Chapter 2

DEPOT LEVEL MAINTENANCE PLANNING

2.1 Background

a. NAVSEA Acquisition Managers (AMs), Program Managers (PMs) and Program Executive Officers (PEOs) are responsible for providing all required elements of Integrated Logistics Support (ILS) for the systems, equipment and components under their cognizance. This includes the planning and establishment of the capability and capacity for required Depot Level Maintenance.

b. In determining a repairable item's maintenance profile, all three levels of maintenance, i.e., organizational, intermediate, and depot, shall be considered. The maintenance level designated to make the actual repair/discard decisions for NAVSEA equipment will be at the lowest level where capability can be economically and practically established, subject to any overriding operational considerations.

2.2 Depot Maintenance Planning

a. Depot maintenance planning shall begin early in the acquisition and logistics planning process. However, the culmination of the maintenance planning - certification of the Designated Overhaul Point (DOP) - is frequently one of the last logistic elements to be completed. This occurs because, unless a repair capability already exists and is recognized via the Depot Maintenance Interservice (DMI) process, the establishment of a specific depot's capability and capacity must be compatible with repair, calibration, test, and production requirements. Moreover, the lead times for the acquisition of new depot support resources can be extensive and there is only limited need for depot maintenance capability/capacity until the weapon system or equipment is deployed. Because of the time required to establish organic depot support, when that decision is made, it is often necessary to first establish interim depot support.

b. The depot maintenance planning process must be tightly controlled, and the elements of DOP assignment and approval must be fully integrated into that process. An overview of NAVSEA procedures used for the selection and assignment of DOPs are contained in Chapter 3 of this Guide. The following subparagraphs expand on key depot maintenance planning actions that should occur sequentially with each acquisition program milestone. Attachment (1) to this Chapter provides a recap of depot maintenance planning during the acquisition process. NAVSEA maintenance planning milestones are keyed to AM/PM/PEO acquisition milestones as follows:

(1) Milestone A – Approval to Initiate Concept Studies. Because of the limited knowledge of support resource requirements at this phase, only conceptual baseline maintenance planning is undertaken which will help determine whether or not

depot maintenance support must be obtained. However, the AM/PM/PEO should notify SEA 04L43 that there is a potential for an introductory package and/or the expansion of existing depot maintenance capability and capacity.

(2) Milestone B – Approval to Enter Into System Development and Demonstration:

(a) The support concept review conducted by the AM/PM/PEO during this phase will result in the definition of a detailed maintenance plan derived from a baseline maintenance concept. This detailed maintenance plan specifically identifies each planned depot level repairable by contractor part number, or if the item currently exists in the DoD inventory, by NSN.

(b) If depot maintenance support is required, a Decision Tree Analysis (DTA) will be prepared to justify a commercial or organic DOP. Potential Navy organic DOPs should be identified. The AM/PM/PEO will coordinate this initial identification of potential DOPs with SEA 04L4.

(c) After initial estimates of depot capability/capacity resources including manpower, facilities, test equipment and documentation, and depot maintenance support resources are determined, any resources in short supply, e.g., unique skills or specialties, will be identified. This action will be coordinated with SEA 04L4. JLC Forms 27 “DMI Candidate Information” and 44 “Depot Maintenance Planning Information” should be prepared for submission to the Navy MISMO (NAVAIR 6.1.3). If information is available, JLC Form 28 “ Dept Repairable Item List” may also be submitted at this time. For new acquisitions the forms shall be submitted as soon as possible but no later than 90 days after award of the Engineering and Manufacturing Development (EMD)/System Development and Demonstration (SDD) contract.

(d) Based on an assessment of planned testing and validation dates, deployment schedules, and existing intra and interservice industrial capabilities and capacities, a determination will be made as to whether interim depot support is required. If so, a tentative plan for its establishment as well as for the transition from the interim to the permanent DOP must be prepared by Milestone C.

(e) JLC Form 28 “Depot Repairable Item List”, (if not previously submitted) and such other JLC forms as may be required by the MISMO and the JDMAG, depending on the depth and scope of the DMI review, will be submitted.

(e) In coordination with appropriate command resource sponsors, the AM/PM/PEO begins to formulate a budget plan for acquiring total depot capability and capacity. The required resources include manpower (requisite skills and adequate numbers), support plant and test equipment, tools, documentation (technical repair standards, technical manuals, test program sets etc.), and initial piece parts, as appropriate. Additionally, budgetary requirements for Depot Maintenance Support Resources will be identified to NAVSUP and/or other appropriate program sponsors

through Program Support Data. Necessary budgetary action will be initiated in accordance with Program Objective Memorandum (POM) lead times.

(4) Milestone C – Approval to Enter Into Production or Procurement:

(a) If the production equipment changes from that designed as the Full Scale Engineering Development Model, make any necessary adjustments to the maintenance plan and estimates of depot resources.

(b) If required, the tentative plans for interim depot support that were developed during Milestone B are refined, and, if necessary, interim depot support is initiated to support Technical Evaluation (TECHEVAL), Operational Evaluation (OPEVAL), or early deployment initiatives directed by higher authority.

(c) The AM/PM/PEO will establish the permanent DOP(s), based on the results of the DMI review, and refine and execute the budget plan as necessary.

(d) The AM/PM/PEO will transition depot support from the interim to the permanent DOP in accordance with previous planning.

(e) The permanent DOP will be certified as capability and capacity are established and the transition occurs.

2.3 Depot Maintenance Interservice

a. The DMI Process, the background of which was generally discussed in Chapter 1, is detailed in Chapter 4. In summary, its purpose is to eliminate redundant repair sources so as to achieve optimal use of the depot maintenance facilities of all Services. There is a formal interservicing network consisting of the Joint Group on Depot Maintenance (JG-DM) assisted by the Joint Depot Maintenance Activities Group (JDMAG), Maintenance Interservice Support Management Offices (MISMOs), Maintenance Interservice Support Offices (MISOs), and Maintenance Interservice Coordinating Offices (MICOs). The JG-DM is chartered by the Joint Logistics Commanders (JLC) to assure adequate planning, coordination and implementation of depot maintenance interservice programs. The JDMAG is a joint Service organization that reviews, deliberates, and approves the source of repair for Depot Level Repairables (DLRs). Each Service has a MISMO, and the Navy's is located in the Naval Air Systems Command. Each Navy Systems Command Headquarters and Inventory Control Point has a MISO. The NAVSEA MISO is in SEA 04L4. A MICO is located at each NAVSEA reporting industrial activity.

b. NAVSEA policy is for all subordinate activities to provide depot maintenance support either organically or by contract with other military Services, governmental agencies, or Systems Commands when capability and capacity exist or can be made available.

2.4 Certification and Audit of DOP Repair and Test Capability

a. Once a DOP has been selected, whether organic intraservice, interservice, or commercial, it must be certified prior to induction of the newly assigned DLR workload. Certification procedures are designed to ensure the adequacy of depot maintenance support resources, as well as DOP capability and capacity.

b. To be certified, a DOP must meet the standards in the following areas:

(1) Documentation, including drawings and specifications, technical manuals and/or technical repair standards.

(2) Support, Plant, Calibration and Test Equipment.

(3) Manpower and Personnel Training.

(4) Availability of piece parts.

(5) Material storage and control.

(6) Facilities.

(7) Quality Control.

(8) Production Control.

(9) Safety procedures.

(10) Production capability and capacity to meet required delivery or performance schedules.

c. Commercial DOP certification requires, in addition to the requirements listed above, the following contractual considerations:

(1) The contractor must agree to provide data on failure rates, piece parts usage, repair turnaround time, repair costs, survival rates, units held awaiting parts, average awaiting parts time, and other management information pertinent to depot repair. This requirement for data should be incorporated into the repair contract.

(2) The contractor must agree to provide piece parts and any necessary test equipment, etc. in support of expected repair requirements. Arrangements for unscheduled repair requirements will be negotiated on a case-by-case basis.

(3) The contractor must agree to transaction item report (TIR) transactions identifying receipt of unserviceable repairables, changes in the material condition (status), and shipment of the repaired items.

d. NAVSEA depot certification policy and procedures are promulgated in the Depot Certification Handbook (Appendix B to this Desk Guide). Required procedures include:

(1) Certification of Depot Repair and Test Capability must be completed prior to the assignment and work loading of any DOP. It will normally be accomplished during the Production and Deployment Phase of the acquisition process, and will be coordinated by SEA 04L1.

(2) A certification team will be formed by the AM/PM/PEO. It will include a Quality Assurance and an Industrial Process representative as well as an AM/PM/PEO representative. Additional expertise will be assigned as necessary. The appropriate NAVICP-Mechanicsburg Repairables Management Field Representative (RMFR) will be afforded the opportunity to observe the certification of DOPs for items to be managed by NAVICP.

(3) The certification will be conducted and documented in accordance with a Certification Plan developed by the AM/PM/PEO. The plan will: designate the Certification Team Members; identify the minimum certification requirements for the system, equipment, or component DLR being considered; include liaison with the local Defense Contract Management Center (DCMC) office in the case of a commercial DOP; stipulate certification reporting procedures; and provide a certification checklist.

e. SEA 04L4 will direct periodic audits of NAVSEA DOPs to ensure compliance with established technical repair standards, industrial standards, and compliance with agreed upon work loading. Cognizant AM/PM/PEO personnel will assist SEA 04L1 in conducting the audits, and the NAVICP RMFR will be invited to attend, as appropriate.

f. As an alternative to the NAVSEA depot certification process outlined above, DOPs belonging to the Industrial Organization for Standardization (ISO) that have been certified to ISO 9000 standards in the areas of design, development, production, installation and/or servicing may submit their certifications for review in lieu of an in-house NAVSEA team certification. ISO certifications covering the areas outlined in subparagraph 2.4 b above, if current and rendered by competent auditors (registrars) licensed through the ISO 9000 Registration Accreditation Board, can, at the discretion of the AM/PM/PEO, be accepted by as equivalent to NAVSEA team certification.

DEPOT MAINTENANCE PLANNING DURING ACQUISITION

	A	B	C
ACQUISITION MILESTONE	**APPROVAL TO INITIATE CONCEPT STUDIES** AoA TEMP	**APPROVAL TO ENTER INTO SYSTEM DEVELOPMENT AND DEMONSTRATION** AoA APB ICEME LCCE ORD STAR TEMP	**APPROVAL TO ENTER INTO PRODUCTION OR PROCUREMENT** APB ICEME ORD STAR
ACQUISITION PHASE	**CONCEPT AND TECHNOLOGY DEVELOPMENT PHASE**	**SYSTEM DEVELOPMENT AND DEMONSTRATION PHASE**	**PRODUCTION AND DEPLOYMENT PHASE**
MAINTENANCE PLANNING	• DEFINE BASELINE MAINTENANCE CONCEPT • ADVISE PROGRAM MANAGER FOR DEPOT MAINTENANCE (PMDM), SEA 04L12 POTENTIAL FOR NEW START • IDENTIFY POC IN PROGRAM OFFICE	• PREPARE DETAILED MAINTENANCE PLAN • VALIDATE DEPOT LEVEL MAINTENANCE REQUIREMENTS • PREPARE DECISION TREE ANALYSIS (DTA) • SUBMIT JLC FORMS 27 AND 44 • INERIM DEPOT SUPPORT (IDS) REQD? IF SO PREPARE TENTATIVE TO PERMANENT DOP PLAN • SUBMIT JLC FORMS 28 – 51 (AS REQUIRED) • SOURCE OF DL REPAIR DECISION RECEIVED	• EFFECT ADJUSTMENTS TO MAINTENANCE PLAN AS NECESSARY • INITIATE IDS TO SUPPORT TECHEVAL, OPEVAL AND FOLLOW-ON SUPPORT AS NECESSARY • TRANSITION FROM INTERIM TO PERMANENT DOP • CERTIFY PERMANENT DOP
FUNDING	**MISSION NEED STATEMENT (MNS) OR PROGRAM DECISION MEMORANDUM (PDM)**	**PROGRAM OBJECTIVES MEMORANDUM (POM) UPDATE**	**POM UPDATE**

APB: Acquisition Pgm Baseline; AoA: Analysis of Alternatives; ICEME: Independent Cost Est. & Manpower Est.; LCCE: Life Cycle Cost Est.; ORD: Operational Reqmnts Doc; STAR: System Threat Assessment Report; TEMP: Test & Eval. Master Plan