Conferences and the Two Year Master Test Plan published annually with quarterly updates. Director, MCOTEA shall:

(a) At each DON AAF program initiation, and for each capability modification, determine necessity for OT and scope of required OT. Document required scope in program TEMP/MTS/SYSCOM Test Strategy.

(b) Host and chair a FDSC charter development conference for the development of an FDSC charter for each program.

(c) Prepare the operational test content, with the exception of LFT&E, and a listing of resources required to execute operational test for input into the TEMP/MTS.

(d) Request, from the office of the Assistant Commandant of the Marine Corps (ACMC), the assignment of a TD for ACAT I and ACAT II programs, as required.

(e) Coordinate with the Marine operating forces and other commands in matters related to OT&E by publishing a Test Planning Document.

(f) Manage those joint OSD-directed multi-service OT&Es for which the Marine Corps is tasked and coordinate Marine Corps support for other Military Services' OT&Es.

(g) Prepare and provide directly to the ACMC, within 45 days (or as stipulated in the TEMP/MTS) after completion of OT&E, an OTA evaluation report for the System Under Test (SUT).

(h) Advise ACMC on OT&E matters.

(i) Advise the MDA of risk associated in the procurement decision when significant limitations are identified during system evaluation.

(j) Maintain direct liaison with DOT&E, the Marine operating forces for OT&E matters, and other military activities and commands, as required.

(k) Represent the Marine Corps in all multi-service OT&E matters.

(l) Serve as the primary interface with JITC on joint interoperability testing conducted during OT.

(m) For USMC programs not required by statute to conduct LFT&E, but where LFT&E is appropriate, the Director, MCOTEA shall concur with the LF-TES as approved by the MDA in the TEMP.

(6) Marine Operating Forces. The Commanding Generals, Marine Forces Pacific and Marine Forces Command shall designate a test coordinator as a focal point for all T&E matters and

support MCOTEA in the T&E of new concepts, equipment, and systems. The Marine operating forces shall provide a Marine Operating Forces Officer-in-Charge for test who will lead the Marine operating forces participating in the operational test and be available to the MCOTEA evaluation team for at least 30 days after completion of OT&E.

4. T&E Planning

a. Capability Based Test and Evaluation. The CBTE approach should provide accurate, objective, and defensible information from test scenarios that will provide meaningful performance results, to include evaluation of system effectiveness, suitability, and survivability (to include cyber survivability) in a mission context.

b. TP4 Utility. Programs shall enter cost data into TP4 as soon as resources and funding are determined and update the database and TEMP/MTS cost tables with each revision.

c. T&E Documentation. Following are the T&E planning documentation requirements and OT requirements for the various AAF paths. The documentation is summarized in Table 10-1.

(1) ACAT I-III programs, and AAPs that require OT&E. All DON ACAT I-III programs, and AAPs that require OT&E shall develop and implement a TEMP for program DT&E, OT&E, and LFT&E and complete an IOT&E per reference (en). Capability modifications to ACAT programs and AAPs that require OT will develop a tailored TEMP update and conduct an appropriately scoped independent Follow-on Operational Test and Evaluation (FOT&E) to support acquisition and fielding decisions.

(2) AAPs. AAP’s that do not require OT&E shall develop T&E documentation per SYSCOM requirements.

(3) BCAT Programs. BCAT programs requiring OT, including those on OSD T&E Oversight, shall document their T&E strategy in a TEMP. The initial TEMP is due at the Acquisition ATP, and should finalize resources required for IOT&E. All other BCAT programs will produce a MTS to support the program T&E strategy. The initial MTS is also due at the Acquisition ATP.

(4) MTA. MTA programs will produce a MTS in lieu of a TEMP, and the OTA will monitor DT testing and conduct a QRA to support the operational demonstrations identified in reference (af).

(5) Urgent Capability Acquisitions. Urgent Capability Acquisition pathway programs shall produce a MTS and the OTA will conduct a QRA to support operator knowledge and to characterize performance.

(6) SWP. SWP programs will produce a MTS, and the OTA will conduct IOT&E when capability development is sufficiently mature prior to initial acquisition. Each addition or modification of capability thereafter requires an updated MTS and completion of appropriately scoped OT&E prior to acquisition and fielding.

(7) Technical development and prototyping efforts performed under R&D authorities other than the DAS (e.g., reference (gs)). Efforts using these authorities that require fleet resources to support development and testing, N94 resources (targets and ranges), or lead to an operational demonstration or other OT effort prior to fielding any capability will produce a MTS and conduct a QRA, if required.

d. Capability Modification T&E. PMs shall plan, fund and execute adequate DT&E, OT&E, and LFT&E for each capability modification, as required. The OTA shall determine whether OT is required and will work with the PM to appropriately scope a capability-focused FOT&E evaluation.

Table 10.1. T&E Documentation Requirements.

| | Initial Acquisition | | | | | Capability Modification | | | | | TEIN Req'd | Test Documentation Approval | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Document | Approval Note 1 | Signature level | When Due | OT Req'd | Document | Approval Note 1 | Signature level | When Due | OT Req'd | | PM | RO | OTA | DON T&E | ASN RDA | DOT&E | D,DTE&A |
| **ACAT I, all ACAT II/III/AAP on OSD oversight** | TEMP | ASN RDA | FOGOSES | MS A/B/C, RFP, FRP | IOT&E | TEMP Update | ASN RDA | FOGOSES | Prior to DT start | FOT&E | x | x | x | x | x | x | x | ACAT ID |
| **ACAT II (non-oversight)** | TEMP | MDA | FOGOSES | MS A/B/C, RFP, FRP | IOT&E | TEMP Update | MDA | FOGOSES | Prior to DT start | FOT&E | x | x | x | x | x | | | |
| **ACAT III (non-oversight)** | TEMP | MDA | O-6 | MS A/B/C, RFP, FRP | IOT&E | TEMP Update | MDA | O-6 | Prior to DT start | FOT&E | x | x | x | x | x | | | |
| **AAP that requires OT&E (non-oversight)** | TEMP | MDA | O-6 | MS A/B/C, RFP, FRP | IOT&E | SYSCOM-specified | MDA | O-6 | per SYSCOM | FOT&E | x | x | x | x | | | | |
| **AAP that does not require OT&E** | SYSCOM-specfied | MDA | per SYSCOM | per SYSCOM | none | SYSCOM-specified | MDA | per SYSCOM | per SYSCOM | none | x | x | | x | | | | |
| **BCAT I with OT, BCAT on oversight** | TEMP | ASN RDA | FOGOSES | Acquisition Authority to Proceed (ATP) | OT&E | TEMP Update | ASN RDA | FOGOSES | Annual Review/new requirement | OT&E | x | x | x | x | x | x | x | |
| **BCAT II with OT** | TEMP | MDA | FOGOSES | Acquisition ATP | OT&E | TEMP Update | MDA | FOGOSES | Annual Review/new requirement | OT&E | x | x | x | x | x | | | |
| **BCAT III with OT** | TEMP | MDA | O-6 | Acquisition ATP | OT&E | TEMP Update | MDA | O-6 | Annual Review/new requirement | OT&E | x | x | x | x | x | | | |
| **BCAT (no OT)** | MTS | MDA | O-6 | Acquisition ATP | none | MTS Update | MDA | O-6 | as required | none | x | x | x | x | | | | |
| **MTA (OSD oversight)** | MTS | ASN RDA | FOGOSES | 180 days after designation | QRA | N/A | | | | | x | x | x | x | x | x | x | |
| **MTA (not oversight)** | MTS | DA | O-6 | 180 days after designation | QRA | N/A | | | | | x | x | x | x | x | | | |
| **SWP (OSD oversight)** | MTS | ASN RDA | FOGOSES | The same time as the Acq Strat | OT&E per MTS w/in 1 year of fund obligation | MTS Update | ASN RDA | FOGOSES | Annual Review/Acq Strat Update | Annual OT&E | x | x | x | x | x | x | x | |
| **SWP (not oversight)** | MTS | DA | As req'd | The same time as the Acq Strat | OT&E per MTS w/in 1 year of fund obligation | MTS Update | DA | As req'd | Annual Review/Acq Strat Update | Annual OT&E | x | x | x | x | x | | | |
| **UON** | MTS | DA | O-6 | 180 days after UONS letter release | QRA | N/A | | | | | x | x | x | x | x | | | |
| **Prototypes** | MTS | DA | O-6 | As req'd | QRA | N/A | | | | | x | x | x | x | x | | | |
| **Joint Programs (DoN MDA)** | TEMP | ASN RDA | FOGOSES | Prior to DT start | IOT&E | TEMP Update | ASN RDA | FOGOSES | Prior to DT start | FOT&E | x | x | x | x | x | x | x | |
| **Joint Programs (non DoN MDA)** | TEMP | DoN T&E | FOGOSES | Prior to DT start | IOT&E | TEMP Update | DoN T&E | FOGOSES | Prior to DT start | FOT&E | x | x | x | x | x | | x | |
| **Joint Programs (Off the shelf)** | MTS | DA | O-6 | Prior to DT start | N/A | MTS | DA | O-6 | Prior to DT start | FOT&E | x | x | x | x | x | | | |

Note 1 – ASN (RD&A)/MDA approve DT portion of the TEMP/MTS, DOT&E/OTA approve OT portion

e. Test and Evaluation Master Plan. The TEMP should be tailored and scoped to focus on PM decision points and resources required. The TERRB provides the basis for the TEMP, and TEMP updates will identify and explain changes to assumptions, planned activities and resources. References should not be rewritten in the TEMP to the maximum extent practical. 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.

(1) Specific content includes:

(a) A brief description of the System Under Test (SUT) and the System of Systems that enables the SUT to succeed.

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

(c) Specific entry and exit criteria and resources required for each phase of testing.

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

(e) Planning assumptions (suppositions assumed to be true in absence of facts), constraints (options to which one is limited), and restraints (what cannot be done). Identify limitations to test (DT&E, OT&E, and LFT&E) and impact on understanding system performance, including but not limited to infrastructure gaps, resource availability, and environment.

(f) Cost estimates for DT&E, OT&E, and LFT&E, and the PE’s used to fund the work shall be documented using TP4, prior to TEMP approval. This includes resources required for each test phase, including targets, weapons/ammunition Non-Combat Expenditure Allocation and M&S. Use TP4 Table 1 (Cost Summary) in the TEMP.

(g) STAT discussion to support DT/OT/LFT&E planning and cost estimates. Identify potential test phase on- and off-

ramps based on system performance and STAT-informed levels of risk.

(h) Justification for Development of Non-DoD Infrastructure. Test planners will use existing DoD infrastructure (ranges, facilities, and laboratories) and other DoD resources, to include embedded instrumentation, for conduct of T&E unless it is demonstrated via a CBA that it is more cost effective to fund development of unique T&E capability at a contractor facility vice a government facility. If the TEMP identifies development and use of unique contractor capability, the SYSCOM Commander/PEO and DON T&E shall review and concur with the CBA prior to PM allocating funds.

(i) Identify requirements for expanded range activities, afloat or ashore, necessary to support the T&E of the platform. Include cost estimates associated and funding sources.

(j) Complete strategic six step DT/OT Cybersecurity T&E approach and resources required, including collection of data to support the cybersecurity DT/OT process, as prescribed in references (en) and (dm) leading to an Authorization to Operate (ATO) per reference (u), a SYSCOM Cybersecurity Safety (CYBERSAFE) system certification per reference (dr), and Cybersecurity Survivability evaluation per reference (ct). DoD cybersecurity policy can be found in references (t), (u), and (eu).

(k) LFT&E Strategy (LF-TES). The LF-TES can be included as a TEMP Annex or staffed separately at the program's discretion. In either case, the LFT&E resources and schedule shall be incorporated into the program Integrated Master Schedule and TP4.

(l) Appropriate CBTE Platform Mission Task (PMT) views.

(m) Ship program specific requirements. For ship programs that only have a Milestone B or that have a combined Milestone B/C, the Milestone B or Milestone B/C TEMP shall document all scheduled DT/OT/LFT&E up to and including IOT&E.

(2) DON TEMP Review and Approval Process. DON TEMP Approval and signature authority is assigned by ACAT/BCAT level and oversight status as per reference (en), and is summarized in Table 10-1. Signature pages that describe the approval process for each level are in reference (eb).

(a) All resource sponsors that provide funding to support the TEMP shall endorse the TEMP to confirm that the TEMP is fully funded.

(b) Changes to TEMP content after PM signature. If, after the PM has signed the TEMP/MTS to start the final approval routing process, a stakeholder changes any TEMP/MTS content, the PM shall notify the WIPT of proposed changes and gain WIPT approval. The PM shall then issue a memo for the record stating the change, any impact to schedule and funding and that he/she concurs with the changes and has the approval of the other WIPT stakeholders. TP4 shall be updated if required.

(c) Joint/Multi-Service TEMP Signature Policy. In today's acquisition environment, many programs are developed by one Service, but funded/used by multiple Services. DON TEMP Signature policy for joint programs is based on program ACAT level and level of DON organizational participation, as discussed in Table 10-1.

(3) TEMP Updates. There are two categories of TEMP updates - "TEMP Revision" and "Tailored Updates." Details on the conduct of each are found in the T&E Manual.

f. MTS

(1) Programs identified in paragraphs 4c(4) through 4c(7) shall produce a MTS that includes:

(a) Description of the capability, attributes desired, and the operational environment, including forces that will deploy with the capability prior to IOC.

(b) Specified tasks, assumptions, constraints, and restraints.

(c) Identification of where operational risk is being assumed in test program (i.e., not exploring entire

operational envelope to support fielding partial capability faster, cybersecurity risk assessment, T&E capability gaps that limit test).

(d) Schedule of test phases and events integrated with key program objectives and decision points.

(e) Anticipated use of M&S to support decisions.

(f) OTA Assessment scope (IOT&E, QRA) that addresses the operational capabilities, limitations, risks, and considerations.

(g) Test strategy resources, cost estimates, and funding documented in TP4, and TP4 Table 1 included in MTS.

(2) T&E Requirements and Resources Board. Programs developing a MTS shall conduct a TERRB at program initiation. The TERRB will provide the basis for the MTA, and MTS updates will identify and explain changes to assumptions, planned activities, and resources.

(3) Master Test Strategy Approval. MTS approval is specific for each acquisition path and is covered in Table 10-1.

g. Capability Modification TEMP/MTS. As defined in enclosure 5, Capability Modifications require a tailored STAT-based TEMP/MTS to document work to be done and resources to be used. The TEMP/MTS should be minimal and focused on system changes. The TEMP/MTS will culminate with an independent phase of OT evaluation that includes a cyber assessment. The PM and cognizant OTA will collaborate to determine the scope of OT&E required using the OTA Level of Test Determination process. A TEMP/MTS is not required for technical refresh or form-fit replacement that do not change or add to the platform/system performance. Table 10-1 provides amplification.

h. DON T&E Coordination Process. Disagreements regarding the scope of required testing, associated resources, and T&E risk assumption should be proactively managed within the T&E WIPT. T&E WIPT stakeholders will incorporate the DOT&E/OTA Running Comment Resolution Matrix (RCRM) or similar process as a means to document disagreements for resolution or TECP elevation. The RCRM will be briefed at every program T&E WIPT,

and the process will be documented in the T&E WIPT charter. Disagreements that cannot be expeditiously resolved at the WIPT (within 90 days) should be elevated via the DON TECP for resolution. DON T&E/N94 will facilitate TECP conversations.

5. Test & Evaluation Phases

a. Developmental Test & Evaluation

(1) 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 IOT&E. The LDTO should 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 contractor DT&E responsibilities will be described in the TEMP and SOW.

(2) Development Test Sufficiency Assessment. References (av), (bu), (co), and (en) establish a requirement for MDAPs to conduct DTSA at Milestones B and C. If the MDA is the SAE of the MILDEP that is managing the program, the sufficiency assessment shall be conducted by the senior official within the MILDEP with responsibility for DT. 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.

b. Integrated Testing. Programs should plan T&E events to allow the DT and OT communities to gather needed information in the proper environment/conditions as early as possible in the program lifecycle. The goal is to inform programs about how they are progressing towards completing mission tasks and potentially reducing the scope of dedicated OT events later in the program lifecycle.

(1) The goal of an integrated testing event is to ensure that the collected data will be usable for DT and OT. To do this, the CDT and OTA shall:

(a) Develop an integrated test plan that reflects all stakeholder needs and ensure that required coordination with

DOT&E has occurred to facilitate acceptance of data collected during Integrated Test as OT&E data.

(b) Incorporate the appropriate criteria of the DON OTRR brief in an Integrated Test Readiness Review brief. Upon completion of the review, the PM shall send an email to the cognizant WIPT stakeholders (OTA Branch/Section head, RO, etc.) notifying them that the system is ready for the IT event, and that requirements for OTA participation have been met.

(2) To facilitate early planning for follow-on events, the OTA shall send an email to the WIPT summarizing the success/failure of executing the integrated test plan within 10 days of event completion.

c. Operational Test & Evaluation

(1) OT&E includes Early Operational Assessments (EOA), OA, IOT&E, FOT&E, QRA, and other events to support specific customer needs.

(a) Per references (db) and (en), OT&E is required for ACAT I-III programs. For AAP programs, the requirement for OT will be determined by the cognizant OTA. For DON programs (and capability modifications as defined in enclosure (5)), the scope of OT&E shall be determined by the cognizant OTA to support fleet understanding of the SUT and characterize the impact on mission task accomplishment. The OTA will work with the PM to appropriately scope a capability-focused OT&E evaluation.

(b) Per reference (en), DOT&E will approve the scope of OT&E for all programs on DOT&E OT&E Oversight.

(c) For programs that are designated as ACAT IVM as of the issuance date of this instruction, their ACAT IVM waiver from OT is grandfathered until the next capability modification.

(2) OT shall evaluate the SUT’s effectiveness, suitability and survivability (including in a cyber-contested environment), identify system deficiencies and map them to assigned mission tasks and also examine how well the SUT supports mission accomplishment when the SUT is operating within its intended SoS. OT&E should be planned to maximize use of

data generated during an integrated testing event, by ensuring adequate data pedigree.

(3) Initial Operational Test & Evaluation

(a) The PM shall ensure IOT&E is completed prior to proceeding Beyond Low-rate Initial Production (BLRIP) for MDAP programs (ACAT I) and programs on OT&E oversight as required by references (z) and (dq). BCAT programs shall conduct IOT&E before the Full Deployment ATP.

(b) For programs and projects that do not require IOT&E, the DT conducted supports the MDA's production or fielding decisions. Programs should consider consulting with the OTA during DT planning and conduct to ensure appropriate operational input.

(4) Follow-on Operational Test and Evaluation. FOT&E is any OT determined to be required to support fielding a capability upgrade beyond the IOC configuration, as well as deferred testing from IOT&E and Verification of Correction of Deficiencies (VCD). This includes OT&E to support Capability Modifications. The OTA and program office will collaborate to determine the required scope of OT. A TEMP update focused on system changes shall be created for Capability Modifications.

(5) Quick Reaction Assessments. QRAs are abbreviated OT&E events in support of DON Urgent Capability Acquisition pathway and MTA pathway programs. This assessment is specific to warfighting solutions that address an UON or that qualify for MTA authority. A QRA provides an objective characterization of system operational capabilities, limitations, and deployment considerations, using the criteria supplied by the end user in the capabilities documentation.

(a) QRAs do not obviate or replace scheduled OT for ACAT/BCAT programs and do not support statutory/regulatory ACAT IOT&E requirements for Full Rate Production (FRP) decisions. Systems that have completed a QRA will undergo formal OT if they transition to an ACAT program. QRA requirements, schedule, and resources shall be documented as part of the program MTS. QRA test plans for efforts under DOT&E oversight shall be approved by DOT&E.

(b) Depending on the operational implications of the associated test strategy, a QRA for rapid prototyping systems could take the form of the OTA observing DT as discussed below.

(6) Operational Test Agency Observing Developmental Test & Evaluation

(a) For any Navy DT observed by COMOPTEVFOR and not documented in an approved TEMP/MTS, a Memorandum of Agreement between COMOPTEVFOR and the program office will be established and address the purpose, sharing of data, contractor involvement, scope of test, and level of feedback from COMOPTEVFOR to the PM.

(b) Marine Corps Operational Test and Evaluation Activity uses the results of non-MCOTEA testing (e.g., DT), when appropriate, to support OT&E. Integrated Testing requires active participation in planning integrated testing with the program office. This is done so operational objectives are understood, the testing is conducted in an operationally realistic manner, and the resultant data are relevant for use in operational evaluations. MCOTEA will prepare an observation plan based on the approved integrated test plan, observe the relevant aspects of the integrated test event as documented in the observation plan on a "not-to-interfere basis," prepare an observation report to comment on the conduct of the test event and, if appropriate, an assessment or evaluation report on the data gathered for the PM.

(7) Verification of Correction of Deficiencies for DON Programs. The purpose of a VCD event is to confirm that deficiencies identified during IOT&E or FOT&E, or while observing DT, have been fixed. While specific OT report tracking and response mechanisms are not required, programs and resource sponsors should review OT reports and develop plans to address the deficiencies.

(8) Operational Test & Evaluation Test Plans. DON OTAs develop and approve all OT&E test plans for the Services. Test plans for MDAPs and programs under DOT&E oversight shall be approved by DOT&E, per references (z), (dq), and (en).

(9) Certification of Readiness for OT.

(a) Reference (en) directs the Services to develop a standard policy for certification of readiness to commence OT. For DON programs, or for programs where a naval OTA is the lead OTA on a Joint/multi-Service Operational Test event, a full OTRR shall be conducted for IOT&E and FOT&E events. A tailored OTRR shall be conducted for EOA, OA, and QRA. If the OTA does not receive OT readiness certification notification from the PEO/SYSCOM Authority/DRPM, the OTA is not authorized to commence OT.

1. The cognizant PEO/SYSCOM Commander/DRPM is responsible for certifying that the SUT is ready for the prescribed OT.

2. The PEO/SYSCOM Commander/DRPM (or SES deputy) shall chair the IOT&E OTRR. For all other OT phases, the PEO/SYSCOM Commander/DRPM shall chair (or designate a chair for) the OTRR. The chair shall not be delegated below the PM.

3. The OTRR shall consist of representatives from the PEO, PM, LDTO, DON T&E, resource sponsor, ASN (RD&A), and the OTA. Representatives from DOT&E shall be included for all OT oversight programs. D,DTE&A shall be invited to ACAT ID program OTRRs. Other recommended members include cognizant technical warrant holders, TAs, and certifying officials.

4. 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". There are two types of T&E Exceptions:

a. "Deviation from SECNAV Policy" (formerly known as a "waiver") which applies when any of the 16 OT Certification Criteria are not met.

b. "Deferral of Test Requirements" which applies when system capabilities identified in the program requirements documents are not available for testing, or the resources required to test program requirements are not available.

5. The PEO/SYSCOM Commander/DRPM shall release the OT Certification message, regardless of who chairs the OTRR. This is not delegable.

(b) Operational Test Readiness Review Planning and Timing.

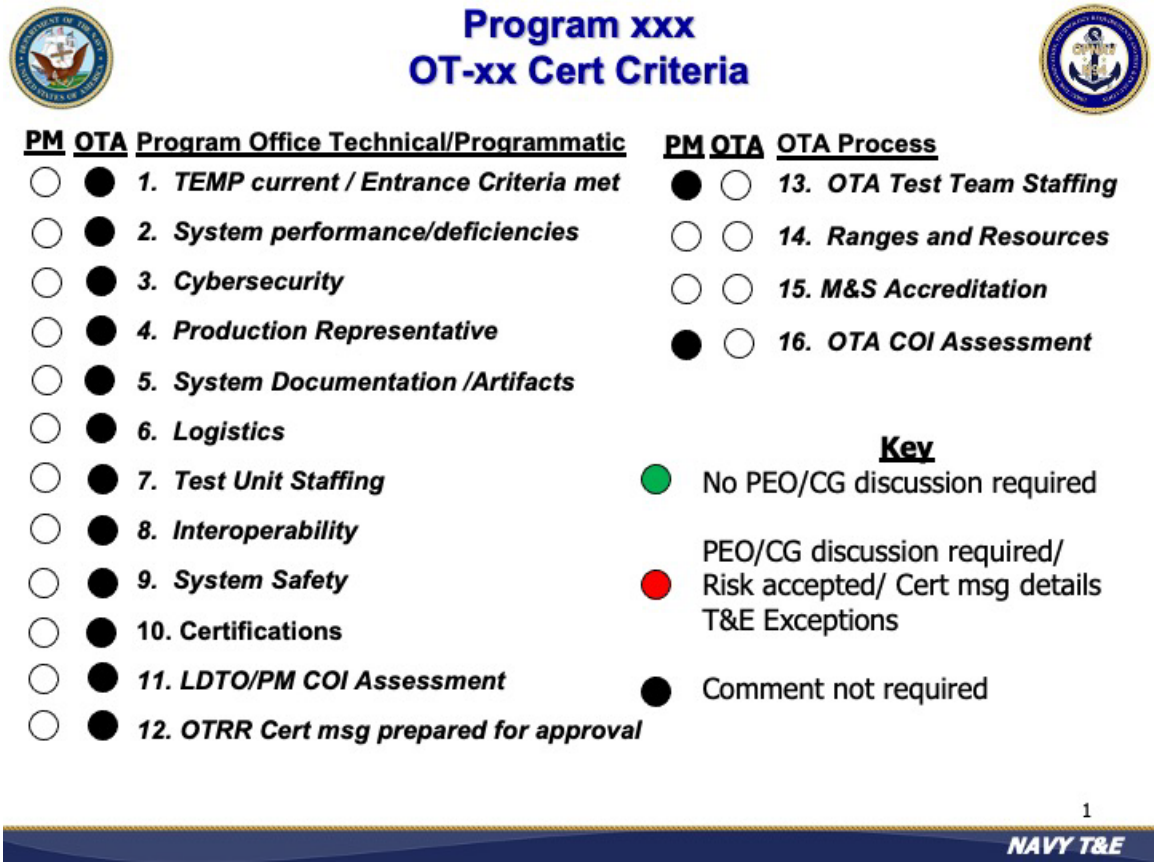
1. An OTRR should be conducted at least 30 days prior to the commencement of the test event to ensure resources are available.

2. If a test event is cancelled, deferred, or if changes have been made to the SUT after the OTRR, but before OT commences, the WIPT should assess the need for a delta-OTRR.

(c) DON OT Certification Criteria and Brief.

1. The purpose of the OTRR is to facilitate an informed leadership discussion on program performance and deficiencies in a warfighting capability and system-of-systems context, not just compliance with program CDD requirements, CONOPS and system specifications. OTRR briefs shall utilize the OTRR Brief Template, which can be found on the DAU DON T&E Policy site and DON Acquisition T&E Collaboration SharePoint. Specific procedures to be implemented for OT certification are also located in the DON T&E Manual.

Figure 10-2. OT Cert Criteria Summary Template.




2. The PM is responsible for ensuring all 16 Criteria from Figure 10-2 are addressed at the OTRR. The PM is responsible for briefing the 12 program office criteria, and the OTA is responsible for briefing the four OTA process criteria. To facilitate the capability-based, System-of-Systems nature of today's warfighting, the OTRR brief shall also document the LDTO, PM, and OTA assessments of the likelihood of resolving each COI successfully.

3. For IOT&E/FOT&E OTRRs, the PM shall address all 16 OTRR Certification Criteria. The MDA may add criteria as necessary to determine readiness for OT. IOT&E/FOT&E Criteria assessments are binary – "met" (green) or "not met" (red). There is no "partially met" or "at risk" (yellow). Assessing a criterion as "not met" does not mean that the program cannot proceed to test. "Not met" means that PEO discussion is

required at the OTRR, and that the PEO must document in the OT Certification Message that he/she understands the reason the criteria was not met and accepts the risk as a Deviation from SECNAV Policy as discussed below.

4. For all OT other than IOT&E/FOT&E (e.g. EOA/OA/QRA), the PM, with the support of the T&E WIPT and concurrence of the PEO and OTA, may tailor OT Certification criteria to reflect appropriate levels of technical and programmatic maturity, and comment on risk to successful completion of the OT event. "T&E Exceptions" do not apply to EOA/OA/QRA OTRRs, and the OT Certification Message goes directly to the cognizant OTA. Criteria assessment can be red, yellow, or green, as the purpose of the event is to characterize risk. The MDA may add criteria as necessary to determine readiness for OT.

a. For example, an OTRR for a pre Milestone-C OA might tailor criteria b. to read "b." T&E results indicate performance thresholds identified in the TEMP have been satisfied to the desired level of maturity for this OA.

b. However, the topic of each criteria is not tailorable; i.e., criteria "b" always refers to system performance/deficiencies.

(d) Operational Test Readiness Review Certification message.

1. T&E Exception Requests. Coordination between PM and DON T&E for T&E exception requests should begin at least 30 days prior to an OTRR. The T&E WIPT shall be briefed on proposed T&E exceptions to ensure full understanding of the impact on OT.

a. When requesting a Deviation from SECNAV Policy in the OTRR certification e-mail/message, the PEO shall identify which of the 16 OT certification criteria are not met, and any impact on the OT period.

b. When requesting a Deferral of Test Requirements in the OTRR Certification Message, the PEO shall describe 1) the capability limitation, 2) the operational impact

upon the SUT, and 3) the planned timeframe for testing the capability in a future OT&E period.

2. The necessary programmatic resources and schedule to enable required additional test periods in which the deferred items are to be tested must be reported to DON T&E, with concurrence of resource sponsor/DC, CD&I. DON T&E will authorize the OTA to proceed to test. For programs on the OSD T&E oversight list, a deviation or deferral of Test Requirements must be coordinated with DOT&E prior to DON T&E authorization to proceed.

(e) DON T&E Approval of T&E Exceptions. Deviations from SECNAV Policy and Deferrals of Test Requirements require written concurrence by both the Navy Resource Sponsor/CD&I and DON T&E representatives at the OTRR. In addition, DON T&E will formally respond to the PEO's OTRR T&E Exception request e-mail/record message by sending an e-mail or record message to the OTA Commander approving the PEO-requested T&E Exceptions for SECNAV.

(f) Start of OT&E. The OTA may commence OT upon receipt of a certification e-mail/message unless T&E Exceptions are requested. When T&E Exceptions are requested, the OTA will not start testing until in receipt of T&E Exceptions authorization e-mail/message from DON T&E. The OTA will issue a start test message/email when OT begins.

(g) De-Certification and Re-Certification for OT&E. When evaluation of issued deficiency and anomaly reports or other information indicates the system will not successfully complete OT&E, the PEO may de-certify the system and stop the operational test. Withdrawal of certification shall be accomplished by e-mail/message to DON T&E, resource sponsor/CD&I, and OTA stating when the system will be evaluated for subsequent recertification and restart of testing (if known). When a system undergoing OT&E has been de-certified for OT, the PEO must re-certify readiness for OT&E prior to restart of OT.

d. Live Fire Test & Evaluation

(1) 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 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 LF-TES and TEMP update process.

(2) Alternative LFT&E Strategy

(a) Programs with LFT&E requirements shall develop a LF-TES outlining the LFT&E approach and resources required. Similar to a TEMP, the LF-TES documents the commitment between signatories to resource and execute LFT&E events, IAW the program's Integrated Master Schedule.

(b) The LF-TES documents which of the two LFT&E approaches will be used - FUSL or Alternate Live Fire Test and Evaluation (ALFT&E).

1. The PM will develop the LF-TES in coordination with the appropriate SYSCOM TA/TWH, resource sponsor and OTA as appropriate. After the TA/TWH signs the LFTES as a concurrent signatory, the PEO/DRPM/SYSCOM Commander approves (non-oversight programs) or endorses (oversight programs) the LF-TES. For programs under DOT&E LFT&E oversight, the PEO/DRPM/SYSCOM Commander submits the endorsed LF-TES to ASN RD&A for DON-level approval. The LF-TES is then sent to DOT&E for final approval. If the program is not under LFT&E oversight, the PEO/DRPM/SYSCOM Commander is the final LF-TES approval authority.

2. The LF-TES will be used to inform the LFT&E sections of the TEMP and will be reviewed and updated as necessary during TEMP revisions. The LF-TES may be included as an appendix to the TEMP, but can be staffed separately as long as strategic LFT&E information (approach, scope, resources, schedule, limitations, etc.) is included in the LFT&E sections of the TEMP. Guidance for writing the LF-TES can be found in

the DOT&E TEMP Guidebook. For USMC programs required by statute to conduct LFT&E, the Director, MCOTEA, shall concur with the LF-TES as approved by the PM. LF-TES/ALFT&E strategy can be included in the TEMP if desired.

(c) LF-TES Approaches. There are two LFT&E approaches that can be discussed in the LF-TES - FUSL and ALFT&E.

1. Full-Up System Level. FUSL testing involves firing threat-representative munitions at the actual platform as configured for combat. This is often done for smaller programs (helmets, body armor) and vehicles.

2. Alternate Live Fire Test and Evaluation. FUSL can be impractical for some ship, submarine, and aircraft programs. A Program Office can develop an ALFT&E strategy that combines component and subassembly tests with modelling and simulation to reach a similar level of knowledge or acceptable level of risk to FUSL tests. To pursue this strategy, the program and Service must seek a waiver by submitting an alternative plan to DOT&E.

3. LFT&E Waivers. An ALFT&E request to waive FUSL live-fire survivability and lethality testing must be submitted by the Service to the DAE with DOT&E's approval. The DAE then must certify to Congress that the survivability and lethality testing of such system or program would otherwise be unreasonably expensive and impracticable. This needs to occur prior to Milestone B (or as soon as practicable after program initiation).

4. LFT&E Waivers shall be coordinated with the OTA, program sponsor, and ASN (RD&A) before ASN (RD&A) transmits the request to DOT&E. Once the ALFT&E plan is approved by DOT&E, DOT&E will send a memo to the DAE stating that they approve the test plan and requesting the DAE to submit the waiver request.

(3) LFT&E Test Plans. Individual LFT&E Test Plans, based on the LF-TES, will be developed by the program office in coordination with the SYSCOM LFT&E subject matter experts, and the OTA as appropriate. The PM will submit LFT&E Test Plans to the SYSCOM TAs for staffing and concurrence. If the program is

under LFT&E oversight, the SYSCOM TA submits the approved Test Plan to DOT&E for final approval. No intermediate DON staffing is required. If the program is not under LFT&E oversight, the TA is the final DON approval authority.

(4) LFT&E VV&A. Program offices are responsible for Verification and Validation (V&V) of LFT&E resources and assets produced to support LFT&E. SYSCOM TA/TWH are responsible for working with programs to accredit LFT&E resources and assets. Program offices shall include a discussion of the LFT&E VV&A plan as part of the TEMP.

e. Interoperability Testing and Certification. Programs (including cloud-based systems) that conduct a data exchange with any other system are required to demonstrate interoperability as part of OT. The OTA has the responsibility to evaluate progress towards joint interoperability as part of each testing phase, and support JITC as a part of DT/IT/OT&E. Interoperability testing consists of intra-Service Navy-Marine Corps, Joint Service, and where applicable, allied and coalition testing.

6. Capability Based Test and Evaluation

a. CBTE provides DT and OT information to decision makers and warfighters in a relevant, operational context based on particular applicable mission tasks in lieu of a specifications-based and data centric approach. Detailed guidance on execution of CBTE for all Navy and Marine Corps programs is found in reference (fo), as well as in SYSCOM and OTA specific guidance.

b. CBTE Program Attributes

(1) The program collaborates with Resource Sponsor/Requirements Office/Fleet/Force/OTA to identify applicable mission tasks, measures and conditions, as derived from applicable documents (including ROC, Projected Operational Environment (POE), Naval Tactical Tasks, Marine Corps Tasks, Coast Guard Tasks, etc.) for the SUT. Resource sponsors/Requirements Offices will concur in writing at the O-6 or above level that the tasks, measures, and conditions identified during the OTA MBTD effort reflect the operational requirements.

(2) The program collaborates with OTA to support MBTD development. RO's/Resource Sponsor/CD&I concur with MBTDs.

(3) The mission-based tasks are decomposed down to the mission thread level, which will enable the creation of a visualization product (currently referred to as a PMT view) that addresses mission tasks, measures and conditions for each platform or SUT. This mission task PMT view is a map that aligns measures and conditions to mission tasks and to specific system architecture. This linkage is also the key to highlighting how a system deficiency will inhibit mission tasks, or how a lack of a resource impacts assessing capability. The CBTE Implementation Guide provides specific PMT View development methodology.

(4) CBTE documentation in the TEMP (new or updated) must include:

(a) Use of approved CBTE language.

(b) PMT Views.

c. CBTE Definitions. For the purpose of Test and Evaluation Planning through the CBTE lens, the following terms are defined below:

(1) Capability. The ability to complete a task(s) or execute a course of action under specified conditions and level of performance.

(2) Effect

(a) The result, outcome, or consequence of an action.

(b) A change to a condition, behavior, or degree of freedom.

(3) Technical Effect. The physical or behavioral change of a system that results from an action, a set of actions, or another factor.

(4) Tactical Effect. The capability/mission impact, result, outcome, or consequence of a technical effect on a system.

(5) Scenario/Tactical Situation (TACSIT). Identifies the environment (e.g. geographical, climatic, and electromagnetic environments), the timeframe, target, weapon or set of weapons, and the available systems for executing the mission.

(6) Conditions. Variables of the environment that affect the performance of tasks in the context of the assigned mission. They are categorized by conditions of the physical environment (e.g. sea state, terrain, or weather), military environment (e.g. forces assigned, threat, command relationships), civil environment (e.g. political, cultural, and economic factors), and custom conditions specific to each system.

(7) Use Case. A description of a system's behavior as it responds to a request that originates from outside that system. A use case describes "who" can do "what" with the system in question. The use case technique captures a system's behavioral requirements by detailing scenario-driven threads through the functional requirements.

(8) Function. The broad, general, and enduring role for which an organization is designed, equipped, and trained.

(9) Mission Thread. A sequence of end-to-end tasks and events that takes place to accomplish the execution of one or more of a System of Systems' capabilities. A mission thread is a type of a use case and represents a single path through the tasks in a use case.

(10) CONOPS. A verbal or graphic statement that clearly and concisely expresses what the commander intends to accomplish and how it will be executed using available resources.

(11) CONEMP. How tactical subject matter experts would employ future Navy systems against existing and future threats.

(12) Campaign. A series of related major operations aimed at achieving strategic and operational objectives within a given time and space.

(13) Operation. A sequence of tactical actions with a common purpose or unifying theme.

(14) Task. A clearly defined action or activity (as defined by the Universal Naval Task List or other source) assigned to an individual or organization.

(15) Tactical Kill Chain (Lethal). A System-of-Systems model of the activities (functions) required to employ a specific weapon against a specific target (a weapon-target pairing) under the conditions and at the ranges described in the TACSIT.

(16) Tactical Effects Chain (Non-Lethal). A System-of-Systems model of the activities (functions) required to accomplish a non-kinetic or supporting mission under the conditions and at the ranges described in the TACSIT.

(17) Mission. The task(s), together with the purpose, that clearly indicates the action to be taken and the reason therefore.

(18) Mission Area. Categories of capabilities as defined in the ROC and POE (e.g. mobility, anti-submarine warfare, strike warfare).

(19) PMT. A platform/system model, including the end-to-end set of steps and tasks that illustrate the technology and human resources needed to deliver expected behavior under a set of conditions.

(20) PMT View. A visualization of a system's performance of its applicable mission tasks within a Tactical Effects/Kill Chain.

(21) Model. A physical, mathematical, or otherwise logical representation of a system, entity, phenomenon, or process.

(22) Vignette. A vignette is a reusable temporally ordered set of events and behaviors for a specific set of entities. These may be thought of as small, ideally self-contained parts of a scenario.

7. Cybersecurity. Overarching cybersecurity policy and requirements can be found in enclosure (14). The PM coordinates with the OTA, the AO, 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 ATO for all IT systems 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. Distinct from the Risk Management Framework (RMF) process which produces an ATO, cyber OT&E shall consist of the OTA evaluation of a system's capability to survive and operate after exposure to operationally representative cyber threats by evaluating the system's capabilities to prevent cyber attack and mitigate and recover lost mission capabilities after a cyber attack occurs. The OTA will evaluate security controls and ability to protect, detect, react, and restore (as defined in reference (dj)) systems during OT based upon the system categorization. OTRRs shall include a dedicated cybersecurity discussion as outlined in the certification criteria. TEMPs shall capture how the six phase cyber DT/OT process, references (en) and (dm), will be implemented within the program schedule and resources, culminating in a Cooperative Vulnerability and Penetration Assessment and Adversarial Assessment.

a. Cybersecurity Test, Evaluation and Certification. PMs shall identify the strategy and resources to execute the six phases of cybersecurity T&E identified in references (en) and (dm) to enable early discovery of system vulnerabilities and facilitate remediation prior to Cybersecurity OT and reduce impact on cost, schedule, and performance.

b. Designating Components or systems "off limits" for Cybersecurity OT. The SYSCOM TA/TWH is responsible for formally identifying and documenting (including specific rationale and associated risk) any component or system deemed "off limits" for Cybersecurity OT. An alternate test plan must be identified for testing the component or system to adequately capture and

categorize cyber vulnerabilities within an operational environment. This will be documented in the program CSS, and referenced with specific detail in the TEMP/MTS.

c. Cyber Crosswalk. The Cyber Crosswalk is a DON T&E/N942 product developed in coordination with SYSCOM Cyber Leads that identifies and aligns RMF steps, CYBERSAFE, systems engineering work, cyber T&E phases, doctrine/guidance, and OT work required to support program decisions, such as milestones and SETR events. This cyber crosswalk is designed to provide programs with a template defining cyber testing requirements across the acquisition life-cycle to assist with streamlining processes and minimizing duplicative efforts. Utilization of the cyber crosswalk allows cyber planners to identify resources available to support these defined cyber test requirements for execution of DT/OT activities. The cyber crosswalk is a living document. The template can be found and downloaded for program use at the DON Acquisition T&E Collaboration SharePoint site.

8. T&E Funding and Resourcing Responsibilities

a. Resource Sponsor/Program Funding Agency Responsibilities. A TEMP/MTS is an agreement between the PM, the resource sponsor/CD&I, OTA, and OSD oversight agencies. As such, resource sponsor TEMP concurrence 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.

b. PM Responsibilities

(1) Except as noted below, the PM is responsible for the work identified in the approved TEMP/MTS. Funds for OT&E shall be made available to the OTA for distribution in time to prepare and obtain any necessary resources to execute OT&E IAW the TEMP/MTS. The PM is not required to fund:

(a) Fleet operating costs for RDT&E support.

(b) Fleet travel for training.

(c) Non-program-related OTA travel and administrative costs.

(d) Major Range and Test Facility Base (MRTFB) institutional costs.

(2) If there is not yet a designated PM, the R&D activity for a pre-ACAT program (or equivalents in other pathways) has responsibilities equivalent to those of the PM for T&E costs.

c. Target & Infrastructure Funding

(1) Targets

(a) Program of Record targets (just the vehicles) are centrally funded and allocated by OPNAV N943. OPNAV N943 allocates target presentations and kill authorizations annually to each claimant (Naval Air Systems Command, Naval Sea Systems Command, Fleet Training), which are then sub-allocated to program test events.

(b) Programs are responsible for costs associated with target preparation, operation, recovery, refurbishment and replacement of consumables and threat emulation payloads destroyed, damaged, or lost during the event. All target costs, whether paid for by the program office directly or provided by other means (N943 centrally funded) shall be included in the resource section of the TEMP/MTS. Costs should include target replacement costs (if planned for expenditure), preparation, recovery, refurbishment, and associated threat emitters.

(c) N943 funding is limited and resource sponsors may need to fund a portion of the targets to meet test requirements. Regardless of TEMP/MTS development status, programs shall coordinate with N943 no later than three calendar years prior to target need date to discuss target resourcing strategies and to support Program Objective Memorandum (POM) issue development. If this formal coordination does not occur on time, a sufficient inventory of targets may not be available to support program test event(s).

(2) Infrastructure

(a) Programs requiring new test capabilities at laboratories, Installed Systems Test Facilities, or Open Air Ranges shall communicate these needs to MRTFB and Navy Working

Capital Fund Test Range Site Leads. Test capability projects necessary to support a unique test requirement are generally the responsibility of the Program Office.

(b) Funding for test capability investment projects and targets must be made available to the execution agency with sufficient lead time to support contract actions and construction, development, and assembly timelines.

d. Fleet/Force Commanders' Responsibilities. Fleet/Force commanders shall plan, program and budget for:

(1) Fleet travel for training.

(2) Operating costs for RDT&E support provided by fleet units.

(3) All costs associated with routine operational expenses except procurement costs of the systems tested and OTA costs.

e. Technical Development and Prototyping Program Responsibilities. The activity performing technical development and prototyping efforts under R&D authorities other than the DAS (e.g., reference (gs)) has responsibilities equivalent to those of the AAF program PM for T&E costs.

f. TP4 Utility

(1) TP4 is a DON T&E-managed web-based utility that enables programs to capture T&E costs (planned and actual) for all programs and efforts (ACAT/BCAT/MTA/urgent capability/software) throughout the acquisition life-cycle, as well as:

(a) Allows searches for T&E capabilities, linking to the Navy Integrated Capability database (NICAP), and coordination with T&E infrastructure planners.

(b) Aligns T&E Costs (Labs, Facilities, Ranges, Targets, Assets, personnel) with program budget Program Element numbers to ensure T&E costs are fully funded.

(2) TP4 registration, training, and user's manual can be found at: https://nicap.navair.navy.mil/tp4/. Additional training site location: (Learn and explore but not transferrable to Production site: https://nicaptest.navair.navy.mil/tp4).

9. Scheduling RDT&E Fleet Support

a. TEIN Assignment. A TEIN is used to track T&E documentation (TEMP/MTS) and in scheduling fleet services. A TEIN is required for all programs that produce a TEMP/MTS, or require fleet resources, support services, or OT engagement. TEIN assignment and PM request should occur immediately after program initiation and before requesting fleet support services.

(1) TEIN Assignment. Minimum documentation requirement is one of the following:

(a) An approved ICD for ACAT programs.

(b) AAP documentation.

(c) Other UONS/JUONS, BCAT, SWP, middle-tier or urgent capability designation document.

(d) A selection notification or Technology Deployment Agreement for ONR programs.

(2) A TEIN is requested from DON T&E by the PM via the resource sponsor using the format found in the T&E manual.

b. RDT&E Fleet/Force Support Scheduling Agents

(1) COMOPTEVFOR is the DON RDT&E Fleet-support scheduling agent.

(2) MCOTEA will coordinate FMF activities via USMC's Plans, Policies, and Operations (PP&O) or related authorities.

10. Modeling & Simulation. Per reference (z,) computer M&S 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, or explore performance in environments that cannot be tested due to resource limitations or personnel and equipment safety restrictions.

a. M&S will be verified, validated, and accredited IAW DoD, DON, and OTA instructions.

b. Modeling & Simulation Verification, Validation and Accreditation. 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. IAW reference (fn), accreditation is the official certification that a model or simulation and its associated data are acceptable for use for a specific purpose.

(1) Accreditation for OT&E is the responsibility of the OTA. Accreditation for Developmental and Live Fire Testing is the responsibility of the PM. Before initiating verification and validation efforts, the Accreditation Authority shall identify the intended use of the M&S tool and provide the M&S 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 Activity, Resource Sponsor, OTA and for programs under OSD oversight, 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 an explanation of how the previous validation is relevant for the intended use in the current test must be provided.

(2) The PM 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 and ensure funding is provided throughout the development process. Specific uses of

M&S for each DT&E, OT&E, and LFT&E phase, the validation strategy, and resources required to perform VV&A for the M&S will be identified in the TEMP/MTS. For digital models and computer based simulations, the TEMP/MTS should include a discussion of the response variables and 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.

c. The OTA shall accredit off-platform cyber test facilities and determine how much on-platform testing is required if a surrogate is used to support cyber testing, just like any other M&S.

11. Environment, Safety and Occupational Health in T&E. This section identifies policy and best practices regarding incorporating ESOH into the test planning and execution process.

a. Environmental Planning Requirements. The PM is responsible for compliance with references (ar) and (aq) requirements, particularly as they affect test ranges and operational areas. Prior to any live fire, developmental, or operational test decision that may affect the physical environment, the PM shall ensure that all applicable requirements are satisfied. Testing shall be planned to ensure sufficient time to acquire the necessary permits and environmental/cultural approvals to comply with applicable environmental requirements. Environmental impact considerations that directly affect testing shall be addressed in the TEMP/MTS and respective test plans as limitations or conditions of the testing.

(1) 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.

(2) Test activities that may require references (ar) and (aq) analyses shall be identified in the references (ar) and (aq) compliance schedule, which is required as part of the program's PESHE.

(3) CDTs/T&E Leads shall ensure ESOH considerations are included in test plans and each Test Readiness Review, including OTRRs. The intent is to ensure that, prior to T&E and fielding, the testers and fleet/force users understand the ESOH hazards, the control measures adopted by the PM, and the residual risks accepted by the PM that will impact end users.

b. TEMP/MTS ESOH Resources. The TEMP should state the intent to be reference (ar) and (aq) compliant throughout DT, OT and LFT&E, and reference PESHE and any other documents that discuss reference (ar) and (aq) requirements. If specific ESOH analyses are required to support test site selection decisions, that will be identified in the TEMP/MTS, and the analytical products referenced, if required. Any resources required to meet environmental policy or law shall be documented in TP4.

c. Safety Releases for Testing

(1) The PM must provide a safety release to developmental and operational testers prior to any test using personnel. A safety release communicates to the activity or personnel performing the test the risks associated with the test and the mitigating factors required to safely complete the test.

(2) A secondary function of the process is to ensure that due diligence is practiced with respect to safety in the preparation of the test by the sponsor. A safety release is normally provided by the PM after appropriate hazard analysis. Safe test planning includes analysis of the safety release related to test procedures, equipment, and training.

**LIFE-CYCLE SUSTAINMENT**

1. Purpose. This enclosure supplements references (b), (da), (db), and (gz) with LCSP and execution guidance for DON acquisition and sustainment programs.

2. General. Per reference (a), the PM shall be accountable for accomplishing program objectives for total life-cycle systems management, including sustainment. In this section, the term PM shall refer to both acquisition PMs and sustainment PMs for programs with split responsibilities. Resource Sponsors will ensure resourcing of sustainment, maintenance, and supply support aligns with Service objectives and priorities in equipping and ensuring operational readiness of forces per reference (i).

3. PEOs, DRPMs and SYSCOMs. Per reference (i), PEOs, DRPMs, and SYSCOM Commanders will directly supervise the management of assigned programs, maintaining oversight of financial management, cost, schedule, and performance of acquisition and sustainment to meet the operational requirements of the systems from development to disposal; and report directly to the ASN (RD&A) for all such matters pertaining to product support and sustainment management. PEOs and SYSCOMs will ensure that acquisition programs that will transition from one PM to another PM have holistic funded sustainment programs that will meet cost, schedule and performance objectives as approved by the MDA.

4. Program Managers. PMs have overall responsibility and are accountable to the MDA, ASN (RD&A), PEO, and SYSCOMs, as appropriate, for the overall planning, resourcing, execution, and performance of the program's life-cycle sustainment throughout the acquisition and sustainment phases. PMs, in close coordination with Service Chiefs and resource sponsors, will balance available resources across development, modernization and sustainment requirements, considering performance, life-cycle management, and product support costs. PMs will ensure that sustainment requirements and factors, including objective reliability and maintainability criteria, are used in program solicitations and contracts, as prescribed by references (gh) and (da), and implementing DFARS provisions. For programs with bifurcated Program Management responsibility between acquisition and sustainment, both PMs will coordinate

design tradeoffs and resourcing balancing that impact life-cycle sustainment performance, sustainment costs, and sustainment schedules with the partner PM and resource sponsor(s).

5. Product Support Managers (PSM). As set forth in reference (be) PSMs are responsible to assist the PM by developing, implementing, and continuously assessing a comprehensive LCSP for the weapon system, including: developing and implementing an effective and affordable PSS to meet the program's sustainment objectives; utilizing analysis to improve material availability and reliability, increase availability rate and reduce O&S costs; conducting CBA to validate or revalidate the PSS; developing and implementing Product Support Agreements (PSA) with Product Support Providers (PSP); and adjusting performance requirements and resource allocations across PSPs, as required, to optimize implementation of the PSS. PSMs will maximize small business participation in the program's PSS. Per reference (be), the MDA shall ensure that a qualified PSM is assigned and supporting each covered system program (i.e. all ACAT I programs and MTA programs that are estimated to exceed the MDAP threshold). In addition, MDAs for ACAT II programs and programs in other pathways that exceed the major system (ACAT II) threshold, as well as MDAs for all MTA programs, shall ensure that that a qualified PSM is assigned and supporting the program. MDAs for other programs should assign a PSM. PEOs/DRPMs/SYSCOM Commanders shall ensure that all PSM selections are consistent with the latest approved ASN (RD&A) PSM qualifications. ACAT I PSM selections shall also be consistent with reference (bq). For new systems, the MDA will ensure that the PSM is assigned at program initiation. For programs in sustainment, the MDA will confirm during program and gate reviews that there is a qualified PSM assigned to, and supporting, the program.

6. KPPs/KSAs/ASAs. The PM, in coordination with Resource Sponsors, will ensure requirements and sustainment KPPs/KSAs/ASAs are measurable within the operational context and reportable within the Services' sustainment, financial, and maintenance AIS and/or Accountable Property Systems of Record (APSR).

7. Acquisition Strategies. The AS is the comprehensive plan that identifies and describes the acquisition approach that the program will follow to meet program objectives and manage risks

across the program's entire life-cycle. It is developed and approved prior to acquisition milestones and updated throughout the program's life-cycle. The AS will be updated if significant changes occur in the system's requirements related to sustainment performance, sustainment cost, and support strategy or business case. The AS will address the following for life-cycle sustainment:

a. An overview of the PSS including the plan to utilize commercial sources for maintenance (hardware and software) and depot repair, software support, training, logistics planning, sustaining engineering, supply support, technical data, publications, obsolescence management, industrial base, and sustainment management based on the Business Case Analysis (BCA).

b. The means to ensure competition throughout the program's life-cycle at the system and sub-system level, and associated risks to competition in the sustainment phase such as technical data and IP rights.

8. Replaced System Sustainment Plan (RSSP). Prior to beginning the development of a new system that will be managed as a MDAP, the PM for the system to be replaced shall prepare a RSSP, if required by reference (bf). The RSSP is required to have a milestone schedule and a supportability analysis of the existing system. The RSSP shall provide an appropriate level of resources for sustaining the existing system until the replacement system to be developed is fielded and assumes the majority of responsibility for the mission of the existing system.

9. Life Cycle Sustainment Plans. The LCSP is the primary Program Management document governing operations and support planning from Milestone A to disposal. The LCSP documents the PSS that maximizes competition and value, by providing the best possible product support outcomes at the lowest overall cost for the Service. The LCSP demonstrates the LCSP and estimated costs; and that these estimates are reasonable, affordable, and accurate. The PSM or Logistics Manager, on behalf of the PM, shall develop and update the LCSP for programs in the following categories: all MCA pathway programs; MTA rapid fielding programs; all MTA programs (rapid prototyping or rapid fielding) that exceed the MDAP threshold; and SWP programs. The PM will

endorse and submit the LCSP to the MDA for approval. LCSPs for ACAT I and II programs, and for MTA programs that exceed the ACAT I threshold, will be coordinated with Deputy Assistant Secretary of the Navy for Sustainment (DASN (Sustainment)) and approved by the MDA.

a. LCSPs for covered systems under reference (be) must include all of the elements specified in reference (be).

b. LCSPs shall be updated as needed, and prior to each acquisition milestone and every five (5) years following IOC.

10. Technical Data for Sustainment. Access to, and management of, technical data is critical to the effective and affordable execution of a program's sustainment over the entire life-cycle. Planning and budgeting for the acquisition and maintenance of a system's technical data is imperative from a program's inception. Therefore, all programs shall develop a sustainment technical data plan and include it in the program's IP strategy prior to issuance of a solicitation for the system. The sustainment technical data plan shall be updated at each subsequent major program review and when the program IP strategy is updated.

a. The sustainment technical data plan shall document:

(1) The technical data necessary to support the sustainment strategy from each contractor, subcontractor, or supplier (or government source when applicable).

(2) The procurement approach by contract, consistent with references (fr) and (fq).

(3) Challenges and risks to obtaining the required technical data from each contractor, subcontractor, or supplier.

(4) Risks associated with not obtaining the technical data.

(5) The costs to acquire and maintain the technical data.

(6) Identification of technical data currently delivered to the program.

b. Prior to selecting a contractor for the E&MD, production, or sustainment of a major weapon system, the program shall, to the maximum extent practical, negotiate a price for the necessary technical data to be delivered under a contract for such development, production, or sustainment, IAW reference (fw) and any implementing provisions of the DFARS.

11. Manpower, Personnel, Training (MPT)

a. The PM shall ensure that MPT requirements for the weapon system are optimized for the intended operational environment considering employment with distributed, collaborative and related systems including training systems. The objectives are to ensure that the system is designed to be operated, maintained, and supported to optimize total system performance while reducing TOC, and minimizing the logistics footprint.

b. PMs, in conjunction with respective Navy and Marine Corps MPT authorities, shall develop manpower estimates to determine the most efficient and cost-effective mix of military, civilian, or contract manpower to operate, maintain, and support the system. Total manpower costs and affordability will be reported via the program Life-Cycle Cost Estimates.

c. PMs shall define the human performance characteristics of the user population based on the system description, projected characteristics of target occupational specialties, and recruitment and retention trends and develop options for individual, collective, and joint training for operators, maintenance, and support personnel. These requirements shall include the requisite knowledge, skills, and abilities and associated reusable training elements.

d. Training products and simulations developed for initial and lifetime training shall be compatible with applicable Navy and Marine Corps training standards and live, virtual, and constructive, integrated learning environments as required. Training shall be kept current as modifications occur throughout a program’s life-cycle.

e. PMs shall develop MPT plans per reference (gi) and (bi), respectively.

f. The TSP shall comply with joint and coalition training requirements to ensure warfighter capability and efficiency per reference (aa).

12. Sustainment Program Baseline (SPB)

a. SPBs enable the PM to continuously assess and manage the performance of the life-cycle sustainment program approved in the LCSP for the weapon system, by establishing sustainment and resource requirements with PSAs to meet the validated operational requirements, enabling future readiness outcomes at an affordable cost. All MCA pathway programs should establish an SPB as a best practice for managing sustainment.

b. This comprehensive performance based approach to managing weapon system sustainment enables the DON Sustainment system to meet specific, measureable, accountable, outcome-based requirements, increasing effectiveness of available resources to achieve readiness goals, and manage risk as required by references (da) and (db). To increase governance and accountability throughout the sustainment system, PSAs will identify and track the sustainment performance, cost, and schedule parameters with the system's PSP. Actual performance to the approved SPB requirements will be utilized to demonstrate the program’s Sustainment health during Program, Sustainment, and Gate Reviews.

c. The PM, in coordination with the fleet and support from the PSM, will develop and submit SPBs for approval by the PEO (or equivalent), OPNAV N9, DC(I&L) or DC(A), and DASN (Sustainment). OPNAV and HQMC will utilize SPBs to inform and support the PPBE process. SPBs will be updated and approved every two years. PMs will report to stakeholders quarterly on performance to the approved SPB requirements and funding levels, along with corrective action plans for performance that falls below threshold values.

13. Reliability and Maintainability

a. Developing and continuously monitoring the system's reliability and maintainability performance requirements throughout the life-cycle is a critical element of effective sustainment management. While PMs are responsible for the overall effectiveness of the system's performance, PSMs, in

coordination with R&ME systems engineers, are responsible for planning and implementing the sustainment processes to maintain the availability and the reliability KPP and the operational and sustainment cost KSA throughout sustainment. The PSM, having lead responsibility for sustainment planning, shall document the overall plan for improving reliability, availability, and maintainability at an affordable cost throughout the life-cycle in the LCSP.

b. The KPPs and KSAs may be tracked to other system attributes and technical performance measures such as operational mission failures, logistics failures, time to repair, maintenance ratio, diagnostics, fault isolation, and false alarms. If the FRACAS program is transferred from engineering to logistics, the PSM and the R&ME systems engineer must work together to establish and execute a transition plan. During sustainment, the PSM will implement a process for the fleet to report fault detection and fault isolation anomalies and will correct anomalies as part of the deficiency reporting process.

c. The PSM will work with the R&ME and T&E teams to collect and retain data from operational and developmental T&E to inform system design decisions, and provide insight into sustainment and O&S costs. The PSM will lead development of the RAM-C rationale report and work with the program R&ME lead and the cost estimator in its development.

14. Core Logistics Capabilities. As set forth in reference (bl), it is essential for national defense that the Department maintain a core logistics capability that is government-owned and government-operated to ensure a ready and controlled source of technical competence and resources necessary to ensure effective and timely response to a mobilization, national defense contingency situations, and other emergency requirements.

a. The PM shall obtain determination of the applicability of core depot level maintenance and repair capability requirements at Milestone A or equivalent for a program.

b. No later than Milestone B or equivalent for a program, the PM shall report on the program's core determinations and organic repair capability establishment plan. Updates to the

organic repair capability planned versus actual establishment will be reported at all subsequent program and gate reviews.

c. At Milestone B or equivalent for a program, the PM will include the program's estimated requirements and associated costs for maintenance, repair, and associated logistics capabilities and workloads in the LCSP.

d. Post CDR or equivalent for a program, the PSM will ensure that a Depot Source of Repair Designation Request has been made and the supportability analysis includes detailed requirements for core depot level maintenance and repair capabilities, and associated sustaining workloads required to support such requirements.

e. The PSM will ensure that core depot level maintenance and repair capabilities and capacity are established not later than four years after IOC IAW the approved LCSP and per reference (bl).

15. Configuration Management. Establishing and maintaining configuration management of the system is essential for successfully sustaining the program over the life-cycle. PMs are responsible for controlling and maintaining the Configuration Management of the system including updating all technical data and related logistics products required for maintenance, operations, training, facilities, provisioning, supply support, transportation, packaging and handling. The PM will develop, maintain, and resource a configuration management program to ensure accurate and concurrent technical data and support products to reduce sustainment costs and operational impacts throughout the life-cycle. Reducing multiple configurations of a system or sub-system will reduce supply support, repair, and maintenance costs for the program and the Service. PMs will consider sustainment impacts and life-cycle costs when considering assigning configuration management to the manufacturer or PSP. The PM will develop and report on configuration management performance metrics.

16. Integrated Logistics Assessment (ILA). The purpose of the ILA is to assess the feasibility and affordability of the program's PSS and system design to meet operational availability and affordability thresholds and report those risks to the PM. The ILA process will identify elements and risks in the strategy

that impact the ability for the program to achieve performance thresholds including operating availability and support costs.

a. All ACAT I and II programs shall have an ILA conducted and obtain ILA Certification prior to Milestones B, C and the FRP decision or Full Deployment Decision pursuant to reference (fz) (for weapon system MDAPs) and this instruction (other ACAT I and ACAT II programs). Results of the ILA will be briefed at the Milestone Review and/or Gate Reviews. All ILAs will be conducted IAW references (gj) and (w).

b. Programs following the MTA Pathway shall conduct an ILA within two years after transitioning from a Rapid Fielding program to the MCA Pathway. The ILA schedule will be documented in the program's transition plan.

c. SWP programs shall conduct an ILA prior to major decision points or "Trigger Events" such as: MVCR; Updated/Changed CNS; Major capability changes; or if the program had not been reviewed previously and re-designated as a software acquisition program.

d. The cognizant PEO, SYSCOM Commander, DRPM, or designee, shall be responsible for ensuring that the life-cycle sustainment strategy, planning, execution, and costs are independently assessed.

17. Corrosion Prevention Plan. Product support planning, especially maintenance planning and sustainment engineering, will incorporate appropriate mitigation of CPC risks inherent in the design to meet sustainment requirements. Programs will ensure CPC in systems engineering and LCSP, as required by references (ab), (db), and (dd).

18. Counterfeit Material. To reduce the presence of counterfeit parts in the supply chain and the risk associated with such parts, PMs shall establish and implement a risk-based approach to identify and prevent introduction of material that is at high risk for counterfeiting prior to Milestone B. This risk-based approach includes assessments of the system's design prior to the PDR and throughout the life-cycle to determine the risk of counterfeiting to the selected parts and materiel in the design. Counterfeit mitigation processes shall be implemented IAW reference (gx).

19. Diminishing Manufacturing Sources and Material Shortages. PMs shall develop, document, and implement a risk-based DMSMS program to proactively identify, resource, resolve, and eliminate negative impacts from DMSMS throughout the program's life-cycle per reference (ap). The DMSMS program will be developed, approved, and implemented prior to the Milestone B or equivalent for the applicable AAF pathway, and updated throughout the program's life-cycle. IAW reference (et), programs will continuously collect, maintain, assess, and improve the program's DMSMS case management and solutions to reduce long-term DMSMS impacts and life-cycle costs. PMs will ensure the impacts of future DMSMS is considered in the design of new items and redesign of existing items. Refer to reference (fu).

20. Industrial Base Management. In order for the DON to employ more effective Naval Industrial Supplier Base as well as maintain the ability to respond in the time of war or crisis efforts throughout the DON must be integrated to improve the industrial base and prepare for an increasing fleet size. Therefore, PMs shall designate an Industrial Base Manager for each acquisition program that is responsible for the development and sustainment of the proper industrial base to support the Navy's requirements.

21. Supply Chain Management. All DON programs have the responsibility to manage supply chain activities throughout all phases of the life-cycle, including establishing a complete supply pipeline for initial spare part procurements, and shall implement materiel sourcing strategies and processes that yield the best value to maximize materiel readiness at the lowest total life-cycle cost. Accordingly, the PM shall implement an integrated supply chain team to ensure collaboration across all supply chain organizations and activities to establish a resilient supply chain that meets the operational readiness requirements of the weapon system.

a. Initial spare parts are identified as the interim spares, installation and check-out spares, inventory augmentation, and onboard repair part spares for the associated repairable components, assemblies, or subassemblies in support of newly fielded, upgraded, and modernized weapon system end-items. Whole spare engines are classified as initial spare parts through the life of the system. The supply pipeline includes the required stockage levels for the wholesale supply management activity pipeline and retail operational outfitting

requirements necessary to support ship, aircraft, weapon system, and equipment end-items. These spares investments are the responsibility of the commands budgeting for the acquisition of the end-item as well as reporting accountability.

b. At the time of Material Support Date and/or Fielding of the weapon system, the Program Office will:

(1) Initiate transfer of property accountability of all initial spare parts, excluding engines or other end items, required to support the wholesale and retail supply chain pipelines, without reimbursement, to the supply management activity.

(2) Decapitalize the associated spare parts by removing from its accounting records.

c. The supply management activity will capitalize the transferred spares to its working capital fund accounting records and placed into plant stock that is viewable, sourceable, and billable for all authorized requisitioning activities for the respective end-items. The transfer of all spares must be fully documented and the documentation must be retained. Refer to references (ao) and (fx).

22. Risk Management. During acquisition, the PM will develop and implement a risk management program that includes identification of product support risks to sustainment performance and life-cycle cost, their potential impact to the program, and prioritized means to reduce these risks. PSMs will be assigned to the program's Risk Management Board. The PM shall continue the risk management program throughout the life-cycle, and report these risks during all Program and Gate Reviews.

23. Sustainment Cost Management. The PM is responsible for managing the sustainment costs (investment and O&S) of the program by developing, updating, and analyzing sustainment cost estimates throughout the life of the program. The PM, with support from the PSM, will assess the program's operational and material support performance requirements, continuously evaluating opportunities to improve sustainment processes and adjust strategies, and implement innovation and technologies to reduce future sustainment costs. PMs will coordinate with the

VAMOSC Program Office to review and evaluate program costs collected in the VAMOSC system for accuracy and completeness.

24. O&S Cost Estimate. O&S cost estimates evaluate the affordability and feasibility of a weapon system's PSS. Programs will update the O&S cost estimate with actual R&M data to validate the PSS and sustainment costs estimates and to inform future design considerations. All programs shall conduct, report, and retain O&S cost estimates to determine whether preliminary information and assumptions remain relevant and accurate, and identify and record reasons for variances, throughout the life-cycle.

25. Sustainment Independent Cost Estimate (S-ICE). During Sustainment, all covered programs are required to obtain an ICE for the remainder of the program, at IOC plus five years, and every five years thereafter, to assess cost growth from the most recent ICE. This S-ICE will be conducted IAW reference (em). The S-ICE is required to be completed prior to, and results reported at, the Gate 7 Sustainment Review, in compliance with reference (br).

26. Critical Operating and Support Cost Growth. Each covered system program must report critical operating and support growth in order to support congressional reporting (including any required remediation plans or certifications) by ASN (RD&A) pursuant to reference (br). There are two categories of cost growth that must be assessed prior to, and reported at, the Sustainment Review.

a. Category A: any cost growth of at least 25 percent more than the estimate documented in the most recent ICE for the covered system (i.e. the most recent S-ICE conducted pursuant to references (br) and (em) or, if the program has not had a prior S-ICE, the most recent ICE conducted pursuant to references (fv) and (em)).

b. Category B: any cost growth of at least 50 percent more than the estimate documented in the original baseline estimate in the program’s APB (established at Milestone B or program initiation).

27. Sustainment Reviews

a. Sustainment Reviews will be conducted for all covered programs IAW references (br), (be), and (fz). Sustainment reviews shall be conducted no later than five years after IOC and every five years thereafter. The purpose of the review shall be to assess the execution and effectiveness of the LCSP and the product support strategy and the resulting operational performance and O&S costs.

b. Prior to the review, the program will revalidate the Product Support BCA, update the LCSP and conduct a S-ICE. An analysis of these results will be presented at the Gate 7 Sustainment Review. Each review will include the following elements:

(1) Performance to the approved SPB requirements, if applicable.

(2) Results of the S-ICE presented by the activity that performed the analysis, including a determination of critical cost growth and remediation plans, if required.

(3) A comparison of actual costs to the amount of funds budgeted and appropriated in the previous five years, and if funding shortfalls exist, an explanation of the implications on equipment availability.

(4) A comparison between the assumed and achieved system reliabilities.

(5) An analysis of the most cost-effective source of repairs and maintenance.

(6) An evaluation of the cost of consumables and depot-level repairables.

(7) An evaluation of the costs of IT, networks, computer hardware, and software maintenance and upgrades.

(8) As applicable, an assessment of the actual fuel efficiencies compared to the projected fuel efficiencies as demonstrated in tests or operations.

(9) As applicable, a comparison of actual manpower requirements to previous estimates.

(10) An analysis of whether accurate and complete data are being reported in the cost systems of the MILDEP concerned, and if deficiencies exist, a plan to update the data and ensure accurate and complete data are submitted in the future.

(11) As applicable, information regarding any decision to restructure the LCSP for a covered system or any other action that will lead to critical operating and support cost growth, as defined in reference (br).

(12) Sustainment milestones, including anticipated retirement date.

c. Programs that experience critical O&S cost growth will provide and brief their remediation plan to address and reduce the O&S costs to DASN (Sustainment), or will provide a draft letter (for ASN (RD&A) signature, via DASN (Sustainment)) certifying that such critical O&S cost growth is necessary to meet national security requirements. Either option will include a summary of the reasons for the cost increase (e.g., OPTEMPO, increased quantity, maintenance costs, etc.) along with any mitigating circumstances. If a program submits a draft certification instead of a remediation plan, then ASN (RD&A) will either make the certification or require the program to submit a remediation plan. Remediation plans should include the cognizant organizations responsible for implementing cost reduction opportunities. ASN (RD&A) will include the certification letter or remediation plan, along with copies of the SR, in the submission to Congress at the end of the fiscal year, as required by references (br) and (gz).

**PROPERTY MANAGEMENT DURING ACQUISITION AND SUSTAINMENT**

1. Purpose. This enclosure supplements references (ao) and (ez) with DON specific guidance for the accountability and management of government property, and applies to GE, Operating Materials and Supplies (OM&S) and Inventory as defined in paragraph 2 below. Comprehensive physical and financial management of government property is a sound business practice that must begin at the earliest onset of acquisition planning. Effective property management is essential for operational readiness, support to the warfighter and sustained auditability and is vital to ensure leadership has accurate information to make strategic decisions for future funding and oversight. Additional detailed, property-type requirements are documented in the family of SECNAV instructions that govern tangible personal property: references (ew), (ex), and (ey).

2. Definitions

a. Government Property – All property owned or leased by the government. For purposes of this enclosure, government property includes GE, OM&S, and Inventory.

b. GE – Tangible personal property that is functionally complete for its intended purpose, durable, and nonexpendable. It typically has a service life of two or more years, is not intended for sale, is not installed in a higher assembly, and is acquired with the intention of being used.

c. OM&S – Tangible personal property consumed in normal operations, not held for sale. These items or material include parts, components, and assemblies that are installed into higher assemblies or used up. OM&S is not designed for stand-alone use.

d. Inventory – Tangible personal property held for sale in the Working Capital Fund. Inventory may be parts, components assemblies, or equipment held pending sale to an end user.

e. Government Furnished Property (GFP) - Property in the possession of, or directly acquired by, the government and subsequently furnished to the contractor for performance of a contract. GFP includes, but is not limited to, spares and property furnished for repairs, maintenance, overhaul, or

modification and GE furnished for use by the contractor. GFP also includes contractor acquired property if the contractor acquired property is a deliverable under a cost contract when it has been accepted by the government for continued use under the contract.

3. General Requirements. Property management and accountability requirements must be addressed during acquisition and sustainment. The following are key requirements common to all property types; compliance will be reviewed in conjunction with Command Inspections, Inspector General Inspections, and Financial Audits.

a. Government property must be tracked in an approved APSR per the SECNAV property management policies listed in paragraph 1 of this enclosure.

b. Acquisition programs, including programs in sustainment, must fully resource property management requirements including, but not limited to, personnel, systems, training, and administration.

c. DON personnel responsible for managing property shall be properly trained regarding the proper use, care, physical protection, and financial accounting requirements.

4. Roles and Responsibilities. The following paragraphs delineate key responsibilities for acquisition (including sustainment) PMs, PEOs, and other requiring activities that are common across property types.

a. Review enterprise-wide availability of items to maximize reutilization to the maximum extent practical before procuring new items.

b. Ensure accountable records that include valuation data are established and maintained as required in the SECNAV property type-specific requirements.

c. Ensure proper processes and controls are established, executed, and tested to ensure transactions are recorded in APSRs and to support oversight of DON property in the possession of the government, contractors, and Shared Service Providers (as defined in reference (ey).

d. Maintain and retain financial accountability for the life of items where life-cycle management responsibility is assigned. Financial reporting responsibility shall be completed through the supporting BSO for the duration of the time the item is owned by the DON.

e. Support common business practices across Program Offices and subordinate activities.

f. Designate eligible Accountable Property Officers in writing. Provide copies of all appointment letters to the Command Property Officer.

g. Support metrics collection, consolidation and analysis.

**INFORMATION TECHNOLOGY REQUIREMENTS**

1. Purpose. This enclosure supplements the IT requirements in reference (gl) 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 (CCA) Compliance. Refer to reference (gl) and the CCA Compliance MDID table.

4. Trusted Systems and Networks. Refer to reference (gl).

5. DoD Enterprise Software Initiative. Refer to reference (gl).

6. DoD Data Center Consolidation. Refer to reference (gl).

7. IT, Including NSS, Interoperability. Refer to reference (gl).

**CYBERSECURITY REQUIREMENTS**

1. Purpose. This enclosure supplements reference (eu) within the DON.

2. Cybersecurity References

a. DoD cybersecurity policy can be found in references (t), (u), and (eu); and Knowledge Service, the authoritative source for RMF procedures and guidance, found at https://rmfks.osd.mil.

b. DON cybersecurity policy and guidance can be found in references (v) and (de).

c. Navy policy and implementation guidance can be found in reference (df), (dg), and (dr).

d. Marine Corps policy and implementation guidance can be found in references (dh) and (di).

3. Cybersecurity. Cybersecurity shall be an intrinsic design and systems engineering consideration from program inception, tracked through development, and into production and sustainment.

a. Cybersecurity applies to the various acquisition pathways and must be evaluated iteratively to ensure proper planning and execution.

b. Systems must have the capability to conduct their mission in a cyber-contested environment and have the ability to protect the confidentiality, integrity, and availability of critical mission functions and network data.

c. Systems achieve the desired level of cybersecurity by obtaining the necessary data to support cybersecurity assessment efforts, receiving an authorization, and then maintaining compliance.

4. Cyber Security Strategy. Per reference (eu), CSSs are required for all mission critical and mission essential systems containing IT. The DON Deputy Chief Information Officer (DDCIO (N)) will decide whether to require CSSs for Service-level non-mission essential systems containing IT.

a. Acquisition Program CSS requirements are found in references (t), (u), (de), (eu), and (eo).

(1) The DON Senior Information Security Officer (DON SISO), within DON CIO, reviews and approves CSSs for ACAT IB, IC, and II programs. The DON SISO forwards endorsement of ACAT ID programs to DoD CIO for final approval."

(2) The DDCIO (N) determines the appropriate approval authority for all other ACAT programs.

b. BCAT CSS requirements and approval authorities are found in reference (k) and the DON Business Capability Acquisition Cycle Implementation Guide.

c. CSSs sent to DON CIO for review shall conform with the DoD Cybersecurity Strategy Outline and Guidance published on the DAU website, see https://www.dau.edu/cop/pm/_layouts/15/WopiFrame.aspx?sourcedoc=/cop/pm/DAU%20Sponsored%20Documents/CYBERSECURITY%20STRATEGY%20OUTLINE%20and%20GUIDANCE.docx&action=default. The DoD CSS Outline and Guidance is applicable to all AAF pathways, and retains operational relevance beyond milestone decisions into system sustainment.

d. The PM and Navy Echelon II or Marine Corps Major Subordinate Command Information Officer will approve CSSs prior to formal submission to DON SISO.

e. Programs will update and submit CSSs for approval before milestone and decision points, including FRP/FDD; prior to contract awards involving changes to system architecture or security requirements; or in cases of changes in risk tolerance or other significant changes to the system.

5. Risk Management Framework

a. All DON Information Systems shall be assessed and authorized using RMF and be identified with the applicable Impact Value (i.e., Low, Moderate, High) and Security Objective (i.e., Confidential, Integrity, Availability).

b. Programs should complete each of the RMF steps at the appropriate phase of its acquisition and sustainment life-cycle. The RMF steps are defined by the National Institute of Standards and Technology at https://csrc.nist.gov/projects/risk-management.

c. Security Control Assessors and AOs shall use DT&E and OT&E information when making RMF decisions in order to improve resiliency.

6. Information handling. PMs shall ensure program information is classified at the appropriate level, and that Controlled Unclassified Information handling requirements conform with direction provided by references (ha) through (hc).

7. NAVWAR Cybersecurity Figure of Merit (CFOM) framework. The NAVWAR CFOM is available for PMs to gauge compliance with cybersecurity policies and processes, and the resulting CFOM dashboard is available to guide cybersecurity discussions at applicable program reviews. Marine Corps PMs should use reference (gu). Use of CFOM and reference (gu) does not replace testing and RMF requirements.

8. DON CYBERSAFE Program

a. Purpose. This section replaces SECNAVINST 5239.22 dated 15 Nov 2016, and assigns responsibilities for the development, management, and implementation of the DON CYBERSAFE Program. CYBERSAFE shall provide for enhancements and cybersecurity requirements and measures beyond those directed in references (t) and (v).

b. Applicability. Execution of CYBERSAFE responsibilities shall align to the relationships defined in references (i) and (h).

c. Policy. CYBERSAFE is distinct from, but highly integrated with, DON cybersecurity. The CYBERSAFE program shall provide maximum reasonable assurance of survivability and resiliency of mission critical IT in a contested cyber environment in order to maintain mission capabilities. CYBERSAFE will provide enhanced protection and resiliency to critical IT and include components and processes, materiel and software solutions, and procedures adequate to protect, defend,

and restore those capabilities without abruptly or unexpectedly impacting mission.

(1) CYBERSAFE shall apply to mission critical IT within the DON infrastructure to ensure mission assurance across the life-cycle; including in-service capabilities.

(2) The CNO and CMC shall integrate and synchronize their CYBERSAFE programs.

d. Responsibilities

(1) ASN (RD&A) shall:

(a) In coordination with CNO, CMC, DON CIO, and the DON Principal Cyber Advisor, establish a CYBERSAFE governance process.

(b) Coordinate and provide recommendations and resolutions to the CNO and CMC for CYBERSAFE investment, policy, and strategy.

(c) Establish policy to incorporate CYBERSAFE into leadership briefings such as Gate Reviews.

(2) CNO and CMC shall:

(a) Establish Service CYBERSAFE programs at the SYSCOM level that shall:

1. Identify mission critical IT.

2. Develop operational strategies to implement CYBERSAFE in a contested environment.

3. Implement and ensure execution.

(b) Issue implementing directives to ensure effective and efficient execution and continuous improvement of the CYBERSAFE program.

(c) Oversee the execution of the Services' CYBERSAFE activities, plans, and strategies.

(d) In coordination with ASN (RD&A), DON CIO, and the DON Principal Cyber Advisor, establish a CYBERSAFE governance process.

(e) Identify a Service CYBERSAFE responsible agent to implement and execute the CYBERSAFE program.

(f) Establish policy to incorporate CYBERSAFE into leadership briefings such as R3Bs and OTRR.

(3) The DON CIO and DON Principal Cyber Advisor shall:

(a) Participate in the CYBERSAFE governance process.

(b) In coordination with the Services' CYBERSAFE programs, establish policy to strengthen authority, accountability, and rigor in cybersecurity.

(4) ASN (EI&E) shall participate in the CYBERSAFE governance process.

(5) PEOs shall implement the CNO/CMC CYBERSAFE programs in coordination with the appropriate SYSCOM(s).

9. Cybersecurity Considerations for the Two Pass Seven Gate Governance Process. As programs leverage the Two Pass Seven Gate Process, or other acquisition reviews throughout the acquisition phases of the program, it is imperative the PMs and DAs address cybersecurity considerations at all milestone and decision points in a programs life-cycle.

**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 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 UNP, and the JCIDS to improve existing and develop new warfighting capabilities. Coordination among DoD Components and within DON is an essential element of these processes. Joint concepts, DON concepts, CONOPs, and DON Enterprise Architecture are used to identify and prioritize capabilities gaps and integrated 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. CNO/CMC Responsibilities. As user representatives, CNO/CMC (requirements and resource sponsor) shall execute the responsibilities defined in references (a) through (f), (bo), and (gy) to identify, define, validate, make affordability determinations for, and prioritize required mission capabilities (to include Chemical, Biological, Radiological, and Nuclear (CBRN) Survivability requirements) through JCIDS and allocate program resources to meet those requirements and needs through the PPBE. In addition, CNO/CMC shall coordinate the T&E process as described in enclosure 10. 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 required to be approved and validated by the JROC or Joint Capabilities Board (JCB).

c. IAW 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. Requirements and Resource Sponsor Responsibilities. 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 DAS. An 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 Requirement sponsors. DON 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 requirements 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 and CBRN survivability parameters for developmental and operational testing.

f. Vice Chief of Naval Operations (VCNO) Responsibilities. VCNO is Navy's representative on the JROC.

g. Deputy CNO (Warfighting Requirements and Capabilities)) (CNO (N9)) Responsibilities.

(1) CNO (N9) shall coordinate staffing, validation, and approval of Navy ICDs, CDDs, CDD updates, 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 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 UONs submitted by NCCs and joint UON 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 JROC 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 IAW reference (bo) and applicable statutes, as well as training on execution of the Navy Capability Development Process.

h. Deputy CNO (Information Warfare) (CNO (N2/N6)) Responsibilities. CNO (N2/N6) is responsible for threat intelligence and for validating threat tactics supporting capabilities development, program development, and T&E of DON acquisition programs IAW references (gf) and (gm). Per reference (gn), PEOs and SYSCOMs will coordinate intelligence support requirements through assigned Scientific and Technical

Intelligence Liaison Officers. CNO (N2/N6) shall coordinate staffing, validation, and approval of Navy architecture artifacts and products within ICDs, CDDs, and CDD updates for assessment and compliance with the DON EA for all Navy and joint systems within the JCIDS process. DIA will validate CNO (N2/N6) threat assessments for ACAT ID programs. Additionally, CNO (N2/N6) shall coordinate with Resource Sponsors to ensure that systems or platforms meet adequacy and supportability of the nine JCIDS intelligence support categories per reference (c).

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 Navy JCIDS documents, Capabilities Based Assessments, 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 IAW Navy’s implementation of the "IT Box" model, the NCB or R3B will review and endorse all Navy JCIDS documents, including the initiation and results of Navy-level Capabilities Based Assessments. The NCB or 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 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 DC, CD&I to the applicable 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. Marine Corps Capabilities Development Process for Programs with Marine Corps Fiscal Sponsorship. The following specific procedures shall apply to Marine Corps programs that have Marine Corps fiscal sponsorship (e.g., green dollar). The capabilities documents shall be prepared and approved by the DC, CD&I. These capabilities documents shall be endorsed by the MROC prior to joint review. However, in cases where minimizing the overall staffing time is a priority, sponsors may submit documents for joint staffing in parallel with MROC staffing. Capability documents not requiring joint review or JROC/JCB validation will be validated by the MROC.

d. Urgent Capability Needs and Acquisition Processes. Enclosure (3) of this instruction sets 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. 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. The acquisition community shall use the Two-Pass Seven-Gate Process, when appropriate, to inform decision makers regarding the optimum balance of affordable protection measures within the available trade-space.

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

b. Pre-MDAP and MDAP (ACAT I) programs.

c. BCAT I and BCAT II programs where ASN (RD&A) is the MDA.

d. 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.

e. Acquisition programs in any pathway which the MDA and/or ASN (RD&A) determines the Two-Pass Seven-Gate Process is appropriate to support informed decision processes.

4. Membership. The membership for each gate is identified in Table 16-1. Gate review attendance is limited to a participating organization's principal or deputy at the FO/GO/SES level. For ACAT I programs, if a gate review will be the forum used to meet annual CSB requirements, then the senior officials required by reference (ft) 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 16-1. Gate reviews shall not be combined unless approved by the chairs or co-chairs of both reviews sought to be combined. The entrance criteria and briefing content requirements for gates shall not be tailored except as jointly agreed to by the chair or co-chairs, or their designated representatives.

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

b. For MDAP Gate 7 sustainment reviews, results and recommendations for corrective actions of all elements as identified in reference (br), shall be reviewed. Sustainment reviews under reference (br) must also assess execution of the LCSP.

c. All threat dependent programs shall review required intelligence documentation; VOLT, Threat Modules, and Critical Intelligence Parameters required per reference (gf) at Gates 3, 4, 5, 6, and 7. Any changes in the threat (new and/or evolving threats) shall be briefed and presented during gate reviews.

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 their designated representatives.

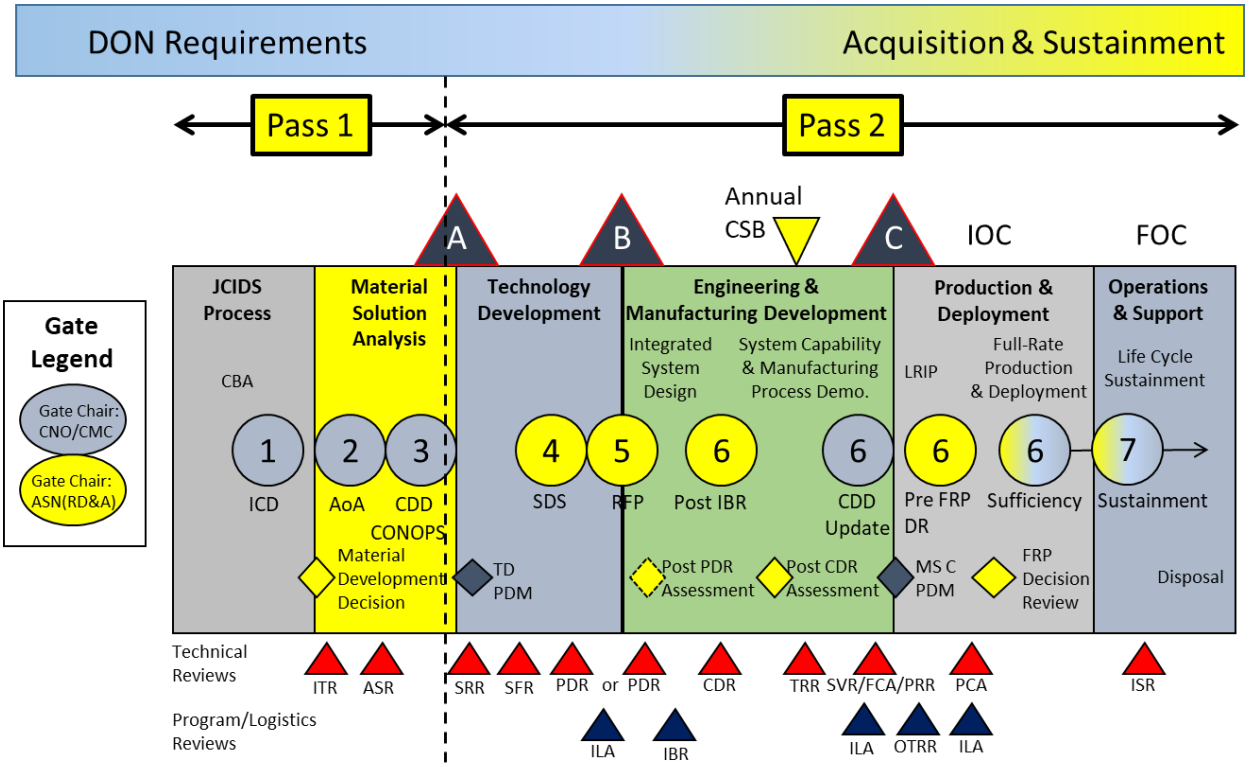
b. ASN (RD&A) shall utilize the Two-Pass Seven-Gate Governance process to ensure that CNO or CMC, as appropriate, concurs with the cost, schedule, technical feasibility, and performance trade-offs made with regard to an MDAP.

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 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.

e. Once the entrance criteria are met, Gate 6 Sufficiency Reviews will be held annually. Once the entrance criteria is met, Gate 7 Sustainment Reviews will be held no less than every five years.

Figure 16-1. Requirements/Acquisition Two-Pass Seven-Gate Process with Development of a System Design Specification.




Footnotes:

| | |
|---|---|
| AOA - Analysis of Alternatives | ISR - In-Service Review |
| ASN (RD&A) - Assistant Secretary of the Navy for Research, Development & Acquisition | ITR - Initial Technical Review |
| ASR - Alternative System Review | LRIP - Low Rate Initial Production |
| CBA - Capabilities-Based Assessment | OSD - Office of the Secretary of Defense |
| CDR - Critical Design Review | OTRR - Operational Test Readiness Review |
| CMC - Commandant of the Marine Corps | PCA - Physical Configuration Audit |
| CNO - Chief of Naval Operations | PDM -Program Decision Meeting |
| CONOPS - Concept of Operations | PDR - Preliminary Design Review |
| CSB - Configuration Steering Board | PRR - Production Readiness Review |
| DON - Department of the Navy | RFP - Request for Proposal |
| E&MD - Engineering & Manufacturing Development | SDS - System Design Specification |

| | |
|---|---|
| FCA – Functional Configuration Audit | SFR – System Functional Review |
| FRP – Full-Rate Production | SRR – Systems Requirements Review |
| IBR – Integrated Baseline Review | SVR – System Verification Review |
| ICD - Initial Capabilities Document | TD – Technology Development |
| ILA – Independent Logistics Assessment | TRR – Technology Readiness Review |

Table 16-1. Gate Reviews.

| GATE 1 (ICD) | MEMBERSHIP | OBJECTIVES | BRIEFING CONTENT |
|---|---|---|---|
| **PURPOSE:**<br><br>Endorse the ICD (or equivalent requirements document) and the proposed AoA Study Guidance.<br><br>**ENTRANCE CRITERIA:**<br><br>1. Completed Service review of the ICD (or equivalent).<br>2. Completed Service review of the proposed AoA Study Guidance and draft AoA Study Plan (approved/endorsed by N81).<br>3. Identification of mutually shared needs with foreign countries is completed. | Briefer:<br>RO, prospective PM, and AoA Director (Dir)<br><br>Chair:<br>CNO/DC, CD&I, or designee<br><br>Principals:<br>N9, N1/DC, M&RA, N2/N6/DC I Intel, N3/N5/DC, PP&O, N4/DC, I&L, DON CIO, DC I C4, DC, P&R, ASN (RD&A), Assistant Secretary of the Navy for Financial Management and Comptroller (ASN (FM&C)), ASN (EI&E), N00N, PMD, WE Lead and/or USFLTFORCOM/MARFOR, SYSCOM<br><br>As Required:<br>PEO/ Director, Strategic Systems Programs (DIRSSP), CNR, DC Avn<br><br>Advisors:<br>DASN (RDT&E), DASNs, N80, N81, N82, N83, N81B, N94, N9I,N2/N6 Intel, USFLTFORCOM (N8), HQMC(CL, PA&E), Department of the Navy Office of General Counsel (OGC), DASN (Budget), DASN (IE&F), DASN (Environment), DASN (Safety), SYSCOM cost director, resource sponsor, DirNIPO, DUSN, COTF/MCOTEA, DON Chief Data Officer (CDO). | 1. Endorsement of the ICD (or equivalent) prior to its submission to the Joint Staff review, or submission to CNO/CMC for signature.<br>2. Satisfactory review of the proposed AoA Study Guidance, assumptions, and timelines.<br>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 programs; or approval of the proposed AoA Study Guidance for lower level ACAT programs.<br>4. Satisfactory review of the draft AoA Study Plan.<br>5. Concurrence with the doctrine, organization, training, materiel, leadership education, personnel, and facilities DCRs.<br>6. Satisfactory review of program health.<br>7. Satisfactory review of affordability assessment.<br>8. Approval to proceed to MDD and Gate 2.<br>9. Informed impact of Foreign Influence and Investment on subject capability. | 1. ICD description, including mission description and success criteria (Mission Technical Baseline).<br>2. AoA Study Guidance description.<br>3. Summary of draft AoA Study Plan.<br>4. Summary of mutually shared needs with foreign countries.<br>5. DCRs inputs.<br>6. Programmatics (cost constraints and affordability assessment, schedule, energy, interdependencies).<br>7. Program health.<br>8. Cybersecurity.<br>(Summarize ICD language that informed the AoA Study Guidance/Plan).<br>9. Life-cycle Mission Data Plan (LMDP)<br>10. Real Property Requirements. |

Table 16-1. Gate Reviews. (Continued)

| GATE 2 (AOA) | MEMBERSHIP | OBJECTIVES | BRIEFING CONTENT |
|---|---|---|---|
| **PURPOSE:**<br><br>Endorse, or approve, the AoA report and preferred alternative(s); approve the CDD and CONOPS guidance and assumptions.<br><br>**ENTRANCE CRITERIA:**<br><br>1. Completed Service review of the AoA Report.<br>2. Preferred alternative(s) identified.<br>3. Approved ICD and MDD.<br>4. Completed ITR and ASR.<br>5. Staffs of principals and advisors had an opportunity to review drafts of the TDS and initial Key Performance Parameters and KPPs/KSAs. | Briefer:<br>RO, prospective PM, and AoA Dir<br><br>Chair:<br>CNO/CMC, or designee<br><br>Principals:<br>VCNO/ACMC, N9, N8/DC, P&R/DC, CD&I, N1/DC, M&RA, N2/N6/DC I Intel, N3/N5/DC, PP&O, N4/DC, I&L, DON CIO, DC I C4, ASN (RD&A), ASN (FM&C), ASN (EI&E), N00N, PMD, SYSCOM WE Lead and/or USFLTFORCOM/MARFOR<br><br>As required:<br>CNR, DC Avn<br><br>Advisors:<br>DASN (RDT&E), DASNs, N80, N81, N82, N83, N81B, N94, N9I, N2/N6 Intel, USFLTFORCOM(N8), HQMC(CL, PA&E), OGC, DASN (Budget), DASN (IE&F), DASN (Environment), DASN (Safety), SYSCOM cost director, Resource Sponsor, PEO/DIRSSP, DirNIPO, DUSN, COTF/MCOTEA, DON CDO | 1. Satisfactory review of AoA results.<br>2. Endorsement of the AoA report and preferred alternative(s) prior to the report's submission to the D, CAPE to assess for ACAT ID programs; or approval of the AoA report and preferred alternative(s) prior to the report's submission to the MDA for other programs.<br>3. Approval of CDD and CONOPS guidance and assumptions.<br>4. Authorization to develop CDD and CONOPS.<br>5. Approval of the initial, draft KPPs/KSAs.<br>6. Satisfactory review of program health.<br>7. Satisfactory review of affordability assessment.<br>8. Approval to proceed to Gate 3.<br>9. Approval of Real Property Assessment and Recommendations (if required for program).<br>10. Informed impact of Foreign Influence and Investment on subject capability.<br>11. Satisfactory Review of initial sustainment strategy and initial sustainment ownership cost. | 1. AoA Report summary, including assumptions, findings, and implications of TOC for preferred alternative(s) at system, SoS, and mission levels.<br>2. Warfighter review of AoA results.<br>3. Analysis of cost risk for each proposed alternative.<br>4. Assessment of DCRs.<br>5. Initial KPP/KSAs summary.<br>6. Initial sustainment strategy.<br>7. Proposed CDD/CONOPS guidance and assumptions.<br>8. ITR & ASR results.<br>9. Environmental, Safety and Occupational Health (ESOH) issues and impacts.<br>10. TMRR.<br>11. Industrial base assessment.<br>12. Programmatics (schedule, energy, interdependencies).<br>13. Program risks.<br>14. Program health.<br>15. Energy impacts and energy demand supportability.<br>16. Affordability assessment.<br>17. Cybersecurity.<br>18. LMDP<br>19. Facilities and Infrastructure requirements. |

Table 16-1. Gate Reviews. (Continued)

| GATE 3 (CDD/CONOPS) | | OBJECTIVES | BRIEFING CONTENT |
|---|---|---|---|
| **PURPOSE:**<br><br>Endorse the CDD and CONOPS.<br><br>**ENTRANCE CRITERIA:**<br><br>1. Approved AoA.<br>2. Approved AoA update, if required.<br>3. Completed Service review of the CDD and CONOPS.<br>4. Completed Service review of the SDS development plan and SDS outline.<br>5. Draft cost reduction strategy.<br>6. Completed cost estimate by SYSCOM Cost Estimating Directorate. (For MDAPs, ICE must be approved before Milestone A.)<br>7. Completed program office review of the potential opportunities for export or cooperative development.<br>8. Staffs of principals and advisors had an opportunity to review drafts of the AS, TEMP, and SEP.<br>9. Completed T&E Requirements and Resource Board (TERRB) | Briefer:<br>RO and PM<br><br>Chair:<br>CNO/CMC, or designee<br><br>Principals:<br>VCNO/ACMC,<br>N9, N8/DC, P&R/DC, CD&I, N1/DC, M&RA, N00N,<br>N2/N6/MC Intel,<br>N3/N5/DC, PP&O,<br>N4/DC, I&L, DON CIO, DirC4/DC Info, ASN (RD&A), ASN (FM&C), ASN (EI&E),<br>PMD, WE Lead and/or USFLTFORCOM/MARFOR,<br>SYSCOM<br><br>As required:<br>CNR, DC Avn<br><br>Advisors:<br>DASN (RDT&E), DASNs, N80, N81, N82, N83, N81B, N94, N9I, USFLTFORCOM(N8),<br>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, DON CDO | 1. Endorsement of the initial CDD prior to its submission to the Joint Staff review, or submission to CNO/CMC for signature.<br>2. Approval, or endorsement, of the CONOPS.<br>3. Evaluation of SDS development plan and SDS outline.<br>4. Determination of potential for export or cooperative development.<br>5. Satisfactory Review of the initial LCSP and sustainment technical data plan.<br>6. Satisfactory review of the program assumptions as reflected in the CARD.<br>7. Satisfactory review of the draft AS, TEMP, and SEP.<br>8. Endorsement of the full funding certification for Milestone A (as applicable).<br>9. Satisfactory review of program health.<br>10. Satisfactory review of affordability assessment.<br>11. Approval to proceed to Milestone A decision (as applicable) and Gate 4.<br>12. Informed impact of Foreign Influence and Investment on subject capability. | 1. Preferred alternative(s), and any changes after AoA approval.<br>2. CONOPS summary.<br>3. CDD description, with warfighting effectiveness and analysis supporting all KPPs and KSAs, and aligned with CONOPs.<br>4. Review capability and threat<br>5. SYSCOM cost estimate with assumptions, and cost risk, with S-curves by appropriation (as applicable).<br>6. Cost drivers by phase and by KPP/KSA, to include specific cost reduction strategies, cost drivers, and cost sensitivity ("knee-in-the-curve").<br>7. Cost arrayed per Naval Center for Cost Analysis policy.<br>8. Overview of Initial life-cycle sustainment strategy.<br>9. Updated assessment of DCRs.<br>10. AS summary.<br>11. Summary of potential opportunities for export or cooperative development.<br>12. Describe modular, common, and open systems approach.<br>13. SRR and SFR results.<br>14. ESOH issues/impacts.<br>15. T&E PMT<br>16. SDS development plan and SDS outline.<br>17. Programmatics (schedule, energy, interdependencies).<br>18. Program risks and health.<br>19. TERRB findings.<br>20. Energy impacts and energy demand supportability.<br>21. Affordability assessment.<br>22. ITRA.<br>23. Cybersecurity.<br>24. Facilities and Infrastructure requirements.<br>25. Review Initial LCSP including tech data and depot core determination. |

Table 16-1. Gate Reviews. (Continued)

| GATE 4 (SDS) | MEMBERSHIP | OBJECTIVES | BRIEFING CONTENT |
|---|---|---|---|
| **PURPOSE:**<br><br>Approve the SDS.<br><br>**ENTRANCE CRITERIA:**<br><br>1. Approved CDD.<br>2. Approved CDD update, if required.<br>3. Approved CONOPS.<br>4. SDS approved by the PM, SYSCOM CHSENG, and resource sponsor.<br>5. Completed SYSCOM cost analysis, with focus on derived technical requirements, their cost drivers, risks, and sensitivity.<br>6. Completed Service review of program cost containment and cost reduction strategies.<br>7. Completed system requirements review (SRR), SFR.<br>8. Completed procurement planning & strategy. | Briefer:<br>PM<br><br>Chair:<br>ASN (RD&A), or designee<br><br>Principals:<br>VCNO/ACMC,<br>ASN (FM&C), ASN (EI&E),<br>N9, N8/DC, P&R/DC, CD&I,<br>N1/DC, M&RA, N00N<br>N2/N6/DC I Intel,<br>N3/N5/DC, PP&O,<br>N4/DC, I&L, DON CIO, DC I C4, PMD, WE Lead and/or USFLTFORCOM/MARFOR,<br>SYSCOM, PEO/DIRSSP<br><br>As required:<br>CNR, DC Avn<br><br>Advisors:<br>DASN (RDT&E), DASNs, N80, N81, N82, N83, N81B, N94, N9I, N2/N6<br>IntelUSFLTFORCOM(N8),<br>HQMC(CL, PA&E), OGC, OSBP,<br>DASN (Budget), DASN (IE&F),<br>DASN (Environment), DASN (Safety), SYSCOM cost director, resource sponsor,<br>PEO/DIRSSP,<br>DirNIPO, DUSN<br>COMOPTEVOR/DirMCOTEA, DON CDO | 1. Satisfactory review of SDS' derived technical requirements traceability to CDD KPP/KSA; and derived requirement cost drivers, risks, and sensitivity.<br>2. Approval of SDS.<br>3. Concurrence with CSB recommended capability changes.<br>4. Authorization to submit CSB recommended capability changes to R3B/MROC, or CNO/CMC, with request for Service approval.<br>5. Determination that program is sufficiently structured to operate within DON's business enterprise.<br>6. Satisfactory review of program health.<br>7. Satisfactory review of affordability assessment.<br>8. Approval to proceed to Gate 5.<br>9. Informed impact of Foreign Influence and Investment on System Specs and Supply Chain.<br>10. Draft LCSP including sustainment technical data plan. | 1. Review capability & threat.<br>2. Program capability review focused on: traceability of SDS to CDD, identification of SDS technical requirements, producibility.<br>3. CSB.<br>4. Cost drivers by phase & by KPP/KSA to include specific cost reduction strategies.<br>5. Warfighter review of KPP/KSA cost drivers.<br>6. Draft AS.<br>7. Draft LCSP including sustainment technical data plan.<br>8. Modular, common, and open systems plan.<br>9. Job Task Analysis (JTA), preliminary Navy Training System Plan (NTSP), & Front End Analysis (FEA).<br>10. Updated assessment of DCRs.<br>11. Update consideration of potential export/codevelopment.<br>12. RFP strategy.<br>13. Post-PDR assessment.<br>14. Environmental issues/impacts.<br>15. Review the overall T&E program & results of key test events.<br>16. Programmatics (schedule, interdependencies).<br>17. Program risks.<br>18. Program health.<br>19. Cybersecurity.<br>20. LMDP<br>21. Facilities and Infrastructure requirements. |

Table 16-1. Gate Reviews. (Continued)

| GATE 5<br>(Dev RFP/Milestone B) | MEMBERSHIP | OBJECTIVES | BRIEFING CONTENT |
|---|---|---|---|
| **PURPOSE:**<br><br>Endorse, or approve, the Development RFP Release (Dev RFP Rel). Milestone B.<br><br>**ENTRANCE CRITERIA:**<br><br>1. Approved SDS and technical data package.<br>2. Approved AS.<br>3. Completed Component Cost Position (CCP). (For MDAPs, ICE must be approved before Milestone B.)<br>4. Staffs of principals and advisors had an opportunity to review the Dev RFP.<br>5. Approved TEMP.<br>6. Approved LF-TES and LFT&E waiver from full-up, system-level (FUSL) testing.<br>7. Completed Service review of the LCSP.<br>8. Completed Service review of PESHE.<br>9. DTSA per reference (bu).<br>10. Core Logistics and Sustaining Workload Estimate.<br>11. TERRB Update | Briefer:<br>PM<br><br>Chair:<br>ASN (RD&A), or designee<br><br>Principals:<br>VCNO/ACMC, ASN (FM&C), ASN (EI&E), N9, N8/DC, P&R/DC, CD&I, N1/DC,M&RA, N00N N2/N6/DC I Intel, N3/N5/DC, PP&O, N4/DC, I&L, DON CIO, CDI C4, PMD, WE Lead and/or USFLTFORCOM/MARFOR, SYSCOM, PEO/DIRSSP<br><br>As required:<br>CNR, DC Avn<br><br>Advisors:<br>DASN (RDT&E), DASNs, N80, N81, N82, N83, N81B, N94, N9I, N2/N6 Intel USFLTFORCOM(N8), HQMC(CL, PA&E), OGC, OSBP, DASN (Budget), DASN (IE&F), DASN (Environment), DASN (Safety), SYSCOM cost director, resource sponsor, PEO/DIRSSP,OTA, DirNIPO, DUSN COMOPTEVOR/DirMCOTEA, DON CDO | 1. Satisfactory review of the Development RFP.<br>2. Endorsement of Dev RFP for ACAT ID programs, or approval of Dev RFP Rel decision point for other programs.<br>3. Concurrence with the CSB recommended capability changes.<br>4. Authorization to submit CSB recommended capability changes to R3B/MROC, or CNO/CMC, with request for Service approval.<br>5. Endorsement or approval of the APB and full funding certification for Milestone B (as applicable).<br>6. Satisfactory review of program health.<br>7. Satisfactory review of affordability assessment.<br>8. Approval to proceed to Milestone B decision and Gate 6 Post-Integrated Baseline Review (Post-IBR) review.<br>9. Satisfactory review of System Security/PPP which support export and/or cooperative development, along with Foreign Investment/Influence.<br>10. Satisfactory review of Supplier Health.<br>11. Satisfactory review of Core Logistics and Sustaining Workload Estimate. | 1. Review capability & threat.<br>2. AS.<br>3. Program schedule.<br>4. RFP content & issues.<br>5. All critical data deliverables, data rights, and related IP rights issues addressed.<br>6. Milestone B CCP, assumptions, and cost risk; S-curves by appropriation.<br>7. Cost drivers by phase & by KPP/KSA to include specific cost reduction strategies.<br>8. TOC planning.<br>9. ILA results and LCSP.<br>10. Updated assessment of DCRs.<br>11. JTA, FEA, and final NTSP.<br>12. Summarized results of PDR.<br>13. Environmental issues/impacts.<br>14. Review the overall T&E program & results of key test events.<br>15. Interdependencies.<br>16. CSB.<br>17. ITRA.<br>18. Program risks.<br>19. Program health.<br>20. Cybersecurity.<br>21. LMDP<br>22. Facilities and Infrastructure requirements.<br>23. T&E PMT and TERRB Update |

Table 16-1. Gate Reviews. (Continued)

| GATE 6 (Post-IBR) | MEMBERSHIP | OBJECTIVES | BRIEFING CONTENT |
|---|---|---|---|
| **PURPOSE:**<br><br>Sufficiency review of Integrated Baseline Review (IBR) results and the contractor's performance measurement baseline.<br><br>**ENTRANCE CRITERIA:**<br><br>1. Development Contract awarded.<br>2. Completed IBR.<br>3. Completed PDR (if PDR held post Milestone B). | Briefer:<br>PM and RO<br><br>Chair:<br>ASN (RD&A), or designee<br><br>Principals:<br>VCNO/ACMC, ASN (FM&C), ASN (EI&E), N9, N8/DC, P&R/DC, CD&I, N1/DC,M&RA, N00N N2/N6/DC I Intel, N3/N5/DC, PP&O, N4/DC, I&L, DON CIO, DC I C4, PMD, WE Lead and/or USFLTFORCOM/MARFOR, SYSCOM, PEO/DIRSSP<br><br>As required:<br>CNR, DC Avn<br><br>Advisors:<br>DASN (RDT&E), DASNs, N80, N81, N82, N83, N81B, N94, N9I,N2/N6 Intel USFLTFORCOM(N8), HQMC(CL, PA&E), OGC, DASN (Budget), DASN (IE&F), DASN (Environment), DASN (Safety), SYSCOM cost director, resource sponsor, PEO/DIRSSP, DirNIPO, DUSN, OTA, COMOPTEVOR/DirMCOTEA, DON CDO | 1. Satisfactory review of IBR results.<br>2. Determination that the contractor's performance measurement baseline meets SDS requirements.<br>3. Concurrence with the CSB recommended capability changes.<br>4. Authorization to submit CSB recommended capability changes to R3B/MROC, or CNO/CMC, with request for Service approval.<br>5. Satisfactory review of program health.<br>6. Satisfactory review of affordability assessment.<br>7. Approval to proceed to Gate 6 CDD Update. | 1. Summarized results of IBR and PDR (if PDR post Milestone B).<br>2. Program schedule.<br>3. Cost drivers by phase & by KPP/KSA to include specific cost reduction strategies.<br>4. Updated LCSP.<br>5. CSB.<br>6. Review capability & threat.<br>7. Environmental issues/impacts.<br>8. Review overall T&E program, results of key test events, & system deficiencies discovered through testing activities.<br>9. Interdependencies<br>10. Updated assessment of DCRs.<br>11. Program risks.<br>12. Program health.<br>13. Cybersecurity.<br>14. LMDP<br>15. Facilities and Infrastructure requirements. |

Table 16-1. Gate Reviews. (Continued)

| GATE 6<br>(CDD Update) | MEMBERSHIP | OBJECTIVES | BRIEFING CONTENT |
|---|---|---|---|
| **PURPOSE:**<br><br>Endorse the revised CDD.<br><br>**ENTRANCE CRITERIA:**<br><br>1. Completed Service review of CDD Update and CONOPS.<br>2. Updated technical data package for LRIP.<br>3. Completed PRR in support of LRIP.<br>4. Updated TEMP has been approved. | Briefer:<br>RO and PM<br><br>Chair:<br>CNO/CMC or designee<br><br>Principals:<br>VCNO/ACMC, ASN (RD&A)<br>ASN (FM&C), ASN (EI&E),<br>N9, N8/DC, P&R/DC, CD&I,<br>N1/DC,M&RA,<br>N2/N6/DC I Intel, N00N<br>N3/N5/DC, PP&O,<br>N4/DC, I&L, DON CIO, DC I C4, PMD,<br>WE Lead and/or<br>USFLTFORCOM/MARFOR,<br>SYSCOM, PEO/DIRSSP<br><br>As required:<br>CNR, DC Avn<br><br>Advisors:<br>DASN (RDT&E), DASNs, N80, N81, N82, N83, N81B, N94, N9I, N2/N6 Intel USFLTFORCOM(N8), HQMC(CL, PA&E), OGC, DASN (Budget), DASN (IE&F), DASN (Environment), DASN (Safety), SYSCOM cost director, resource sponsor, PEO/DIRSSP, DirNIPO, DUSN COMOPTEVOR/DirMCOTEA, DON CDO | 1. Endorsement of the CDD update prior to its submission to the Joint Staff for review, or submission to CNO/CMC for signature.<br>2. Concurrence with the CSB recommended capability changes.<br>3. Authorization to submit CSB recommended capability changes to R3B/MROC, or CNO/CMC, with request for Service approval.<br>4. Satisfactory review of program health.<br>5. Satisfactory review of affordability assessment.<br>6. Approval to proceed to Gate 6 Milestone C review.<br>7. Informed impact of Foreign Influence and Investment on subject capability. | 1. CDD update description including KPPs, KSAs, & other attributes.<br>2. PRR results in support of LRIP.<br>3. Contract strategy.<br>4. Updated technical data package for LRIP traced to KPP/KSA capability thresholds.<br>5. CSB.<br>6. Review overall T&E program, results of key test events & system deficiencies discovered through testing activities.<br>7. Program schedule.<br>8. Cost drivers by phase & by KPP/KSA to include specific cost reduction strategies.<br>9. Warfighter review of production baseline on operations & support (O&S) elements of CCP.<br>10. Updated LCSP to include logistics requirements & funding summary (LRFS).<br>11. Updated assessment of DCRs.<br>12. JTA, FEA, final NTSP, and ME.<br>13. Environmental issues/impacts.<br>14. Review capability & threat.<br>15. Summary of CONOPS.<br>16. Interdependencies.<br>17. Program risks.<br>18. Program health.<br>19. Cybersecurity.<br>20. LMDP<br>21. Facilities and Infrastructure requirements.<br>22. Demonstrate there is sufficient production capacity/security features in place to address International partners demand.<br>23. T&E PMT |

Table 16-1. Gate Reviews. (Continued)

| GATE 6<br>(Milestone C) | MEMBERSHIP | OBJECTIVES | BRIEFING CONTENT |
|---|---|---|---|
| **PURPOSE:**<br><br>Approve, or endorse, the program's entry into Milestone C.<br><br>**ENTRANCE CRITERIA:**<br><br>1. Completed CCP and, for MDAP Milestone C approvals, approved ICE.<br>2. Completed PRR.<br>3. Completed Service Review of updates to the TEMP (as applicable).<br>4. Updated technical data package for LRIP contract (as applicable).<br>5. AS update.<br>6. DTSA per reference (co).<br>7. Completed ILA.<br>8. Core Logistics and Sustaining Workload Estimate. | Briefer:<br>PM<br><br>Chair:<br>ASN (RD&A), or designee<br><br>Principals:<br>VCNO/ACMC,<br>ASN (FM&C), ASN (EI&E),<br>N9, N8/DC, P&R/DC, CD&I,<br>N1/DC,M&RA,<br>N2/N6/DC I Intel, N00N<br>N3/N5/DC, PP&O,<br>N4/DC, I&L, DON CIO, DC I C4,<br>PMD,<br>WE Lead and/or<br>USFLTFORCOM/MARFOR,<br>SYSCOM, PEO/DIRSSP<br><br>As required:<br>CNR, DC Avn<br><br>Advisors:<br>DASN (RDT&E), DASNs, N80,<br>N81, N82, N83, N81B, N94, N9I,<br>N2/N6 Intel USFLTFORCOM(N8),<br>HQMC(CL, PA&E), OGC, DASN<br>(Budget), DASN (IE&F), DASN<br>(Environment), DASN (Safety),<br>SYSCOM cost director, resource<br>sponsor, PEO/DIRSSP,<br>DirNIPO, DUSN, OTA,<br>COMOPTEVOR/DirMCOTEA, DON CDO | 1. Satisfactory review of the program's readiness for entry into Milestone C.<br>2. Endorsement of program's readiness for entry into Milestone C for ACAT ID programs, or approval of Milestone C for other programs.<br>3. Concurrence with the CSB recommended capability changes.<br>4. Authorization to submit CSB recommended capability changes to R3B/MROC, or CNO/CMC, with request for Service approval.<br>5. Endorsement of the full funding certification for Milestone C (as applicable).<br>6. Satisfactory review of program health.<br>7. Satisfactory review of affordability assessment.<br>8. Approval to proceed to Gate 6 FRP Review.<br>9. Informed impact of Foreign Influence/Investment impacts to subject program.<br>10. Satisfactory review of Core Logistics and Sustaining Workload Estimate.<br>11. Satisfactory review of LCSP/PSS and ILA results to ensure they meet operational needs at affordable costs with acceptable risks. | 1. PRR results in support of Milestone C.<br>2. Review DT&E, OA, and JITC interoperability test results, discuss major deficiencies discovered and risk to IOT&E/mission.<br>3. Review PSS execution including Technical Data Strategy; and ILA Results.<br>4. Review reliability growth.<br>5. Updated assessment of DCRs.<br>6. Schedule.<br>7. Milestone C CCP, assumptions, & cost risk; S-curves by appropriation.<br>8. Cost drivers by phase & by KPP/KSA to include specific cost reduction strategies.<br>9. Warfighter review of production baseline of O&S elements of CCP.<br>10. Review capability & threat.<br>11. Environmental issues/impacts.<br>12. ITRA.<br>13. Interdependencies.<br>14. Program risks and health.<br>15. T&E PMT and TERRB Update<br>16. Cybersecurity.<br>17. LMDP<br>18. Facilities and Infrastructure requirements.<br>19. Review Export policy and provide use related to Technology Security and Foreign Disclosure and export control progress as applicable.<br>20. Depot Core Analysis and Organic capability status. |

Table 16-1. Gate Reviews. (Continued)

| GATE 6 (FRP) | MEMBERSHIP | OBJECTIVES | BRIEFING CONTENT |
|---|---|---|---|
| **PURPOSE:**<br><br>Approve, or endorse, the program's entry into FRP.<br><br>**ENTRANCE CRITERIA:**<br><br>1. Completed IOT&E.<br>2. BLRIP Report submitted by DOT&E (as applicable).<br>3. Life Fire Test and Evaluation Report (LFT&E) submitted by DOT&E.<br>4. Completed PRR in support of FRP DR.<br>5. Completed CCP and, for MDAP FRP approvals, approved ICE.<br>6. Completed Service Review of updates to the TEMP (as applicable).<br>7. AS update.<br>8. Completed ILA. | Briefer:<br>PM<br><br>Chair:<br>ASN (RD&A), or designee<br><br>Principals:<br>VCNO/ACMC, ASN (FM&C), ASN (EI&E), N9, N8/DC, P&R/DC, CD&I, N1/DC,M&RA, N2/N6/DC I Intel, N00N N3/N5/DC, PP&O, N4/DC, I&L, DON CIO, DC I C4, PMD, WE Lead and/or USFLTFORCOM/MARFOR, SYSCOM, PEO/DIRSSP<br><br>As required:<br>CNR, DC Avn<br><br>Advisors:<br>DASN (RDT&E), DASNs, N80, N81, N82, N83, N81B, N94, N9I, N2/N6 IntelUSFLTFORCOM(N8), HQMC(CL, PA&E), OGC, DASN (Budget), DASN (IE&F), DASN (Environment), DASN (Safety), SYSCOM cost director, resource sponsor, PEO/DIRSSP, DirNIPO, DUSN, OTA, COMOPTEVOR/DirMCOTEA, DON CDO | 1. Satisfactory review of the program's readiness for entry into FRP.<br>2. Endorsement of program's readiness for entry into FRP for ACAT ID programs, or approval of FRP for other programs.<br>3. Concurrence with the CSB recommended capability changes.<br>4. Authorization to submit CSB recommended capability changes to R3B/MROC, or CNO/CMC, with request for Service approval.<br>5. Endorsement of the full funding certification for FRP (as applicable).<br>6. Satisfactory review of program health.<br>7. Satisfactory review of affordability assessment.<br>8. Acceptance of the disposition of the major system deficiencies identified during the IOT&E.<br>9. Informed impact of Foreign Influence/Investment impacts to subject program.<br>10. Satisfactory review of ILA findings.<br>11. Evaluate execution to LCSP/PSS to ensure they meet the operational needs at affordable costs.<br>12. Satisfactory review of spares funding, execution of core depot funding and path to MSD. | 1. PRR results in support of FRP.<br>2. Review DT&E, IOT&E, and JITC interoperability test results, discuss major deficiencies discovered and risk to mission of fielding/not fielding system.<br>3. Review PSS (LCSP) and execution, including Technical Data Strategy.<br>4. Review reliability growth.<br>5. Updated assessment of DCRs.<br>6. Schedule through disposal.<br>7. FRP CCP, assumptions, & cost risk; S-curves by appropriation.<br>8. Cost drivers by phase & by KPP/KSA to include specific cost reduction strategies.<br>9. Warfighter review of production baseline of O&S elements of CCP.<br>10. Review capability & threat.<br>11. Environmental issues/impacts.<br>12. ITRA.<br>13. CSB.<br>14. Interdependencies.<br>15. Program risks.<br>16. Program health.<br>17. Cybersecurity.<br>18. LMDP.<br>19. Facilities and Infrastructure requirements.<br>20. Core Analysis Determinations and organic capability establishment status.<br>21. T&E PMT Update. |

Table 16-1. Gate Reviews. (Continued)

| GATE 6 (Sufficiency/CSB) | MEMBERSHIP | OBJECTIVES | BRIEFING CONTENT |
|---|---|---|---|
| **PURPOSE:**<br><br>Sufficiency review of the system's mission readiness, affordability, and sustainability.<br><br>**ENTRANCE CRITERIA:**<br><br>1. Achieved FRP of the system.<br>2. Achieved IOC of the system.<br>3. Updated program cost estimates per DON Policy.<br>4. Updated LRFS, including TOC reduction initiatives.<br>5. Updated LCSP. | Briefer:<br>RO and PM<br><br>Co-Chairs:<br>ASN (RD&A)* and CNO/CMC*, Or designees<br><br>Principals:<br>VCNO/ACMC, ASN (FM&C)*, ASN (RD&A) PMD*,PEO/DIRSSP*, OSD J8*, USD (A&S)*, OUSD (R&E)* ASN (EI&E), N9, N8/DC, P&R/DC, CD&I, N1/DC,M&RA, N2/N6/DC I Intel, N00N N3/N5/DC, PP&O, N4/DC, I&L, DON CIO, DC I C4, WE Lead and/or USFLTFORCOM/MARFOR, SYSCOM<br><br>As required:<br>CNR, DC Avn<br><br>Advisors:<br>DASN (RDT&E), DASNs, N80, N81, N82, N83, N81B, N94, N9I, N2/N6 Intel USFLTFORCOM(N8), HQMC(CL, PA&E), OGC, DASN (Budget), DASN (IE&F), DASN (Environment), DASN (Safety), SYSCOM cost director, resource sponsor, PEO/DIRSSP, DirNIPO, DUSN, OTA, COMOPTEVOR/DirMCOTEA, DON CDO<br><br>*Required by Law for MDAP CSBs | 1. Satisfactory review of the system's mission readiness and sustainability.<br>2. Endorsement of selected recommendations to resolve system and mission readiness issues and shortfalls.<br>3. Concurrence with TOC reduction opportunities.<br>4. Concurrence with risk assessments.<br>5. Satisfactory review of affordability assessment.<br>6. Decisions on Configuration Changes for the System/Program.<br>7. Informed impact of Foreign Influence/Investment impacts to subject program. | 1. IOC/FOC schedule & definitions.<br>2. Execution of PSS including TD strategy.<br>3. Status of Depot Standup.<br>4. Facilities and Infrastructure requirements.<br>5. Technical health.<br>6. T&E Major deficiencies & resolutions.<br>7. Budget and funding.<br>8. Threat and capability review.<br>9. Summary of CONOPS as employed.<br>10. CSB.<br>11. Evaluation of TOC reduction, initiatives, and investment.<br>12. Cost drivers by phase & by KPP/KSA to include specific cost reduction strategies.<br>13. Interdependencies.<br>14. Schedule.<br>15. Significant risks.<br>16. Program health.<br>17. Cybersecurity.<br>18. LMDP.<br>19. Supply Support status including spares required versus funded and MSD status<br>20. Status and resolution of T&E findings.<br>21. T&E PMT Update |

Table 16-1. Gate Reviews. (Continued)

| GATE 7<br>(Post IOC Sustainment) | MEMBERSHIP | OBJECTIVES | BRIEFING CONTENT |
|---|---|---|---|
| **PURPOSE:**<br><br>Conduct sustainment reviews IAW reference (br).<br><br>**ENTRANCE CRITERIA:**<br><br>1. Five years after achievement of IOC of the system.<br>2. Updated S-ICE per DoD and DON policy<br>3. Updated LCSP.<br>4. Updated Sustainment BCA. | Briefer:<br>RO PM and PSM<br><br>Co-Chairs:<br>ASN (RD&A) and CNO/CMC, Or designees<br><br>Principals:<br>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/DC I Intel, N00N N3/N5/DC, PP&O, N4/DC, I&L, , DC I C4, PMD, WE Lead and/or USFLTFORCOM/MARFOR, SYSCOM, PEO/DIRSSP<br><br>As required:<br>CNR, DC Avn<br><br>Advisors:<br>DON CIO, DASNs, N80, N81, N82, N83, N81B, N94, N9I, N2/N6 Intel, USFLTFORCOM(N8), HQMC(CL, PA&E), OGC, DASN (Budget), DASN (IE&F), DASN (Environment), DASN (Safety), SYSCOM cost director, resource sponsor, PEO/DIRSSP, DirNIPO, DUSN, OTA, COMOPTEVOR/DirMCOTEA, DON CDO | 1. Satisfactory assessment of the effectiveness of the PSS to include mission readiness, sustainability, and maintainability.<br>2. Satisfactory assessment of the sustainment cost against current cost estimates.<br>3. Endorsement of recommendations to resolve system and mission readiness issues and product support shortfalls.<br>4. Concurrence with TOC reduction opportunities.<br>5. Concurrence with sustainment risk assessments and mitigations.<br>6. Satisfactory review of affordability assessment and critical cost growth (if applicable).<br>7. Starting within five years after IOC of an MDAP and every five years thereafter, conduct and documentation of the sustainment review required by reference (br).<br>8. Informed impact of supply chain risks (Foreign Investment/Influence, Mergers/Acquisitions, and Obsolescence). | 1. Execution of PSS including TD strategy.<br>2. Performance to approved SPB requirements (if applicable).<br>3. Results of the S-ICE and determination of critical cost growth.<br>4. Comparison of actual costs to the amount of funds budgeted and appropriated over previous five years, if shortfalls exist, explanations of implications on equipment availability.<br>5. Results of Sustainment BCA.<br>6. Comparison of assumed and achieved reliabilities.<br>7. Analysis of most cost-effective source of repair and maintenance.<br>8. Evaluation of the cost of consumables and depot-level repairables and upgrades.<br>9. Evaluation of the costs of IT, networks, computer h/w and software maintenance.<br>10. Assessment of actual fuel efficiencies compared to projected.<br>11. Comparison of actual manpower required vs previous estimates.<br>12. Analysis of accuracy and completeness of cost data, and plan to update if required.<br>13. Plans to restructure LCSP or other actions that will lead to critical cost growth.<br>14. Sustainment milestones, including retirement date. |

**DATA ACROSS THE ACQUISITION PATHWAYS**

1. Purpose. This enclosure supplements overarching data policy artifacts such as references (ec), (ed), (ee), (fj), (fk), (fl), (fm), and (gg) with data requirements for DON acquisition programs and their corresponding reporting requirements.

2. Data Requirements for Acquisition Programs

a. Acquisition Program Requirements. All DON acquisition professionals will ensure that their acquisition programs adhere to the principles in references (ed), (fj), (fk), (fl), and (fm),regardless of AAF pathway:

(1) Data shall be a priority consideration through all phases of the acquisition process from program inception, tracked through development, and into production and sustainment.

(2) Collective data stewardship shall occur from acquisition initiation through sustainment, by which functional data managers implement DON data policies and manage day-to-day quality of data, and PMs adhere to DON data policies.

(3) Programs shall enable electronic collection of data and maintain the pedigree of data through tagging, storage, cataloging, and maintenance of key artifacts such as data dictionaries, business glossaries, and data models IAW DON data policies.

(4) Programs shall enable enterprise-wide data access and availability, adhering to information exchange standards and conforming to security, privacy, and ethical policies.

(5) Additionally, per references (fm) and (gg) all acquisition program systems and subsystems are required to implement DoD standard data interfaces to enable the exchange and flow of information and register these interfaces in the DON Enterprise Data Catalog.

b. Guidance and Oversight. The DON CDO, the DON Data Governance Board and Data Stewards shall provide oversight and guidance to ensure that acquisition programs are successfully

incorporating and executing the requirements of paragraph (3)(a) of this enclosure. They shall:

(1) Provide specifications and data standards to the acquisition community for implementation.

(2) Oversee the development and adoption of enterprise-wide data and interface standards and specifications.

(3) Establish data officers to coordinate with, and advise, the MDA/DA at appropriate milestones on the implementation of standards and specifications.

(4) Standardize, create, and track a common set of metrics to assess program and system compliance with DoD and DON guidance. These metrics shall be presented during program reviews, investment reviews, and funding discussions to inform investments or modernization activities.

(5) IAW regulatory requirements described in reference (ej) all programs dependent on Intelligence Mission Data shall provide a LMDP beginning at Gate 1 and maturing through Gate 6 for independent validation and verification by the DON CDO.

3. Data Requirements for Acquisition Reporting. Per reference (ee), to support the Acquisition community in leveraging the different pathways offered by the AAF, data transparency will be required to assess progress and enable Data Reporting Standards.

a. Data Reporting Standards. Acquisition programs will be required to provide information and data as required by their respective pathway. These requirements can be found at https://aaf.dau.edu/aaf/policies/ and will be updated accordingly as the AAF evolves.

b. RDAIS. RDAIS is the DON's authoritative information system for acquisition data on all acquisition programs under the DAS. Upon initial designation by the MDA of an acquisition program, that program will enter into an active acquisition reporting status and will be subject to RDAIS reporting requirements per paragraph (4)(a) of this enclosure, unless documented otherwise by ASN (RD&A) policy.

c. Cost Analysis and Financial Management and Budget Data

(1) Responsibilities. ASN (FM&C), per reference (ek), directs and manages financial management activities and operations, ensures that financial management systems comply with requirements, supervises and directs the preparation of budget estimates, and carries out, with respect to DON, the functions specified for the Under Secretary of Defense (Comptroller). The Director, Office of Budget is responsible to ASN (FM&C) for preparation and administration of the DON budget as assigned by law, instruction, and regulations.

(2) Cost Analysis Data. Reference (em) details cost analysis guidance and procedures, discussing the roles and responsibilities of OSD Cost Assessment and Program Evaluation, MDA and program office. Authorized users may upload and view cost analysis documents, such as program office estimates, DoD Independent Cost Estimates CARD, and DoD CCP in either the Cost Assessment Data Enterprise or AIR websites: https://cade.osd.mil and https://www.dodtechipedia.mil/dodc/dispaly/AIR/Home.

d. Program Budget Information System. Acquisition programs, including AAPs, shall report financial management and budget data per references (ek) and (el). The authoritative source for Navy financial management and budget data is the Program Budget Information System-Audit Trail Database Application offers a wide range of information such as budget tools, budget guidance, and program budget data, etc. ACAT and AAP programs that report in RDAIS must submit budget reports as required for POM, Budget Estimate Submissions and the PB. Budget reports include cost, schedule and track to budget submissions. MTA programs will submit their budget data in the PID submission.

**MANDATORY LEGAL REVIEWS AND ARMS CONTROL COMPLIANCE REVIEWS OF WEAPON SYSTEMS**

1. Purpose. This enclosure supplements paragraph 1.2.v of reference (a) with procedures for legal reviews and arms control compliance reviews of DON weapon-system acquisition programs, consistent with references (eq) and (p).

2. 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 2.e below contains definitions specific to this enclosure 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 any AAF pathway or in any other way, including by purchase of a commercial or 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 shall consult with the Office of the JAG, Code 10 (National Security Law) to assist in determining the appropriate review authority and ensure a sufficient legal review has been completed IAW reference (a) and reference (eq).

d. Responsibility and Timing. PMs, or others who develop, acquire, or procure weapons or weapon systems, will ensure that all potential weapons or weapon systems are reviewed IAW this enclosure. 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. PMs, 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 E&MD 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 in any AAF pathway, 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 enclosure, 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 enclosure, 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 enclosure, 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. However, if a weapon or weapon system is so closely integrated with a platform’s controls, communication systems, computer processors, sensors, or other systems that it relies on them to identify targets and trigger release of weapon payloads, then the platform should itself be considered a component of the weapon or weapon system to the extent of such reliance.

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 CONOPS 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 enclosure.

(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).

(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 CONEMP 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 responsible office.

3. Review for Compliance with Arms Control Agreements

a. All systems developed or acquired by DON will be reviewed by the DIRSSP via the Naval Treaty Implementation Program Office, with the advice of OGC, to certify compliance with arms control agreements IAW reference (q).

b. PMs will ensure that, as reference (q) requires, all DON acquisition program activities which may be affected by arms control agreements are 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).

**GLOSSARY**

1. Purpose. DON-specific acquisition acronyms and terms are listed herein.

2. General. The DAU's Glossary (reference (ad)) of common acquisition acronyms and terms may be found at https://dap.dau.edu/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.