

Part 3
Program Structure

- References:
- (a) DoD Directive 5000.1, "Defense Acquisition," 15 Mar 96 (NOTAL)
 - (b) DoD Regulation 5000.2-R, "Mandatory Procedures for Major Defense Acquisition Programs (MDAPs) and Major Automated Information System (MAIS) Acquisition Programs," 15 Mar 96 (NOTAL)
 - (c) SECNAVINST 5710.25A, "International Agreements," 2 Feb 95 (NOTAL)
 - (d) SECNAVINST 5510.34, "Manual for the Disclosure of DON Military Information to Foreign Governments and International Organizations," 4 Nov 93 (NOTAL)
 - (e) SECNAVINST 4900.46B, "The Technology Transfer and Security Assistance Review Board (TTSARB)," 16 Dec 92 (NOTAL)
 - (f) SECNAVINST 5420.188D, "Program Decision Process," 31 Oct 95 (NOTAL)
 - (g) Chairman of the Joint Chiefs of Staff Memorandum of Policy (MOP) 77, "Requirements Generation System, Policies and Procedures", 17 Sep 92 (NOTAL)
 - (h) SECNAVINST 4000.36, "Technical Representation at Contractor's Facilities," 28 Jun 93 (NOTAL)
 - (i) OPNAVINST 5100.24A, "Navy System Safety Program," 3 Oct 86 (NOTAL)
 - (j) MCO 3960.2B, "Marine Corps Operational Test and Evaluation Activity," 24 Oct 94 (NOTAL)
 - (k) SECNAVINST 5239.3, "Department of the Navy Information Systems Security (INFOSEC) Program," 14 Jul 95 (NOTAL)
 - (l) OPNAVINST 1500.8M, "Navy Training Planning Process," 18 Sep 86 (NOTAL)

3.1 Purpose

The purpose of this part is to identify the elements that are necessary to structure a successful program. These elements are contained in strategies proposed by the program manager (PM), endorsed by Chief of Naval Operations (CNO)/Commandant of the Marine Corps (CMC) and approved by the milestone decision authority (MDA). See references (a) and (b) for further implementation requirements for all Department of the Navy (DON) programs.

3.2 Program Goals

PMs for all DON programs shall establish program goals that meet the implementation requirements of reference (b), paragraph 3.2.

06 DEC 1996

3.2.1 Objectives and Thresholds

PMs for all DON programs shall propose program objectives and thresholds for approval by the MDA. PMs shall not make trade-offs in cost, schedule, and/or performance outside of the trade space between objectives and thresholds defined by the program's goals without first obtaining approval from CNO/CMC and the MDA. See reference (b), paragraph 3.2.1, for further implementation requirements for all DON programs.

3.2.2 Acquisition Program Baselines

Every acquisition program shall establish an acquisition program baseline (APB) that documents the cost, schedule, and performance objectives and thresholds of that program. See reference (b), paragraph 3.2.2, for further implementation requirements for all DON programs.

3.2.2.1 Preparation and Approval

ACAT I, IA, and II program APBs shall be prepared by the PM, endorsed by CNO/CMC, concurred with by the Program Executive Officer (PEO), SYSCOM Commander, or DRPM, as appropriate, and approved by the MDA. ACAT III and IV program APBs shall be prepared by the PM, endorsed by CNO/CMC, and approved by the MDA. For IT ACAT programs, the APB is prepared by the PM, endorsed by the IT functional area point of contact (POC), CG, MCCDC, and resource sponsor, and approved by the MDA (see enclosure (7), appendix II, annex B, section 7, for IT functional area POCs). APBs shall be prepared and approved at the program's initiation; revised and/or updated at each subsequent program milestone decision; and revised following a program restructure or an unrecoverable program deviation. For ACAT IC programs, the APB shall not be approved without the coordination of the Under Secretary of Defense (Comptroller) (10 U.S.C. 2220(a)(2)) and the Joint Requirements Oversight Council (JROC). See reference (b), paragraph 3.2.2.1, for further implementation requirements for all DON programs.

3.2.2.2 APB Content

CNO (N8)/CMC (CG, MCCDC) shall validate the key performance parameters in ACAT II, III, and IV program APBs. The APB content for all DON programs, including those APBs revised as a result of program modifications, shall meet the implementation requirements of reference (b), paragraph 3.2.2.2, (see the table in enclosure (1), paragraph 1.4.5.2).

3.2.3 Exit Criteria

Reference (b), paragraph 3.2.3, requires ACAT I and ACAT IA programs to use exit criteria to meet the requirement in 10 U.S.C. 2220(a)(1) for goals during an acquisition phase.

06 DEC 1996

MDAs shall also establish exit criteria in the acquisition decision memorandum (ADM) for each phase for ACAT II, III, and IV programs.

See reference (b), paragraph 3.2.3, for further implementation requirements for status reporting and exit criteria for all DON programs.

3.3 Acquisition Strategy

PMs for all DON programs shall develop an acquisition strategy implementing the requirements of reference (b), paragraph 3.3. For ACAT IC, IAC, and II programs, the PM shall develop the acquisition strategy in coordination with the acquisition coordination team (ACT). For ACAT III and IV programs, the PM shall develop the acquisition strategy in coordination with the ACT, if one is established.

3.3.1 Sources

See reference (b), paragraph 3.3.1, for implementation requirements for all DON programs.

3.3.2 Cost, Schedule, and Performance Risk Management

PMs for all DON programs shall research and apply applicable technical and management lessons-learned during system development or modification. Data bases containing this information are listed in the Deskbook (DON Section). An ACT, as appropriate (see enclosure (1), paragraph 1.2), shall assist the PM to assess risk areas and tailor risk management strategies. See reference (b), paragraph 3.3.2, for further implementation requirements for all DON programs.

3.3.3 Cost as an Independent Variable (CAIV)

The CAIV concept shall be applied to all DON ACAT acquisition programs. See reference (b), paragraph 3.3.3, and this instruction, paragraph 2.3.2.3.1, for further implementation requirements for all DON programs.

3.3.3.1 Cost/Performance Tradeoffs

For DON ACAT IC, IAC, and II programs, an ACT shall be used to provide cost-performance tradeoff analysis support, as appropriate. Cost-performance tradeoffs shall also be performed for ACAT III and IV programs and an ACT, if established, shall provide tradeoff support as approved by the MDA. See reference (b), paragraphs 3.3.3.1 and 4.3.8, for further implementation requirements for all DON programs.

06 DEC 1996

3.3.3.2 Cost Management Incentives

See reference (b), paragraph 3.3.3.2, for implementation requirements for all DON programs.

3.3.4 Contract Approach

See reference (b), paragraph 3.3.4, for implementation requirements for all DON programs.

3.3.4.1 Competition

See reference (b), paragraph 3.3.4.1, for implementation requirements for all DON programs.

3.3.4.2 Best Practices

See reference (b), paragraph 3.3.4.2, for implementation requirements for all DON programs.

3.3.4.3 Cost Performance

See reference (b), paragraph 3.3.4.3, for implementation requirements for all DON programs.

3.3.4.4 Advance Procurement*

See reference (b), paragraph 3.3.4.4, for implementation requirements for all DON programs.

* Not applicable to IT programs.

3.3.4.5 Continuous Acquisition and Life-Cycle Support (CALs) (Digital Data)

See reference (b), paragraph 3.3.4.5, for implementation requirements for all DON programs.

3.3.5 Management Approach

The acquisition strategy shall be developed in sufficient detail to establish the managerial approach that shall be used to achieve program goals. See reference (b), paragraph 3.3.5, for further implementation requirements for all DON programs.

3.3.5.1 Streamlining

See reference (b), paragraph 3.3.5.1, for implementation requirements for all DON programs.

3.3.5.2 International Considerations*

All DON ACAT programs shall consult with the Navy International Programs Office (IPO) during development of the

06 DEC 1996

international element of the program's acquisition strategy to obtain:

1. Relevant international programs information, such as existing or proposed research, development, and acquisition international agreements and data exchange agreements with allied and friendly nations.
2. ASN(RD&A) policy and procedures regarding development, review, and approval of international armaments cooperation programs, as established by reference (c).
3. DON technology transfer policy established by references (d) and (e) under the policies of the Secretary of Defense as recommended by the National Disclosure Policy Committee (NDPC).

See reference (b), paragraph 3.3.5.2, for further implementation requirements for all DON programs.

* Not normally applicable to IT programs.

3.3.5.3 Joint Program Management

When DON activities are considering involvement in another service program that is past Milestone I, but pre-Milestone III, and there has been no formal previous involvement, they shall establish an operating agreement with the lead service defining participation in the program. This operating agreement shall include funding, participation in joint milestone information preparation/endorsement and program reviews, joint program management, and joint logistics support.

When a DON activity is considering involvement in another service program that is past Milestone III, and when there has been no previous formal involvement, the decision to forward funds to the lead service will be supported by:

1. Milestone Information. Other service milestone information, supported by a DON activity endorsement, will be used to the maximum extent possible. Any unique DON activity requirements will be addressed by separate correspondence.
2. Decision. The information requirements to support the DON activity's decision to associate with the other service program will follow the general guidelines of reference (f).

When ASN(RD&A) approves withdrawal from a program, CNO (N8)/CMC (CG, MCCDC) will prepare necessary briefing material and correspondence to support ASN(RD&A)'s withdrawal decision. See reference (b), paragraph 3.3.5.3, for further implementation requirements for all DON programs.

06 DEC 1996

3.3.5.3.1 Joint Potential Designator (JPD) Interface with Other Services

For weapon system programs, CNO (N81)/CMC (CG, MCCDC) shall staff mission need statements (MNSs) received from the other Services for JPD assessment in compliance with reference (g) and, in turn, shall provide Navy/Marine Corps MNSs to the other Services for their JPD determination. Operational requirements documents (ORDs) which have MNSs evaluated as joint or joint interest, or that are not preceded by a MNS, shall also be staffed among the Services for JPD reassessment or assessment, as appropriate. All DON MNSs/ORDs shall have a JPD assessment before final approval.

For IT programs, the IT functional area POC shall coordinate the MNS with the Office of the Secretary of Defense (OSD) principal staff assistant (PSA) for joint or multi-service applicability. The IT functional area POC shall similarly coordinate the ORD with all appropriate CNO/CMC codes and with the OSD PSA.

3.3.5.4 Assignment of Program Executive Responsibility

See reference (b), paragraph 3.3.5.4, for implementation requirements for ACAT I and IA programs, and any other programs determined by ASN(RD&A) to require dedicated program executive management.

3.3.5.5 Technical Representatives at Contractor Facilities

Reference (h) provides procedures for the use of DON technical representatives at contractor's facilities. See reference (b), paragraph 3.3.5.5, for further implementation requirements for all DON programs.

3.3.5.6 Information Sharing and DoD Oversight

ASN(RD&A) or designee and PEOs/SYSCOM Commanders/DRPMs shall implement the requirements of reference (b), paragraph 3.3.5.6.

3.3.6 Environmental, Safety, and Health Considerations

Reference (i) provides procedures for system safety programs. See reference (b), paragraphs 3.3.6 and 4.3.7, for implementation requirements for all DON programs.

3.3.7 Sources of Support

See reference (b), paragraph 3.3.7, for implementation requirements for all DON programs.

06 DEC 1996

3.3.8 Warranties

See reference (b), paragraph 3.3.8, for implementation requirements for all DON programs. See Defense Federal Acquisition Regulation Supplement (DFARS) paragraph 246.770 for a description of programs that require a warranty.

3.3.9 Evolutionary Acquisition and Preplanned Product Improvement

When an evolutionary acquisition (EA) strategy is used to field a core capability and there are subsequent modifications to the initial fielded core capability, such modifications shall satisfy a validated requirement and be supportable in the operational environment.

EA modifications to the core capability shall be funded, developed, and tested in manageable increments. Each increment shall be managed as a modification in accordance with enclosure (1), paragraph 1.4.5.2, and reference (b), paragraph 1.4.5.2.

Preplanned product improvement (P3I) modifications shall also satisfy a validated requirement and be supportable in the operational environment.

3.4 Test and Evaluation

Early involvement between the developing activity (DA) and the operational test agency (OTA) (Operational Test and Evaluation Force (OPTEVFOR))/(Marine Corps Operational Test and Evaluation Activity (MCOTEA)) is required to ensure that both have a common understanding of the system requirements and that developmental and operational testing is tailored to optimize cost, schedule, and performance. The Commander, Marine Corps Systems Command (COMMARCORSYSCOM) and Director, MCOTEA are the principals responsible for developmental test and evaluation (DT&E) and operational test and evaluation (OT&E), respectively, within the Marine Corps. Reference (j) establishes MCOTEA as the Marine Corps independent operational T&E activity responsible for adequate testing, objective evaluation, and independent reporting in support of the Marine Corps acquisition process. See reference (b), paragraph 3.4, for further implementation requirements for all DON programs.

3.4.1 Test and Evaluation Strategy

Any environmental evaluation required under Title 42 United States Code 4321-4347 or Executive Order 12114 shall be completed before the decision is made to proceed with either a developmental or operational test that may affect the physical environment. See reference (b), paragraphs 3.4.1 and 4.3.7, for further implementation requirements for all DON programs.

06 DEC 1996

3.4.2 Developmental Test and Evaluation

DT&E is required for all developmental acquisition programs. For DON programs, DT&E shall be conducted by the DA through contractor testing or government test and engineering activities. Combined developmental testing/operational testing (DT/OT) shall be pursued whenever possible to reduce program costs, improve program schedule and provide early visibility of performance issues. See reference (b), paragraph 3.4.2, for further implementation requirements for all DON programs.

3.4.2.1 Interoperability Testing and Certification

For applicable systems, interoperability testing shall be conducted to ensure that ORD requirements are met. Interoperability testing consists of two major areas, Navy-Marine Corps interoperability testing and joint service interoperability testing.

1. Marine Corps-unique interfaces shall be tested during DT&E by MARCORSSYSCOM.
2. Navy or Marine Corps joint service interoperability testing shall be accomplished during DT&E by the Joint Interoperability Test Center, Fort Huachuca, AZ.
3. The PM shall have system interoperability certified prior to Milestone III.

3.4.2.2 DT&E of Amphibious Vehicles

All DT&E of amphibious vehicles and amphibious tests of other equipment or systems used by a landing force in open seaways shall be conducted by, or be under the direct supervision of, the COMMARCORSYSCOM with appropriate Naval Sea Systems Command (NAVSEASYSYSCOM) or PEO/DRPM coordination. The Director, MCOTEAs shall ensure that OT&E of such systems is planned, scheduled and evaluated with appropriate coordination with OPTEVFOR.

3.4.2.3 Aircraft and Air Traffic Control (ATC) Equipment

The CNO shall be responsible for satisfying Marine Corps requirements for aircraft and ATC equipment as defined by the CMC. DT&E of naval aviation systems and ATC equipment shall be accomplished under the direction of the Naval Air Systems Command (NAVAIRSYSCOM) at Navy test activities.

3.4.2.4 Test and Evaluation of System Certification

System certification testing shall be conducted to ensure that ORD security requirements are met. Testing shall determine that the security measures specified for the system in response to ORD requirements are implemented and provide the level of

protection required. The PM shall coordinate with OPTEVFOR (or MCOTEA for Marine Corps systems) and the Designated Approval Authority (DAA) (CNO/CMC, or designee) to determine the extent of system certification testing required. In accordance with reference (k), the PM shall ensure system certification is achieved prior to Milestone III, Production or Fielding/Deployment Approval.

3.4.3 Certification of Readiness for OT&E

See reference (b), paragraph 3.4.3, for implementation requirements for all DON programs.

3.4.3.1 Navy Criteria for Certification

The following criteria are the minimum required for certification of readiness to commence operational evaluation (OPEVAL) and follow-on operational test and evaluation (FOT&E); however, for other phases of OT, specific criteria may be tailored as appropriate.

1. The test and evaluation master plan (TEMP) is current and approved.
2. All DT&E objectives and performance thresholds have been met, or are projected to be at system maturity, and results indicate that the system will perform successfully in OT&E and will meet the criteria for approval at the next program decision milestone (e.g., full-rate production on completion of OPEVAL). All DT&E testing data has been published and distributed. With the exception of combined DT/OT, the DA/PM shall provide available developmental test reports and data to the OTA for possible use in supplementing operational test data, for all programs undergoing OT&E, not less than 30 days prior to the commencement of operational testing unless otherwise agreed to by COMOPTEVFOR.
3. The results of DT&E (and previous OT&E) demonstrate that all significant design problems (including compatibility, electromagnetic environmental effects, interoperability, survivability/vulnerability, reliability, maintainability, availability, human factors, systems safety, and logistics supportability) have been identified and corrective actions are in process.
4. System operating and maintenance documents, including Maintenance and Material Management (3M) program documents and preliminary allowance parts list (PAPL), have been distributed to COMOPTEVFOR.

06 DEC 1996

5. Adequate logistic support, including spares, repair parts, and support/ground support equipment is available as documented in the TEMP. Discuss (in the certification message) any logistics support which should be used during OT&E, but will not be used with the system when fielded (e.g., contractor provided depot level maintenance).
6. The applicable system technical documentation (e.g., failure modes, effects, and criticality analyses (FMECA), level of repair analyses (LORA), life-cycle cost (LCC), and logistic support analyses (LSA)) has been provided to COMOPTEVFOR.
7. The OT&E manning of the system is adequate in numbers, rates, ratings, and experience level to simulate normal operating conditions.
8. The approved Navy training plan, if applicable, has been provided to COMOPTEVFOR.
9. Training for personnel who will operate and maintain the system during OT&E (including OPTEVFOR personnel) has been completed, and this training is representative of that planned for fleet units under the Navy training plan.
10. All resources required for operational testing such as instrumentation, simulators, targets, and expendables have been identified, planned, and are listed in the TEMP. All appropriate documents are available.
11. The system provided for OT&E, including software and the total logistics support system, is production representative. If this is not the case, a waiver (see paragraphs 3.4.3.6 and 3.4.3.7 below) must specify the difference between the system to be used for test and the final production configuration.
12. All threat information required for OT&E (e.g., threat system characteristics and performance, electronic countermeasures, force levels, scenarios and tactics) is available and a list of such information (including security classifications) has been provided to COMOPTEVFOR.
13. The system safety program has been completed.
14. The system complies with Navy occupational safety and health/hazardous waste requirements, where applicable.
15. Software maturity metrics analysis demonstrates the software is stable and expected to perform at a level commensurate with the operational test phase.

06 DEC 1996

16. For software qualification testing (SQT), a Statement of Functionality, describing the software capability, has been provided to COMOPTEVFOR.
17. For programs employing software, there are no unresolved priority 1 or 2 software problem reports (SPR), and all priority 3 problems are documented with appropriate impact analyses.
18. For aircraft programs, there are no unresolved Board of Inspection and Survey (INSURV) Part I (*) or Part I (**) deficiencies.

3.4.3.2 Marine Corps Criteria for Certification

The Marine Corps criteria for certification of readiness to commence OPEVAL/FOT&E are (with the exception of Marine Corps aviation programs which adhere to paragraph 3.4.3.1 procedures):

1. The TEMP is current and approved.
2. The DT&E has been completed and the results reported.
3. All DT&E objectives and performance thresholds have been met. All failures and deficiencies, to include those identified in previous OT&E, have been corrected. (Note: If all have not been corrected, the PM shall ensure that uncorrected failures or deficiencies are addressed in the certification letter.)
4. DT&E of embedded computer systems, including hardware, firmware, and software, has satisfied the Marine Corps standard criteria for computers and warrants proceeding into OT&E.
5. Deviations have been addressed where expected reliability of the system differs from the requirements documents.
6. The results of DT&E demonstrate that all significant design problems (including compatibility, electromagnetic environmental effects, interoperability, survivability/vulnerability, producibility, reliability, availability, maintainability, human factors, and logistical supportability) have been identified and solutions are in hand.
7. The system provided for OT&E, including software and the total logistics support system, is production representative. If the system is not production representative, the PM shall describe the differences in the certification correspondence.

06 DEC 1995

8. It is expected that the system will perform successfully in OT&E, and will meet the criteria for approval for full-rate production on completion of OT&E.
9. Required training for personnel who will operate and maintain the system during OT&E (including MCOTEA personnel) has been completed, and this training is representative of that planned for the operational forces that will be using the system.
10. System operating and maintenance manuals have been distributed for OT&E.
11. The OT&E manning for the system is the same in numbers, rates, ratings, and experience level as is planned for operational forces under normal operating conditions.
12. The Manpower and Training Plan has been approved and provided to the Director, MCOTEA.
13. Adequate logistics support, including spares, repair parts, and support and test equipment are available for OT&E. Discuss in the certification letter any logistics support which should be used during OT&E, but will not be used with the system when fielded (e.g., contractor provided depot level maintenance).
14. All resources required for OT&E (e.g., instrumentation, targets, expendables, operations security) have been planned, are listed in the TEMP, and are available.
15. Software maturity metrics analysis demonstrates the software is stable and expected to perform at a level commensurate with the operational test phase.
16. For software qualification testing (SQT), a Statement of Functionality, describing the software capability, has been provided to MCOTEA/Marine Corps Tactical System Support Activity (MCTSSA).
17. For programs employing software, there are no unresolved priority 1 or 2 software problem reports (SPR), and all priority 3 problems are documented with appropriate impact analyses.
18. All threat information required for OT&E (e.g., threat system characteristics and performance, electronic countermeasures, force levels, scenarios, and tactics) is available.

06 DEC 1996

19. Any changes to the concept of employment (COE) are identified and provided in the test support package (TSP).
20. The system technical documentation, such as FMECA, LORA, LCC, and LSA, has been provided to the Director, MCOTEA.
21. The system is safe to use in accordance with the COE. Any restrictions to safe employment are stated.

3.4.3.3 Navy Procedures for Certification

1. Prior to certifying readiness for OT&E, the SYSCOM/PEO/DRPM/PM shall convene an operational test readiness review (OTRR) or similar forum. This review shall include all members of the testing team (DT&E and OT&E) including representatives from CNO (N912), the program sponsor, and COMOPTEVFOR.
2. After completing DT&E and the COMOPTEVFOR distribution of the OT&E test plan (normally 30 days prior to OT&E), and when the DA determines that a system is ready for OT&E, the DA shall:

a. For programs without waivers (see paragraphs 3.4.3.6 and 3.4.3.7 below for waiver procedures), notify OPTEVFOR by message with "info copy" to CNO (N091), the program sponsor, fleet commands, INSURV (for ships/aircraft), and other interested commands, of the system's readiness for OT&E. The message will certify that the system is ready for OT _____ (phase) as required by the TEMP.

b. For programs requesting waivers (see paragraphs 3.4.3.6 and 3.4.3.7 below for waiver procedures), address the certification to CNO (N091) with "info copy" to OPTEVFOR, and others listed above. CNO(091) shall inform COMOPTEVFOR by message to proceed with the test subject to the waivers.

3.4.3.4 Marine Corps Procedures for Certification

1. Approximately 30 days prior to the start of an OT&E, an OTRR will be chaired and conducted by the Director, MCOTEA. OTRR participants shall include the OT&E Test Director and Assistant Test Director, representatives from the PM, MARCORSYSCOM (Program Analysis and Evaluation (PA&E) and Program Support Engineering - Test (PSE-T)) and MCCDC (C441). The purpose of the OTRR is to determine the readiness of a system, support packages, instrumentation, test planning, and test participants to support the OT. It shall identify any problems which may impact the start or proper execution of the OT, and make any required changes to test plans, resources, training, or

06 DEC 1996

equipment.

2. COMMARCORSYSCOM shall certify to CMC that the system is safe and ready for operational testing. This certification includes an information copy for the Director, MCOTEA and MCCDC (C441).
3. MCOTEA shall select OTRR agenda issues based on a review of DT&E results and related program documentation, including certification of equipment to be safe and ready for OT&E. MCOTEA shall also review all OT&E planning for discussion at the OTRR. OTRR agenda items may be nominated by any OTRR attendee.

3.4.3.5 Aircraft OPEVALs Certification Procedures

In addition to the above certification by the DA, INSURV shall submit an independent technical assessment of readiness for OPEVAL to CNO (N091) and COMOPTEVFOR (for aircraft acquisition programs). For unresolved Part I deficiencies, CNO (N88) or designee, shall chair a conference with members from COMNAVAIRSYSCOM/PEO/DRPM, INSURV, and CNO (N091) to review status prior to the OTRR. The chair will then make a written report to CNO (N88) with action recommendations and any dissenting opinions noted. CNO (N88) has authority to withhold introduction, or waive, temporarily or permanently, Part I deficiencies. This report will be made available to the OTRR board.

3.4.3.6 Navy Waivers

There are two kinds of waivers:

1. Waivers from compliance with the criteria for certification cited in paragraph 3.4.3.1 above.
2. Waivers for deviations from the testing requirements directed by the TEMP.

3.4.3.7 Navy Waiver Requests

Waivers shall be requested in the OT&E certification message (see this instruction, enclosure (7), appendix III (last page)). If a waiver request is anticipated, the PM shall coordinate with the program sponsor, CNO (N912), and OPTEVFOR prior to the OTRR or similar review forum. Use of the ACT or IPT, test planning working group (TPWG), or similar forum is also recommended to ensure full understanding of the impact on operational testing. Approval of a waiver request shall not alter the requirement, and the waived items shall be tested in subsequent operational testing.

1. When requesting a waiver, the PM shall outline the limitations that the waiver will place upon the system under test, the upcoming operational testing, and

their potential impacts on fleet use. Further, a statement shall be made in the OT&E certification message noting when the waived requirement will be available for subsequent operational testing.

2. CNO (N091) shall approve waivers, as appropriate. CNO (N091) shall coordinate waiver requests with COMOPTEVFOR, CNO (N4, N8), and the program sponsor.
3. A waiver may result in limitations to the scope of testing (LIMSCOPE) that precludes COMOPTEVFOR from fully resolving all critical operational issues (COIs).
4. Waived items shall not be used in COMOPTEVFOR's analysis to resolve COIs, but may be commented on in the "Operational Considerations" section of the test report.

3.4.3.8 Marine Corps Waivers

If full compliance with the certification criteria is not achieved, but the deviations are minor, MARCORSYSCOM shall request in the certification correspondence that MCCDC (C441) grant a waiver to allow OT to begin. Justification shall be provided for the waivers. DAs/PMs shall make every attempt to meet all of the readiness criteria before certification. If the need for a waiver is anticipated, the PM shall identify the waiver to MARCORSYSCOM (PSE) when establishing the schedule for the OTRR. Waivers shall be fully documented prior to the OTRR.

3.4.3.9 Navy Start of Testing

COMOPTEVFOR may start testing upon receipt of a certification message unless waivers are requested. When waivers are requested, COMOPTEVFOR may start testing upon receipt of waiver approval from CNO (N091).

3.4.3.10 Navy Program Decertification

A decertification message is originated by the DA, after coordination with the program sponsor, to withdraw the system certification and stop the operational test. It is sent when evaluation of issued deficiency/anomaly reports or other information indicates the system will not successfully complete OT&E. Withdrawal of certification shall be accomplished by DA message to CNO (N091) and COMOPTEVFOR stating, if known, when the system will be evaluated for recertification and subsequent restart of testing.

3.4.3.11 Navy Recertification

When a system undergoing OT&E has been placed in deficiency status, the DA must recertify readiness for OT&E prior

06 DEC 1996

to restart of testing in accordance with paragraph 3.4.3.

3.4.4 Modeling and Simulation

See reference (b), paragraph 3.4.4, for guidance.

3.4.5 Operational Test and Evaluation

See reference (b), paragraph 3.4.5, for guidance.

3.4.5.1 Visitors

Observers and other visitors shall not normally be permitted during operational testing. If, during operational testing, a situation arises that requires a unit commander to report to seniors in the unit commander's chain of command via an operational report (OPREP) or similar report, test results shall be divulged only to the degree necessary for the OPREP.

3.4.5.2 OT&E Activities

OT&E shall be conducted by COMOPTEVFOR or the Director, MCOTEAs, or their designated executive test agents. Reference (b) requires an independent organization, separate from the DA and from the user commands, to be responsible for all OT&E. COMOPTEVFOR is designated the Navy's independent operational test organization. MCOTEAs are designated the Marine Corp's independent operational test activity. COMOPTEVFOR is responsible for planning and conducting OT&E, reporting results, providing evaluations of each tested system's operational effectiveness and suitability, identifying system deficiencies, developing tactics, and making recommendations regarding fleet introduction. The Director, MCOTEAs are responsible for planning and conducting OT&E, reporting results, providing evaluations of each tested system's operational effectiveness and suitability, and identifying system deficiencies.

3.4.5.3 Test and Evaluation of System Security

System security testing shall be conducted to ensure that the planned and implemented security measures satisfy ORD requirements when the system is installed and operated in its intended environment. The PM, OPTEVFOR (or MCOTEAs), and the DAA (CNO/CMC, or designee) shall coordinate and determine the level of risk associated with operating the system and the extent of security testing required. In accordance with reference (k), the DAA shall provide an accreditation statement prior to Milestone III, Production or Fielding/Deployment Approval.

3.4.6 Operational Test and Evaluation Plans

See reference (b), paragraph 3.4.6, for implementation requirements for all DON programs.

3.4.6.1 Navy Briefing

1. For OSD oversight programs, COMOPTEVFOR shall provide test plan briefings to the Director, Operational Test and Evaluation (DOT&E). The PM shall be briefed prior to DOT&E. A copy of the OT&E test plan shall be provided by COMOPTEVFOR to CNO (N091).
2. For non-OSD oversight programs within the Navy, COMOPTEVFOR will brief the OT&E test plan concept to the PM prior to DT&E or technical evaluation (TECHEVAL) and brief the detailed operational test plan to the PM prior to OT&E or OPEVAL. This shall be scheduled to allow an adequate review prior to beginning OT&E. With the exception of combined DT/OT, DT data and results shall be provided to COMOPTEVFOR not less than 30 days prior to the beginning of OT. This will allow COMOPTEVFOR adequate time to determine the amount of DT data usable to supplement OT, thereby allowing for a possible reduction in the extent of OT.
3. For all programs within the Navy requiring OT, the DA shall ensure COMOPTEVFOR participation in the DT&E test plan development.

3.4.7 Use of System Contractors in Support of Operational Test And Evaluation

See reference (b), paragraph 3.4.7, for implementation requirements for all DON programs.

3.4.8 Production Qualification Test and Evaluation

See reference (b), paragraph 3.4.8, for implementation requirements for all DON programs.

3.4.9 Live Fire Test and Evaluation

The PM is responsible for conducting Live Fire Test and Evaluation (LFT&E), when required, and for providing the contents of the LFT&E section of Part IV of the TEMP. See reference (b), paragraph 3.4.9, for implementation requirements for all DON programs.

3.4.10 Foreign Comparative Testing

See reference (b), paragraph 3.4.10, for implementation requirements for all DON programs.

3.4.11 Test and Evaluation Master Plan (TEMP)

TEMPs shall be required for all DON ACAT programs. The TEMP may be a stand-alone document, or it may be included as the T&E management section of a single acquisition document, or for

06 DEC 1996

ship programs not requiring OT&E, it may be addressed as noted in paragraph 3.4.11.1 below. See reference (b), paragraph 3.4.11, for further implementation requirements for all DON programs.

3.4.11.1 Ship Programs

For ship programs not requiring OT&E, TEMP requirements shall be satisfied by performance standards within the shipyard test program, as well as builder's trials, acceptance trials, and final contract trials, specified in the contract and in specifications invoked on the shipbuilder. These foregoing trials shall normally be observed by representatives of the cognizant PEO/DRPM or NAVSEASYS COM shipbuilding program office, the Supervisor of Shipbuilding for the respective shipyard, and INSURV.

3.4.11.2 Measures of Effectiveness (MOEs) and Measures of Performance (MOPs)

For DON programs, MOEs and MOPs shall be consistent among the analysis of alternatives, ORD, APB, and the TEMP. The TEMP shall document in Part IV how MOEs and MOPs will be addressed in T&E.

3.4.11.3 Thresholds

Separate performance thresholds for DT and for OT, where appropriate, shall be established. The technical parameters, threshold values, and issues used for DT shall be established by the PM, whereas the operational parameters and issues which shall be used for OT are incorporated in the TEMP by COMOPTEVFOR/MCOTEA. The numerical values for DT and OT shall be derived from the performance parameters established in the ORD. See reference (b), paragraphs 3.2.1 and 3.4.11.3, for further implementation requirements for all DON programs.

3.5 Life-Cycle Resource Estimates

See reference (b), paragraph 3.5, for implementation requirements for all DON programs.

3.5.1 Life-Cycle Cost Estimates

Naval Center for Cost Analysis (NCCA) is the Navy organization responsible for preparing ACAT IC independent cost estimates (ICEs). Additionally, NCCA analysts shall participate in developing life-cycle cost estimates for ACAT ID, IC, and II programs, particularly in the early resolution of cost issues. MDAs may request that similar NCCA assistance be used in developing life-cycle cost estimates for ACAT III and IV programs. The ACT shall consider the use of appropriately tailored cost analysis requirements descriptions (CARDS) for ACAT II programs to clarify details not found in other documentation and to document assumptions. CARD templates are located in the

06 DEC 1996

Deskbook (DON Section).

When an independent cost estimate (ICE) for a DON ACAT IC program is not prepared by the OSD CAIG, NCCA shall be the DON organization responsible for preparing the ICE.

For DON programs (or cost elements within programs) with significant cost risk or high visibility, the MDA may request that NCCA prepare a cost analysis to supplement the program office life-cycle cost estimate.

NAVMAC analysts shall participate and assist the PM in the development of manpower life-cycle cost estimates for ACAT I programs, particularly in the early resolution of cost issues. NAVMAC assistance may be used in developing manpower life-cycle cost estimates for ACAT II, III, and IV programs, if requested by the MDA.

See reference (b), paragraph 3.5.1, for further implementation requirements for all DON programs.

3.5.2 Manpower Estimates (MEs)

DON MEs, required for ACAT I programs, shall be approved by CNO (N12)/CMC (DC/S Manpower and Reserve Affairs (M&RA)). See reference (b), paragraph 3.5.2, for further implementation requirements for all DON programs.

3.6 Program Plans

Program plans belong to the PM and are to be used by the PM to manage program execution throughout the life-cycle of the program. The PM, in coordination with the ACT, when established, shall determine the type and number of program plans. Except for the TEMP, program plans are not required to support a milestone decision and shall normally not be required by the MDA as mandatory milestone information or periodic reports. With the exception of the acquisition plan (AP), TEMP, Navy training plan (NTP) (see reference (1)), and technology assessment and control plan (TACP) (if a TACP is required by the MDA), any program plans required shall be approved by the PM. The AP shall meet FAR requirements. See DoD Deskbook (DON Section) for selected discretionary program plan formats.