



Department of Defense INSTRUCTION

NUMBER 4151.20
January 5, 2007

USD(AT&L)

SUBJECT: Depot Maintenance Core Capabilities Determination Process

- References:
- (a) DoD Directive 4151.18, "Maintenance of Military Material," March 31, 2004
 - (b) Section 2464 of title 10, United States Code
 - (c) Joint Publication 1-02, "Department of Defense Dictionary of Military and Associated Terms," as amended
 - (d) DoD 4151.18-H, "Depot Maintenance Capacity and Utilization Measurement Handbook," January 1997
 - (e) DoD 8910.1-M, "Department of Defense Procedures for Management of Information Requirements," June 1998

1. PURPOSE

This Instruction implements policy, assigns responsibilities, and prescribes procedures under References (a) and (b) to identify required core capabilities for depot maintenance and the associated workloads needed to sustain those capabilities.

2. APPLICABILITY

This Instruction applies to the Office of the Secretary of Defense (OSD), the Military Departments, and those Defense Agencies that perform depot maintenance. The Military Departments and covered Defense Agencies are hereafter referred to collectively as the "DoD Components."

3. DEFINITIONS

Terms used in this Instruction are defined in Enclosure 1 and Reference (c).

4. POLICY

Pursuant to Reference (a), it is DoD policy that:

4.1. The core capability requirements determination process underpins the establishment and retention of a broad set of public sector depot maintenance capabilities deemed necessary for the Department.

4.2. The DoD Components shall apply the core capability requirements determination process to identify required core capabilities and the workloads necessary to sustain effectively the core capabilities.

4.3. Required core capabilities, and the depot maintenance workloads needed to sustain those capabilities, shall be calculated by individual DoD Components and then aggregated to determine overall DoD core requirements.

4.3.1. In sizing DoD depot maintenance activities to satisfy core requirements, the use of a single-shift, 40-hour workweek standard preserves the capability to respond effectively to surge requirements through expanded work hours or additional shifts during emergency operations.

4.3.2. In addition, the workforce required to sustain core capabilities should be structured to ensure that depot maintenance activities can accommodate required workloads within the time constraints imposed by contingency scenarios developed by the Joint Chiefs of Staff (JCS).

4.3.3. Core capabilities and the workloads required to support these capabilities must be periodically adjusted as a result of factors such as: force structure changes, introduction of new weapons systems, aging or modification of existing weapons systems, technology changes, or changes in battle doctrine to counter emerging threats. For these reasons, core requirements shall be reviewed biennially, or whenever necessary/appropriate.

4.4. The DoD Components shall maintain cost-effective and technically competent core public sector depot maintenance facility workloads and capabilities during peacetime identified in paragraph 4.3., as well as fully support contingency scenarios identified in paragraph 4.3.2.

5. RESPONSIBILITIES

5.1. The Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)) shall serve as the approving authority for the core capability requirements and associated workloads for the Department of Defense.

5.2. The Deputy Under Secretary of Defense for Logistics and Materiel Readiness, under the USD(AT&L), shall:

5.2.1. Maintain this Instruction and its computation methodology.

5.2.2. Issue tasking memorandums to trigger the computation process on a biennial basis.

5.2.3. Collect, review, and evaluate DoD Component submissions as applicable, and compute the composite core capability requirements and associated workloads for the Department of Defense.

5.3. The Heads of the DoD Components shall implement policies and procedures consistent with this Instruction within their respective organizations.

6. PROCEDURES

6.1. The DoD Components that perform depot maintenance shall compute core capability requirements and associated workload on a biennial basis.

6.1.1. The computations shall use the President's budget submission for odd-numbered years as a baseline.

6.1.2. The computational methodology outlined in Enclosure 2 shall be applied to this requirement.

6.1.3. Each DoD Component shall use only the applicable portion(s) of the work breakdown structure contained in the worksheets.

6.1.4. Electronic copies of the worksheets contained in Enclosure 2 may be obtained from the Office of the Assistant Deputy Under Secretary of Defense for Materiel Readiness and Maintenance Policy.

6.2. Each DoD Component that performs depot maintenance shall submit a report biennially containing the completed worksheets to the Office of the Secretary of Defense in accordance with the tasking memorandum issued for each computation cycle.

6.2.1. The worksheets shall be submitted in both paper and electronic spreadsheet format.

6.2.2. The transmittal shall be accompanied by a memorandum signed by the senior official of the DoD Component responsible for the core computation.

6.2.3. The submissions shall include a narrative introduction that addresses the DoD Component's planned application of workload to sustain computed core capability requirements, identification of workload shortfalls (if any), and a plan to address the shortfalls.

6.2.4. Plans to rectify capability shortfalls (if any), including a description of planned capital investment, timing, and planned workarounds until the new capability is available, shall be included in the biennial reporting required by DoD 4151.18-H (Reference (d)).

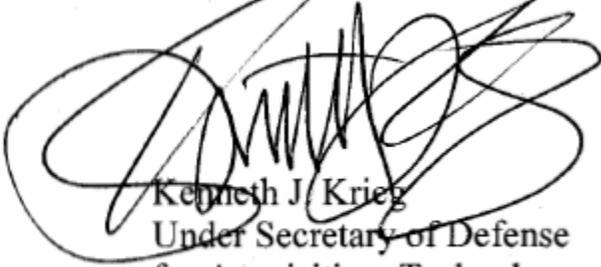
7. INFORMATION REQUIREMENTS

7.1. Reporting formats are included with Enclosure 2. Navy and Marine Corps data shall be reported from the principal perspective by separate worksheets.

7.2. This biennial DoD internal reporting requirement has been assigned Report Control Symbol DD-AT&L (BI) 2243 in accordance with DoD 8910.1-M (Reference (e)).

8. EFFECTIVE DATE

This Instruction is effective immediately.



Kenneth J. Krieg
Under Secretary of Defense
for Acquisition, Technology, and Logistics

Enclosures - 2

- E1. Definitions
- E2. Methodology

E1. ENCLOSURE 1

DEFINITIONS

E1.1. Capability. For the purposes of this Instruction, the combination of skilled personnel, facilities and equipment, processes, and technology needed to perform a particular category of work (e.g., composite repair), and that are necessary to maintain and repair the weapon systems and other military equipment needed to fulfill strategic and contingency plans.

E1.2. Capacity. The amount of work that can be performed within a certain period of time, generally expressed in direct labor hours (DLHs) per year. The Department of Defense has an approved methodology for measuring public sector depot maintenance capacity (Reference (d)).

E1.3. Commercial Items. For the purposes of this Instruction, those items that have been sold or leased in substantial quantities to the general public and are purchased without modification in the same form they are sold in the commercial marketplace, or with minor modifications to meet Federal Government requirements, when the modifications do not result in the need for peculiar support equipment for maintenance and repair or follow-on testing of the item modified.

E1.4. Components. For the purposes of this Instruction, assemblies or subassemblies of military materiel for which depot maintenance is provided (e.g., avionics/electronics, black boxes, hydraulic pumps, landing gear, and starters). Some items such as turbine engines may be categorized as both end items and components.

E1.5. Contingency. See Reference (c).

E1.6. Core. The depot maintenance capability (including personnel, equipment, and facilities) maintained by the Department of Defense at Government-owned, Government-operated facilities as the 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. Depot maintenance for the designated weapon systems and other military equipment is the primary workload assigned to DoD depots to support core depot maintenance capabilities.

E1.7. Depot Maintenance. For the purposes of this Instruction, the processes of materiel maintenance or repair involving the overhaul, upgrading, rebuilding, testing, inspection, and reclamation (as necessary) of weapons systems, equipment end items, parts, components, assemblies, and subassemblies. Depot maintenance also includes all aspects of software maintenance; the installation of parts or components for modifications; and technical assistance to intermediate maintenance organizations, operational units, and other activities.

E1.8. Direct Labor Hour (DLH). A common metric for measuring depot maintenance capability, workload, or capacity, representing 1 hour of direct work (e.g., touch labor or other directly attributed effort).

E1.9. Efficiency/Economy Adjustment. An adjustment of the core workload direct labor hours to maximize the productive output achieved with available core resources. This workload adjustment ensures that core capabilities are fully and efficiently utilized, rather than being left idle for long periods of time awaiting work.

E1.10. End Item. For the purposes of this Instruction, nominally a weapon system such as an aircraft, ship, tank, etc., but sometimes interpreted as an item that includes many subassemblies (e.g., landing gear). A turbine engine could be either an end item or a component of an end item (e.g., an aircraft).

E1.11. Equipment. See Reference (c).

E1.12. Exclusions. Specific systems or types of Defense materiel which have been legislatively excluded from core capability requirements computations. Examples include, but are not limited to, materiel supported under special access programs and commercial items.

E1.13. Initial Operational Capability (IOC). See Reference (c).

E1.14. Joint readiness. See Reference (c).

E1.15. Materiel. See Reference (c).

E1.16. Platform. A weapon system or system of systems or support system designated by a DoD Component as the basis for analysis of core capability requirements.

E1.17. Principal items. See Reference (c).

E1.18. Private Sector. Infrastructure operated by commercial firms.

E1.19. Public Sector. Infrastructure owned and operated by the Federal government.

E1.20. Readiness. For the purposes of this Instruction, the ability of U.S. military forces to fight and meet the demands of the national military strategy. Readiness is the synthesis of two distinct, but interrelated, levels: joint readiness and unit readiness defined as the ability to provide capabilities required by the combatant commanders to execute their assigned missions; derived from the ability of each unit to deliver the outputs for which it was designed.

E1.21. Reconstitution. The process, after a contingency/surge operation, of making a unit or activity available again for steady-state operational commitments. Reconstitution planning begins during the initial stages of surge operations, and actual reconstitution of the forces continues beyond the end of the contingency operation. Factors to consider in reconstitution planning include maintenance of equipment, restoring levels of consumables, lost training, examination of the impact of operations on personnel and attrition rates, and post-contingency steady-state operational requirements.

E1.22. Software. A set of computer programs, procedures, and associated documentation concerned with the operation of a data-processing system (e.g., compilers, library routines, manuals, and circuit diagrams).

E1.23. Special Access Programs (SAPs). For the purposes of this Instruction, a program established for a specific class of classified information that imposes safeguarding and access requirements that exceed those normally required for information at the same classification level (E.O. 12958).

E1.24. Surge. The act of expanding an existing depot maintenance repair capability to meet increased requirements by adjusting shifts or by adding skilled personnel, equipment, spares, and repair parts. The expanded capability will increase the flow of repaired or manufactured materiel to the using activity or to serviceable inventory storage.

E1.25. Sustainability. See Reference (c).

E1.26. Weapon System. See Reference (c).

E1.27. Workload. An amount of depot maintenance work, usually specified in DLHs or workdays. It relates to specific weapons systems, equipment, components, or programs and to specific services, facilities, and commodities.

E2. ENCLOSURE 2

DEPOT MAINTENANCE CORE CAPABILITY REQUIREMENTS DETERMINATION METHODOLOGY

E2.1. DESCRIPTION

DoD depot maintenance core policy provides a sound basis for identification of the depot maintenance capabilities required to ensure a ready and controlled source of technical competence to support the force structure identified in the planning guidance promulgated by the OSD and contingency scenarios developed by the JCS. To efficiently maintain depot maintenance core capabilities, DoD facilities, equipment, and personnel accomplish a broad range of workloads in support of peacetime operations. Most of these workloads involve the overhaul or repair of combat weapons systems and components.

E2.2. METHODOLOGY

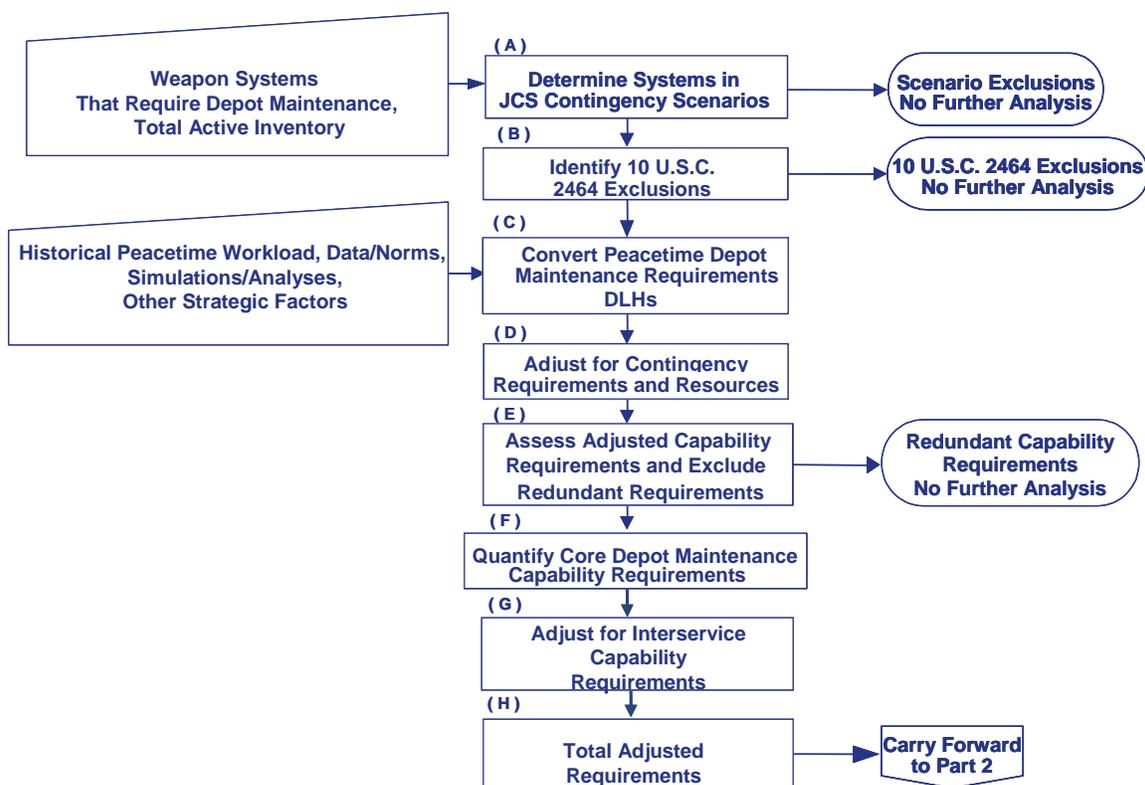
The depot maintenance core capability requirements determination methodology is used to determine essential DoD depot maintenance core capabilities for each DoD Component, and the workloads needed to sustain those capabilities. The methodology can be employed to assess requirements for individual items or processes, weapons systems, or types of capabilities as applicable. The computations involved in this methodology are performed from the perspective of the DoD Component that owns the depot maintenance assets and are divided into two parts. Part 1 identifies depot maintenance core capability requirements in terms of DLHs, and allows for an adjustment for inter-Service considerations. Part 2 identifies the depot maintenance workloads required to cost-effectively support core capability requirements (expressed in terms of DLHs). Additionally, flow diagrams and worksheets have been developed that correspond to the parts of the methodology.

E2.2.1. Part 1: Depot Maintenance Core Capability Requirements Determination

E2.2.1.1. Part 1 includes all weapons systems and equipment operated by each DoD Component regardless of where depot maintenance is actually performed. As illustrated in Figure E2.-F1., the starting point is the OSD-promulgated planning guidance, to define the overall DoD force structure required to execute the JCS-developed contingency scenarios. Next, applicable weapons systems are identified, and any systems that are being excluded are documented citing the authority for that exclusion from the core process. For the remaining systems, annual peacetime depot maintenance capability requirements are computed in DLHs. Next, as illustrated in Figure E2.F2., contingency requirement and resource adjustments are made to account for applicable “surge” factors during the different phases of a contingency (e.g., preparation/readiness, sustainment, and reconstitution). The objective is to determine the most appropriate composite “surge” adjustment for a particular set of circumstances. Overall depot maintenance capability requirements are then assessed to determine whether they include redundancy. For example, a DoD Component may determine that repair capabilities for specific

systems are so similar that the capabilities for one system can effectively satisfy the capability requirements for another. After redundancies have been eliminated, all the remaining requirements are identified as core depot maintenance capability requirements, expressed in DLHs. Applicable information regarding the results of each step should be recorded on the DoD Depot Maintenance Core Worksheet (Part 1), Table E2.T1. The block designations in the methodology relate to the column designations in the worksheet.

Figure E2.-F1. Part 1—Capability Requirements Determination



E2.2.1.2. DoD Components may modify the worksheets to support internal computations (for example, by adding additional columns) as long as the version submitted to OSD contains the original columns.

E2.2.1.3. Block A – Determine Systems in JCS Contingency Scenarios

E2.2.1.3.1. Consider all scenario-tasking platforms/weapon systems that require depot maintenance, regardless of whether maintenance is currently performed at a public sector or private sector depot maintenance facility. Platforms/weapons systems may include multiple end items, principal items, components, subsystems, parts, and materiel, and many of these items may also be separately identified as depot-level reparable (DLRs). Record in Column A1 of the worksheet (Part 1), Table E2.T1.

E2.2.1.3.2. Quantify the total active inventory (number of units) for each platform/weapons system within the context of the DoD depot maintenance work breakdown structure (WBS) at the type/model level (e.g., F-15 series aircraft, LHA-class ships, M109 family of vehicles) and record within the appropriate WBS category in Column A2 on the worksheet (Part 1), Table E2.T1.

E2.2.1.3.3. Throughout Part 1, as a minimum, WBS categories are to be completed to the third level of indenture for aircraft and aircraft components, the second level of indenture for aircraft engines, and the first level of indenture for all other categories.

E2.2.1.3.4. Determine how many of these platforms/weapons systems are included in the force structure for employment in support of JCS contingency scenarios.

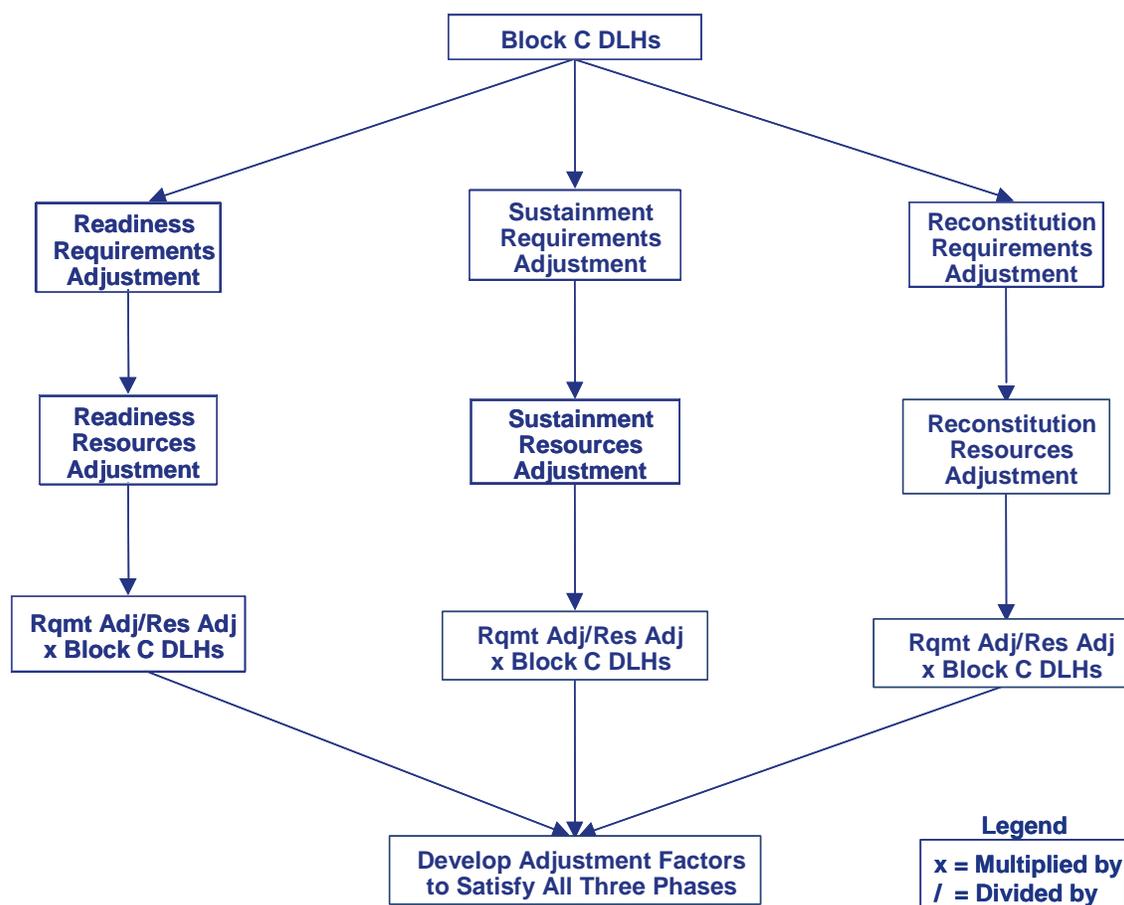
E2.2.1.3.5. Exclude quantities not required for the scenarios. Record the scenario requirements data in Column A3 of the worksheet (Part 1), Table E2.T1.

E2.2.1.4. Block B – Identify Net After Exclusions. Identify any platforms/weapons systems and related DLRs that are excluded from the requirement to maintain core logistics capabilities, exclude from further analysis and document the authority for that exclusion from the core process. Record the net result in Column B of the worksheet (Part 1), Table E2.T1.

E2.2.1.5. Block C – Convert Scenario Requirements to Peacetime DLHs. Use appropriate factors (e.g., historical workload averages, work standards, occurrence factors, historical peacetime capabilities, technology-based requirements) to convert platform/weapons system requirements passed from Block B into annual depot maintenance DLHs. Add DLH data to applicable WBS categories to account for DLRs that are installed in platforms/weapons systems or otherwise employed in JCS scenarios, but not already included in Block A platform/weapons system depot maintenance data. Record results in Columns C1 and C2 of the worksheet (Part 1), Table E2.T1., as applicable.

E2.2.1.6. Block D – Adjust for Contingency Requirements and Resources. The adjustment occurs in two steps.

E2.2.1.6.1. Step D1: Adjust for Contingency Requirements. Adjust annual peacetime depot maintenance DLH data by applying a surge factor for requirements during the readiness, sustainment, and reconstitution phases of contingency operations. Base surge factors on contingency simulations, logistics support analyses, and/or historical data for both peacetime and wartime operations. Select the most appropriate requirement for readiness, sustainment, or reconstitution capabilities and record results in DLHs in Column D1 of the worksheet (Part 1), Table E2.T1. See Figure E2.F2 for a notional requirements and resource adjustment process.

Figure E2.F2. Contingency Requirements and Resource Adjustments

E2.2.1.6.2. Step D2: Adjust for Resources. Apply an appropriate resource adjustment factor (e.g., 1.6) to the DLHs from Column D1 of the worksheet. This factor accounts for the ability of on-hand peacetime depot maintenance resources to increase production by operating additional hours without being augmented by additional facilities, equipment, or personnel. Record the results in DLHs in Column D2 of the worksheet (Part 1), Table E2.T1.

E2.2.1.7. Block E – Adjust for Redundant Requirements. The DoD Components may adjust the size of core capability requirements to an amount deemed sufficient to assure adequate depot maintenance support for their strategic or contingency operations. Such adjustments shall, however, consider the needs to prevent adverse impacts in the event of a failure to perform by any element in the sustainment process and to assure the DoD depots' adequate responsiveness to operational requirements. The DLHs determined as a result of the calculations outlined in blocks A through D may be adjusted further to address redundant capability requirements (i.e., multiple platforms that are so similar they share a common or complementary base of repair processes, technologies, and capabilities; or when a large quantity of single platform requirements necessitate duplicate DoD capabilities). Each DoD Component makes its own redundant core capability requirements adjustments.

E2.2.1.8. Block F – Quantify Depot Maintenance Core Capability Requirements. Quantify the depot maintenance core capabilities that must be provided by Government personnel, equipment, and facilities in compliance with Reference (b). Apply adjustments required by Block E to the results of Block D and record the result in Column F of the worksheet (Part 1), Table E2.T1.

E2.2.1.9. Block G - Adjust for Interservice Capability Requirements. Determine whether any of the DLH requirements passed from Block F will be satisfied by other DoD depot maintenance capabilities. Include core capability requirements necessary to support other DoD Components, and exclude capability requirements that will be supported by other DoD Components. Record inter-Service requirements “in” and inter-Service requirements “out” in Columns G1 and G2, respectively, of the worksheet (Part 1), Table E2.T1.

E2.2.1.10. Block H – Total Adjusted Requirements. Record the net adjusted requirements in Column H of the worksheet (Part 1), Table E2.T1. Carry this information forward to the workload identification process described in Block K (see subparagraph E2.2.2.5.).

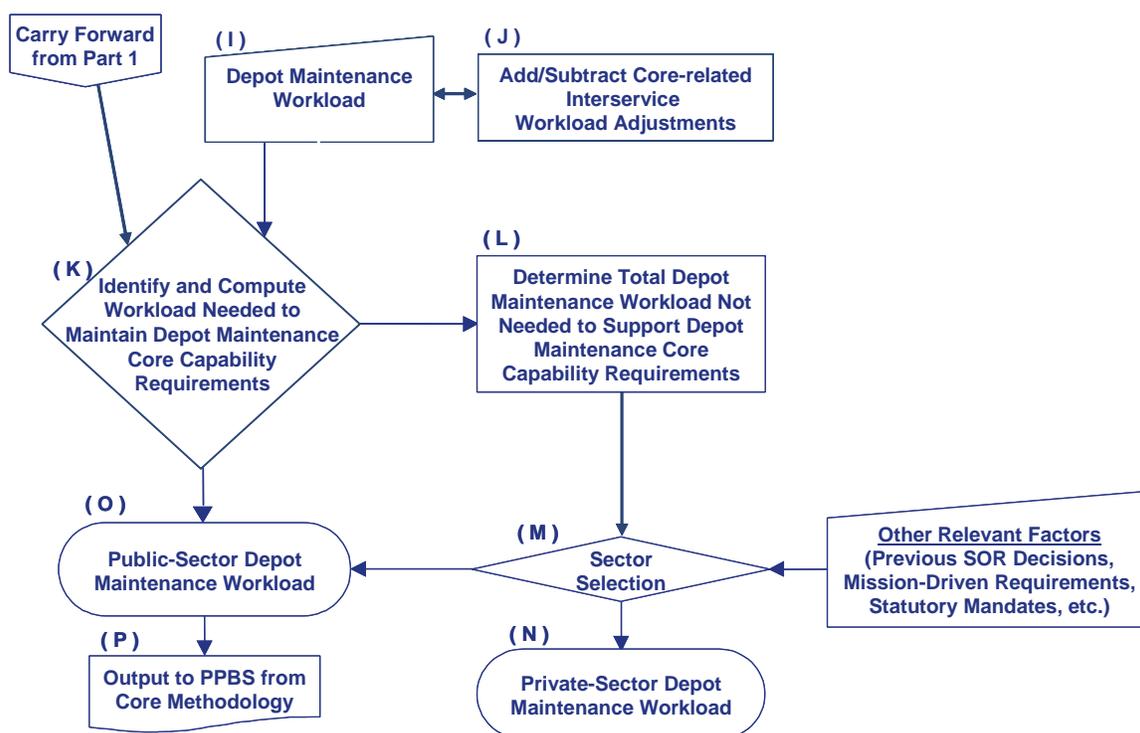
E2.2.2. Part 2: Depot Maintenance Workload Allocation

E2.2.2.1. Part 2 identifies the workloads necessary to sustain the depot maintenance core capability requirements identified in Part 1. In this part, the depot maintenance workloads that are needed to maintain core capabilities are subtracted from total public sector depot maintenance funded workload, leaving those workloads that are not necessary to sustain core capability requirements available for Service source of repair decisions. This part establishes a minimum level of public sector depot maintenance workloads within each DoD Component. The data may also be used to assist in the identification of depot maintenance capital investments that must be made to comply with Reference (b) requirements for establishment of core depot maintenance capabilities within 4 years of initial operational capability (IOC). Figure E2.F3. is a flow diagram for Part 2. Applicable information regarding the results of each step in this process should be recorded on the DoD Depot Maintenance Core Capability Worksheet (Part 2), Table E2.T2.

E2.2.2.2. Throughout Part 2, as a minimum, WBS categories in the worksheet are to be completed to the third level of indenture for aircraft and aircraft components, the second level of indenture for aircraft engines, and the first level of indenture for all other categories.

E2.2.2.3. Block I – Quantify Total Depot Maintenance Workload. Quantify all public sector depot maintenance workloads for your own DoD Component in terms of DLHs. Record this workload data in Column I of the worksheet (Part 2), Table E2.T2.

Figure E2.F3. Part 2--Workload Allocation



E2.2.2.4. Block J – Add/Subtract Interservice Workload Adjustments

E2.2.2.4.1. Adjust Block I workload data to account for any workloads that one DoD Component is providing to another DoD Component. These adjustments may either increase or decrease the total DLH quantities passed from Block I, depending on whether the affected DoD Component is the “principal” or “agent” for a particular depot maintenance workload.

E2.2.2.4.2. Record inter-Service workload “in” in Column J1 and inter-Service workload “out” in Column J2 of the worksheet (Part 2), Table E2.T2.

E2.2.2.5. Block K – Identify and Compute Workload Needed to Maintain Depot Maintenance Core Capability Requirements. Considering the information from Blocks G and H, identify workloads to be used to sustain core capability requirements. Express these workloads in terms of DLHs. Substitutions of similar workloads may be made as necessary to fulfill core capability requirements for systems with limited inventories or fluctuating workload requirements. Record core-sustaining workload data in terms of DLHs in Column K on the worksheet. If there is a shortfall in the workloads available to sustain required core capabilities, then this shortfall must be considered in Block P, or workloads currently being performed under contract should be considered for performance at a public sector facility to satisfy that requirement.

E2.2.2.6. Block L – Determine Depot Maintenance Workload Not Needed to Support Depot Maintenance Core Capability Requirements. Identify the depot maintenance workloads (DLHs) that do not directly support core capability requirements. Record non-core sustaining workload data in Column L on the worksheet (Part 2), Table E2.T2.

E2.2.2.7. Block M – Sector Selection. The DoD Components shall identify the most appropriate sources of repair (public or private sector) for all depot maintenance workloads passed from Block L, as follows:

E2.2.2.7.1. Identify all other relevant data necessary to make value-driven depot maintenance source of repair (SOR) evaluations (e.g., previous SOR decisions, mission-driven requirements, legislative mandates).

E2.2.2.7.2. Identify and allocate directed workload requirements.

E2.2.2.7.3. Identify any depot maintenance workloads for which there are no known commercial sources and allocate those workloads to public sector facilities.

E2.2.2.7.4. Identify any workloads needed to ensure efficient operation of core depot maintenance capabilities in accordance with the provisions of Reference (b) and allocate those workloads to public sector facilities.

E2.2.2.7.5. Identify any workloads needed to ensure that not more than 50 percent of non-exempt depot maintenance funding is expended for performance by non-Federal Government personnel in accordance with the provisions of Reference (b) and allocate those workloads to public sector facilities.

E2.2.2.7.6. Allocate all remaining workloads as appropriate based on best value criteria.

E2.2.2.8. Block N – Private Sector Depot Maintenance Workload. Quantify in terms of total funding required (\$) all depot maintenance workloads performed by private sector depot maintenance facilities. Record this data in Column N on the worksheet (Part 2), Table E2.T2.

E2.2.2.9. Block O – Public Sector Depot Maintenance Workload. Quantify in terms of DLHs the total amount of workload that directly supports depot maintenance core capability requirements, plus any other workload that is most appropriately performed by public sector maintenance facilities. Record this data in Column O of the worksheet (Part 2), Table E2.T2.

E2.2.2.10. Block P – Output to Service Planning, Programming, and Budgeting System (PPBS). Use workload data from Blocks K and O to ensure that the PPBS process adequately supports depot maintenance core capabilities in accordance with Reference (b). Compare planned capital investments to weapons systems IOC milestones to ensure capital investment decisions adequately support depot program capability within IOC plus 4 years.

Table E2.T1. DoD Depot Maintenance Core Capability Worksheet (Part 1)

Description	Column A			Column B	Column C		Column D		Column E	Column F	Column G		Column H
	Determine Systems in JCS Contingency Scenarios			Identify Exclusions	Convert Scenario Requirements to Peacetime DLHs		Adjust for Contingency Rqmts and Resources		Adjust for Redundant Requirements	Quantity Core Depot Maint Capability Rqmts	Adjust for Interservice Requirements		Total Adjusted Requirements
WBS Category	A1 Tasked Platform System	A2 Total Active Inventory	A3 Number in Scenarios	Net After Exclusions	C1 Platform DLHs	C2 DLR DLHs	D1 Result After Contingency Adjustment	D2 Result After Resource Adjustment	Redundant Rqmts	DLHs	G1 Interservice In	G2 Interservice Out	Adjusted Requirements
1. Aircraft													
1.1. Airframes													
1.1.1. Rotary													
1.1.2. VSTOL													
1.1.3. Cargo/Tanker													
1.1.4. Fighter/Attack													
1.1.5. Bomber													
1.1.6. Aircraft - Other													
1.2. Aircraft Components													
1.2.1. Dynamic Components													
1.2.2. Hydraulic/Pneumatic													
1.2.3. Instruments													
1.2.4. Landing Gear													
1.2.5. Aviation Ordnance													
1.2.6. Avionics/Electronics													
1.2.7. APUs													
1.2.8. Other													
1.3. Aircraft Engines													
2. Ground Vehicles													
2.1. Combat Vehicles													
2.2. Amphibious Vehicles													
2.3. Tactical (wheeled) Vehicles													
2.4. Construction Equipment													
3. Sea Ships													
3.1. Aircraft Carriers													
3.2. Submarines													
3.3. Surface Combatants/Others													
4. Communication/Electronic Equipment													
4.1. Radar													
4.2. Radio													
4.3. Wire													
4.4. Electronic Warfare													
4.5. Navigational Aids													
4.6. Electro-Optics/Night Vision													
4.7. Crypto													
4.8. Computers													
4.9. Other													
5. Support Equipment													
5.1. GSE													
5.2. Generators													
5.3. TMDE													
5.4. Calibration													
5.5. Other													
6. Ordnance, Weapons, & Missiles													
6.1. Nuclear Weapons													
6.2. Chemical Weapons													
6.3. Biological Weapons													
6.4. Conventional Weapons													
6.5. Explosives													
6.6. Small Arms/Personal Weapons													
6.7. Strategic Missiles													
6.8. Tactical Missiles													
7. Software													
7.1. Weapon System													
7.2. Support Equipment													
8. Fabrication/Manufacturing													
9. Fleet/Field Support													
10. Special Interest Items													
11. Other													

Table E2.T2. DoD Depot Maintenance Core Capability Worksheet (Part 2)

Description	Column I	Column J		Column K	Column L	Column N	Column O
	Quantify Total Depot Maintenance Workload	Add/Subtract Interservice Workload Adjustments		Identify and Compute Workload Needed to Maintain DM Core Capability Rqmts	Determine Total DM Workload Not Needed to Support DM Core Capability Rqmts	Private-Sector DM Workload	Public-Sector DM Workload
		J1	J2				
WBS Category	DLHs	DLHs In	DLHs Out	DLHs	DLHs	\$	DLHs
1. Aircraft							
1.1 Airframes							
1.1.1 Rotary							
1.1.2 VSTOL							
1.1.3 Cargo/Tanker							
1.1.4 Fighter/Attack							
1.1.5 Bomber							
1.1.6 Aircraft - Other							
1.2 Aircraft Components							
1.2.1 Dynamic Components							
1.2.2 Hydraulic/Pneumatic							
1.2.3 Instruments							
1.2.4 Landing Gear							
1.2.5 Aviation Ordnance							
1.2.6 Avionics/Electronics							
1.2.7 APUs							
1.2.8 Other							
1.3 Aircraft Engines							
2. Ground Vehicles							
2.1 Combat Vehicles							
2.2 Amphibious Vehicles							
2.3 Tactical (wheeled) Vehicles							
2.4 Construction Equipment							
3. Sea Ships							
3.1 Aircraft Carriers							
3.2 Submarines							
3.3 Surface Combatants/Others							
4. Communication/Electronic Equipment							
4.1 Radar							
4.2 Radio							
4.3 Wire							
4.4 Electronic Warfare							
4.5 Navigational Aids							
4.6 Electro-Optics/Night Vision							
4.7 Crypto							
4.8 Computers							
4.9 Other							
5. Support Equipment							
5.1 GSE							
5.2 Generators							
5.3 TMDE							
5.4 Calibration							
5.5 Other							
6. Ordnance, Weapons, & Missiles							
6.1 Nuclear Weapons							
6.2 Chemical Weapons							
6.3 Biological Weapons							
6.4 Conventional Weapons							
6.5 Explosives							
6.6 Small Arms/Personal Weapons							
6.7 Strategic Missiles							
6.8 Tactical Missiles							
7. Software							
7.1 Weapon System							
7.2 Support Equipment							
8. Fabrication/Manufacturing							
9. Fleet/Field Support							
10. Special Interest Items							
11. Other							