### Interim Policy and Procedures for Strategic Manpower Planning and for Development of Manpower Estimates for Defense Acquisition Programs

1. <u>POLICY</u>. DoD Components shall, as part of their Manpower Management program, develop a strategic manpower planning process for responding to fundamental changes to the Department's strategic objectives; roles and missions; force structure; and management and warfighting strategies. A key objective of strategic manpower planning shall be to develop a workforce that can be reconfigured quickly to respond to changing threats and contingency plans; adjust to new mobilization plans; and evolve to support new warfighting capabilities, business practices, and organizations.

2. <u>PROCEDURES</u>. As missions, threats, and priorities change, the DoD Component manpower authority, or designee, shall develop long-range strategies to adjust the mix of military and civilian manpower and intra-governmental, host nation, and contract support to accommodate changes to policy, doctrine, management strategies, materiel, and organization. As a minimum, the following practices shall be considered when developing strategic manpower plans.

### 2.1. Strategic Planning for Joint Warfighting Capabilities.

2.1.1. <u>The Joint Capabilities Integration and Development System (JCIDS)</u>. The JCIDS, required by the Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3170.01C, provides an integrated, collaborative process for developing new warfighting capabilities through changes to doctrine, organization, training and education, materiel, leadership, personnel, and/or facilities (DOTMLPF). Manpower officials shall help identify DOTMLPF solutions to operational deficiencies. If a materiel solution is required, manpower officials shall work with other Defense officials to identify which concepts and technologies can be developed into affordable Defense acquisition systems. During the JCIDS staffing process, DoD Component manpower officials shall comment on the adequacy of the capabilities documents and Key Performance Parameters (KPPs). Because of the interrelationship of manpower, personnel and training requirements, manpower officials shall confer with Program Managers (PMs) of Defense acquisition programs and personnel and training officials to ensure that materiel solutions are affordable from a manpower perspective, maximize use of human resources, and help solve or, at a minimum, do not exacerbate systemic manpower, personnel, and training problems.

2.1.2. <u>Threat Changes and Operational Risk</u>. As required by section 153(a)(3)(C) of title 10, U.S.C., the Chairman of the JCS shall advise the Secretary of Defense of critical deficiencies and strengths in force capabilities (to include manpower) identified during the preparation and review of contingency plans (CONPLANS). Combatant Commanders shall assess threat changes and determine whether the manpower policies of the armed forces support changing strategic plans and whether the planned number of non-combatants in theater during a conflict is appropriate for the threat-level and situation. As required by DoD Instruction 3020.37, Commanders shall assess the probability that private sector contractors will continue to perform critical support services during a mobilization or war. If there are concerns about non-performance or inappropriate risks, Commanders shall prepare contingency plans for obtaining the essential services from another source. These determinations shall be made in conjunction

with manpower and contract officials, as appropriate, to ensure the work can be converted to another category of manpower or to another private sector contractor.

2.2. <u>Strategic Planning for Transformation of Business Practices and Organizations</u>. As missions, priorities, and technologies change and Principal Staff Assistants and functional managers develop plans to transform business practices; restructure organizations; transfer, privatize, or contract activities; or, divest non-core functions; manpower officials shall be consulted concerning manpower adjustments. Manpower officials shall assess how plans for transforming or reengineering roles, missions, and management strategies will affect workloads or alter the lines of authority, span of control, or delegated management responsibilities and require a change to the manpower.

# 2.3. Manpower Mobilization and Crisis Planning.

2.3.1. <u>General</u>. DoD Components shall develop mobilization and crisis planning systems that support the military objectives of the Department. Manpower mobilization planning shall be conducted in consonance with operation planning and shall be flexible, responsive, and adaptive to management changes and emergency situations.

2.3.2. <u>Objective</u>. The objective of manpower mobilization and crisis planning shall be to provide reasonable assurance that: (1) manpower in the military forces is programmed at levels necessary to provide needed capabilities in the shortest (most demanding) timeline required by the war plans; and, (2) sufficient military and civilian manpower with the requisite knowledge, skills and abilities (KSAs) are available in the infrastructure, Individuals Account, and Reserve Component, or can be recruited or contracted to meet all mobilization and wartime demands. The manpower mobilization and crisis planning process must provide a range of phased, incremental improvements in force readiness, deployment capability, and sustainability necessary to support JCS approved operation plans (OPLANS), contingency plans (CONPLANS), and CONUS sustaining missions.

2.3.3. <u>Considerations</u>. The Strategic Planning Guidance, Contingency Planning Guidance, and Unified Command Plan provide strategic guidance, contingency taskings, and force listings for Combatant Commanders. Based on this guidance, Combatant commanders prepare OPLANS and/or CONPLANS, some of which are supported by the time-phased force deployment data (TPFDD) file. Wartime demands—i.e., manpower resources that are needed for a full mobilization and war and to provide filler and replacement personnel for losses sustained over the course of a conflict—shall be determined consistent with the JCS joint operation planning system and the wartime manpower planning systems of the Services.

# 2.3.4. Planning Process.

2.3.4.1. Manpower authorities shall use a process that has been formally approved by the DoD Component for determining wartime demands consistent with DoD Directive 1100.18 and DoD Instruction 1100.19. Mobilization planners shall: (1) identify wartime demands by quantity, grade, and skill; (2) identify overages and shortages that result when the Department transitions from peacetime to wartime operations; (3) develop plans for realigning available

resources to meet the most urgent needs; and, (4) address serious shortfalls during the PPBES process that cannot be offset from other sources. Because a mobilization can expand the military forces beyond the programmed force structure, manpower authorities shall consider the entire wartime demand when making these determinations.

2.3.4.2. Consistent with DoD Directive 1100.18 and DoD Instruction 1400.32, DoD Components shall ensure that civilian and military personnel inventories are sufficient to meet critical wartime demands. If there are insufficient civilian and military personnel with the requisite knowledge, skills, and grades for critical wartime assignments, manpower authorities shall undertake corrective action.

2.3.4.2.1. During peacetime, mobilization planners shall identify and plan to defer or curtail programs and tasks not essential to military contingencies or emergency situations and plan to transfer the associated personnel to higher priority tasks. Manpower officials shall work with personnel and training officials to provide for the efficient and expedient use of these resources by designating the manpower for wartime assignments and, if appropriate, cross-training the personnel for their wartime responsibilities.

2.3.4.2.2. Emergency-essential (E-E) manpower for critical support services shall be designated as "key" consistent with the guidance in DoD Directive 1200.7 to ensure the manpower is not identified for conversion or elimination and to ensure the positions are not filled by Ready Reservists that can be called to Active duty.

2.3.4.2.3. Civilian manpower in infrastructure activities that provide continuity of operations during a mobilization, contingency, or war shall be designated as "key" consistent with the guidance in DoD Directive 1200.7 to ensure the manpower is not identified for conversion or elimination and to ensure the positions are not filled by Ready Reservists that can be called to Active duty.

2.3.4.2.4. If there are Active military personnel that are needed in the operating forces during a mobilization or war that cannot be fully utilized or properly trained in the operating forces during peacetime (such as with medical personnel), DoD Components shall consider cost-effective alternatives. They shall first consider whether members of the Ready Reserve can be used or if conversion to civilian or private sector performance is appropriate. If Active military personnel are required, DoD Components shall assign the military to infrastructure activities during peacetime where they can develop their skills while remaining available in the event of a war or other emergency. If there are insufficient military positions for these assignments, manpower authorities shall convert civilian manpower with related skills and grades to military performance except if: (1) civilian incumbency is required by law; (2) the civilian manpower is designated as "key;" or, (3) the manpower is designated for civilian career progression or rotation. If there is insufficient civilian manpower available for conversion to military performance, manpower authorities shall convert contracted services to military performance to meet these requirements consistent with the DoD Component's manpower policies. In all cases, these conversions must be in activities that enable military personnel to develop or remain proficient in skills required by their wartime assignments. Once converted,

this manpower shall be designated for wartime assignments to ensure it is not inadvertently identified for conversion or elimination.

2.3.4.2.5. Manpower authorities shall plan to augment infrastructure activities that have critical missions that expand during a mobilization or war with surplus personnel from activities that are deferred or curtailed, non-unit Reservists, recalled retirees, volunteers, or contingency contracts, as appropriate. Manpower authorities shall plan to back-fill positions in the infrastructure that are vacated by E-E civilians and Active military who have wartime assignments in the operating forces with surplus personnel from other areas, non-unit Reservists, recalled retirees, or volunteers provided the positions are critical to a mobilization, military contingency, or war. Contingency contracts may also be used, if appropriate.

### 2.4. Strategic Planning for Restructuring the Defense Workforce.

2.4.1. <u>Structuring Career Fields and Developing Critical Expertise</u>. Manpower, personnel, and training officials shall confer to ensure manpower, training programs, and career fields are structured to: (1) support the vesting of title 10, U.S.C., functions, powers, and duties; (2) support the delegation of management responsibilities and approval authorities; (3) provide for career development of both military and civilian personnel; and, (4) keep manpower, personnel, and training requirements at a level to efficiently and effectively accomplish the mission.

2.4.1.1. <u>Development of Military and Civilian Expertise</u>. Defense manpower, shall be designated, and training and career fields structured, according to the roles and responsibilities assigned to each category of personnel—civilian and military. As a rule, civilian knowledge and facility shall be developed to engender a "profession of governance;" whereas, military knowledge and skills shall be developed to engender a "profession of arms." Manpower shall be designated as civilian to: (1) assist in maintaining civilian authority, direction, and control over the DoD as required by section 401 of title 50, U.S.C.; (2) develop management and leadership skills; (3) provide technical advice and counsel to support civilian governance of the DoD; and, (4) accomplish civilian essential line functions. Manpower shall be designated as military to: (1) maintain military command and control of combat and crisis operations; (2) develop command and leadership skills; (3) provide military advice and counsel to support civilian governance of the DoD; and, (4) accomplish military essential line functions. Career fields for both civilian and military shall: complement but not duplicate or compete with each other; provide for career progression for both categories of personnel; and, avoid overspecialization and excessive training.

2.4.1.2. <u>Designations for Career Development</u>. It is Department policy to indoctrinate new recruits for military service through initial training and to provide education, training, and developmental assignments for critical technical and leadership skills (military and civilian) that cannot be obtained directly from the private sector. Personnel and training officials shall assess new missions and evolving technologies to determine whether new or additional training, education, or experience will be needed to cultivate the required skills and expertise. Manpower officials must be advised if career development positions are needed to produce an adequate pool of candidates for each ascending level of proficiency or leadership. All such

positions shall be part of an approved career development program. However, personnel officials shall ensure manpower requirements for career development positions are held to a minimum by combining occupational specialties and restructuring grade requirements to narrow career ladders whenever possible.

2.4.2. <u>Designations for Rotation Base</u>. It is Department policy to provide for the rotation of civilian career-conditional and career employees assigned outside the United States consistent with section 1586 of title 10, U.S.C., and to maximize stability of military assignments and minimize personnel and unit turbulence caused by excessive permanent change of station (PCS) moves consistent with DoD Directive 1315.7. Accordingly, personnel officials shall review how changes in force structure and unit/ship deployments affect overseas and sea-to-shore assignments. If there is turbulence detrimental to unit or personnel readiness or service member quality of life, personnel officials shall confer with manpower authorities concerning the size of the rotation base. Manpower necessary for maintaining a rotation base to support an equitable assignment system for overseas and sea-to-shore assignments shall be determined by civilian series and military occupational specialty using a formal process that considers assignment, rotation, and career development policies and military time on station (TOS) goals.

2.4.3. <u>Additional Manpower for Career Progression and Rotation</u>. If there are insufficient positions for military career progression or rotation, manpower authorities shall convert civilian manpower with related skills and grades to military performance except if: (1) civilian incumbency is required by law; (2) the manpower is designated as "key;" or, (3) the manpower is required for civilian career progression or rotation. If there is insufficient civilian manpower available for conversion to military performance, or if additional civilian positions are needed for rotation or career progression, manpower authorities shall convert contracted services in similar skills and grade-levels to civilian or military performance to meet these requirements. Once converted, this manpower shall be designated for career progression or rotation to ensure it is not inadvertently identified for conversion or elimination.

# 2.5. Strategic Planning for Defense Acquisition Programs.

2.5.1. <u>Affordable Programs</u>. Consistent with DoD Directive 5000.1, DoD Components shall plan acquisition programs based on realistic projections of the resources (funds and manpower) likely to be available in future years. Manpower officials are responsible for assessing program affordability from a military end strength (ES) and civilian full-time equivalent (FTE) perspective. Preliminary assessments of manpower affordability shall be based on (1) long-range forecasts of the Defense workforce; (2) plans for retirement or transfer of "predecessor" systems; (3) broad estimates of the manpower required for the new capability; (4) Congressional constraints placed on military ES and civilian FTEs; and, (5) restrictions placed on resources for special programs, such as resources "fenced" for the National Foreign Intelligence Program (NFIP). If out-year projections indicate there will be significant shortfalls, manpower officials shall work with other Defense officials to determine what resources the DoD Component will invest to operate, maintain, support, train, and dispose of the system. These determinations shall consider all available information—e.g., priority of the new system, possible trade-offs for manpower in lower priority programs, and program goals set for comparable systems and capabilities.

2.5.2. <u>Manpower Estimates (MEs)</u>. MEs for Defense acquisition programs shall be approved by the DoD Component manpower authority, or designee, as indicated in paragraph E1.2.2. Manpower affordability shall build on preliminary judgments of program affordability made during the JCIDS process. However, MEs shall provide more detailed assessments of the manpower required for the new system and for the retired or replaced "predecessor" systems. In all cases, judgments about manpower affordability shall be consistent with information reported in the ME. Also, since manpower costs (both direct and indirect) are often major contributors to total ownership costs, the MEs shall be used to inform the Independent Cost Estimates (ICEs) and other cost estimates required by DoD Instruction 5000.2. (See the guidance for Manpower Estimates at enclosure 1.)

2.5.3. <u>Program Goals</u>. Consistent with DoD Instruction 5000.2, DoD Components shall establish program objectives and thresholds for a minimum number of cost, schedule, and performance parameters for Defense acquisition programs.

2.5.3.1. As directed in DoD Instruction 5000.2, cost parameters shall be established for system life cycle costs or, if available, total ownership costs. The user representatives shall assess system affordability when establishing these requirements. Because manpower can be a major determinant of program costs and affordability, manpower parameters should be established in the Capability Development Documents (CDDs). When there are critical manpower or skill requirements that warrant a key performance parameter (KPP), the KPP should be established in the CDD and reflected in the Acquisition Program Baseline (APB). Manpower goals and parameters shall be based on manpower analyses and studies and established to ensure that: (1) design options that reduce workload and are essential for ensuring program affordability are pursued and not passed-over in favor of other lesser priority design features; (2) ownership costs and manpower are kept at desired levels; and, (3) future-year resources designated for other higher priority programs are preserved.

2.5.3.2. Performance parameters are established to ensure systems are designed and developed to provide an operationally useful capability. Performance parameters in the CDD, such as reliability, availability, and maintainability (RAM) rates and operating tempos, shall be used to establish the manpower requirements and directly link them to operational requirements. This linkage is critical to readiness reporting, mobilization planning, and programming/ budgeting.

2.5.4. <u>Human Systems Integration (HSI)</u>. Acquisition policy in DoD Directive 5000.1 stresses the importance of a "total system" approach. HSI focuses on the human component of the total system by addressing and integrating requirements for manpower, personnel, training, human factors, occupational health, safety, habitability, and personnel survivability. Since all aspects of HSI are interdependent, PMs are encouraged to establish HSI Integrated Product Teams (IPTs) to support the Defense acquisition process and ensure that, as trade-offs are made, systems are designed to optimize total system performance, minimize total ownership costs, and accommodate the characteristics of the population that will operate, maintain, and support the system.

2.5.4.1. Manpower officials shall participate in the Defense acquisition process and work with personnel officials and human factors engineers to ensure that PMs pursue engineering designs that minimize manpower and control increases to skill requirements. Consistent with guidance in DoD Instruction 5000.2, PMs are required to ensure human factors engineering/cognitive engineering is employed during system design to provide for effective human-machine interfaces and assure systems are built to meet the parameters in the capabilities documents and KPPs in the APBs. Manpower and personnel officials shall assist PMs with identifying and eliminating system design characteristics that require excessive cognitive, physical, or sensory skills or workload intensive tasks.

2.5.4.2. Training and safety and occupational health hazards contribute directly to manpower in the Individuals Account and time away from work. Consistent with guidance in DoD Instruction 5000.2, PMs are required to consult with the training community to develop options for individual, collective, and joint training with special emphasis on alternatives that enhance user capabilities, maintain skill proficiencies, and reduce individual and collective training times. PMs are also required to address habitability issues, prevent environmental, safety, and occupational health (ESOH) hazards, or manage these hazards when they cannot be avoided. Manpower officials shall assist both communities and the PM with identifying design options that minimize training time and ESOH hazards so that manpower and time away from work are kept to a minimum.

2.6. <u>Long-Range Forecasts of Defense Manpower</u>. Manpower officials shall develop comprehensive, long-range forecasts of Defense manpower to assist with strategic planning following the procedures at enclosure 2. These forecasts shall project manpower and contract support far enough into the future and provide information in enough detail to assist:

2.6.1. Principal Staff Assistants and other Defense officials with: (1) maintaining oversight of the Defense workforce; (2) developing strategic plans for human resources and Training Transformation Strategic Plans; and, (3) assessing the affordability of alternative concepts and technologies for future joint warfighting capabilities;

2.6.2. The Joint Staff with determining the extent to which the major programs and policies of the armed forces in the area of manpower conform to the strategic plans as required by title 10, U.S.C.;

2.6.3. Manpower mobilization planners with calculating wartime demand and supply to support mobilization planning and programming and estimating potential wartime casualties based on the number of military, civilian, and contract personnel exposed to hostile fire and collateral damage;

2.6.4. Training and personnel officials with maintaining oversight of planned changes to skill requirements so they can revise training and education programs and restructure career fields to accommodate the future needs of the Department; and,

2.6.5. Manpower authorities with: (1) establishing the availability of manpower resources in future years; (2) addressing the affordability of acquisition programs from a military

ES and civilian FTE perspective; and (3) identifying, minimizing and, if possible, eliminating critical out-year shortfalls.

### 3. RESPONSIBILITIES.

3.1. <u>The Deputy Under Secretary of Defense (Civilian Personnel Policy)</u> shall provide civilian personnel policies to facilitate detailing, reassignment, or relocation of civilian personnel not needed by one DoD Component to satisfy the critical workload of another DoD Component.

3.2. <u>The Assistant Secretary of Defense (Health Affairs)</u> shall, in support of mobilization planning, facilitate reassignment of military medical personnel in excess of the materiel or facility capabilities of one Military Department to the medical facilities of another Military Department, as practical.

# 3.3. The DoD Components shall:

3.3.1. Limit the number of personnel participating in reserve training in a drill pay status to those for whom a mobilization requirement exists and who have been determined to be available upon mobilization;

3.3.2. Identify members of the Individual Ready Reserve (IRR) for assignment to units of the Active or Reserve forces, to the extent necessary to facilitate enhancement of refresher training, rapid deployment, and effective utilization in a war or national emergency consistent with sections 4.7, 4.10, and 4.11. of DoD Directive 1235.13;

3.3.3. When it is cost-effective, provide for the cross-training of civilian personnel during peacetime that are in activities the DoD Component plans to defer or curtail during a contingency or emergency so they can be cross-utilized effectively and efficiently during a mobilization or war; and,

3.3.4. In conjunction with the budget estimate submission, advise the Under Secretary of Defense (Personnel and Readiness), or designee, of the strategy for accommodating significant manpower actions, such as new missions, changes to the force structure, system acquisitions, divestiture or transfer of major functions, and base closures. These discussions shall be forward-looking and strategic in nature, addressing major manpower trends and planned conversion from one source of support (civilian, military, or contract) to another.

#### E1. ENCLOSURE 1

#### **GUIDANCE FOR MANPOWER ESTIMATES FOR DEFENSE ACQUISITION PROGRAMS**

#### E1.1. PURPOSE.

E1.1.1. Manpower Estimates (MEs) are required by section 2434 of title 10, U.S.C. Title 10 directs the Secretary of Defense to consider an estimate of the personnel required to operate, maintain, support, and provide training for a defense system in advance of approval of the engineering and manufacturing development, or production and deployment of a major defense acquisition program. Table E3.T1, "Statutory Information Requirements," of DoD Instruction 5000.2, directs development of a ME at Milestones B, C, and full-rate production of major defense acquisition programs.

E1.1.2. The ME is the source document for determining the manpower portion of the "total costs of ownership" for acquisition systems required by section E1.4 of DoD Directive 5000.1. In addition, the it is the only OSD-level acquisition document that addresses manpower affordability from a military end-strength (ES) and civilian full-time equivalent (FTE) perspective and the only required acquisition document that addresses skill shortages.

E1.1.3. MEs also serve as the authoritative source for out-year projections of military and civilian manpower and contract support required for: (1) the acquisition and upgrade of weapon, support, and automated information systems; and (2) the concomitant transfer of systems from the Active to Reserve Component and retirement of systems from the inventory. They are used to develop strategic forecasts of the Defense workforce and assist with strategic planning. MEs shall be developed for all manpower-significant programs (e.g., programs with high personnel or critical skill requirements), regardless of acquisition category and consistent with the DoD Component's manpower policies.

#### E1.2. RESPONSIBILITIES.

E1.2.1. The DoD Component manpower authority, or designee, shall serve as the user representative for all manpower matters for acquisition programs.

E1.2.1.1. When approving MEs, manpower authorities shall assess whether: (1) the estimates are comprehensive and accurate; (2) there are sufficient resources (i.e., military ES, civilian FTE, and contract services) to support the program; (3) there will be adequate trained personnel to operate, maintain and support the system; (4) congressional "controls" (floors and ceilings) and administrative restrictions on special programs (such as resources "fenced" for the National Foreign Intelligence Programs) have been observed; and (5) manpower and personnel objectives and thresholds in the capabilities documents have been met.

E1.2.1.2. The ME shall outline the DoD Component's official manpower position and address whether the system is affordable from a military ES and civilian FTE perspective. In addition, the manpower authority shall ensure that manpower estimates are based on the level of performance most likely to be achieved and recommend post-fielding verification of high risk

factors used for the estimate. At Milestone C and Full Rate Production decisions, MEs shall reflect results of developmental tests, as available.

E1.2.2. The following officials are responsible for delegation, approval, and submission of the MEs to OUSD(P&R):

- E1.2.2.1. Department of the Army: Assistant Secretary of the Army (Manpower and Reserve Affairs), or designee;
- E1.2.2.2. Department of the Navy: Assistant Secretary of the Navy (Manpower and Reserve Affairs), or designee; and,
- E1.2.2.3. Department of the Air Force: Assistant Secretary of the Air Force (Manpower and Reserve Affairs), or designee.

E1.2.3. The manpower authority for the lead DoD Component for joint programs shall be responsible for obtaining approval of the ME from all DoD Component manpower authorities participating in the program.

E1.3. SUBMISSION. A draft ME should be approved for release at least three to six months in advance of the Defense Acquisition Board (DAB) milestone review in order that the manpower can be used for development of cost estimates and affordability assessments. The final ME shall be submitted to OUSD(P&R) in sufficient time to support the Overarching Integrated Product Team (OIPT) review in preparation for the Defense Acquisition Board (DAB). Normally this will be three weeks prior to the OIPT.

E1.4. CONTENT OF THE MANPOWER ESTIMATE. The content of the ME shall be approved by the manpower authority and tailored to fit the program under review. (For instance, manpower for system specific training is generally included in the estimate, while manpower for basic training is usually excluded.) A ME is required at Milestones B, C, and full-rate production. It should be updated at each of these milestones consistent with changes in other program documentation. Where possible, the estimate should reference rather than duplicate information in other acquisition program documentation.

E1.4.1. <u>Cover Memorandum</u>. A cover memorandum shall briefly identify the program and milestone under review, resource shortfalls, personnel issues, and the affect the program will have on the Component's manpower structure and Individuals Account. It shall indicate whether increases in military or civilian manpower are above programmed levels, or waivers to existing manpower constraints/restrictions will be required to support the program. The cover memorandum shall also state program risks and whether manpower constraints (objectives and thresholds) and key performance parameters (KPPs) for manpower will be met or exceeded. The DoD Component's manpower authority, or designee, shall sign the cover memorandum.

E1.4.2. <u>System Description</u>. The system description shall include only information that explains the factors and assumptions used to estimate the manpower.

E1.4.2.1. <u>System Name and Description</u>. The ME shall provide the name of the system and address its purpose. It shall provide a brief description of all hardware and software items that constitute the system, to include the major end item, essential support equipment, training devices, simulators, special test equipment, and software.

E1.4.2.2. Operational Concept. The estimate shall include a brief description of the operational concept and address the roles of both Active and Reserve units if differences exist. It shall specifically state if the system will be used as a weapon against the enemy since this determination affects the combatant status of the operators. The estimate shall specify requirements for continuous operations and surge and describe environmental conditions or other factors that affect manpower determination. (For instance, chemical, biological, nuclear, or extreme meteorological conditions require protective clothing, which impede performance and increase manpower). The ME shall identify, by fiscal year, echelon, Manpower Mix Criteria code, and DoD Function code, the type and number of units or platforms (battalions, squadrons, ships, etc.) receiving the systems and the number of systems going to each type of unit or platform. It shall identify any un-programmed force structure and plans to store systems in warehouses or temporarily place systems in training units if the plans affect the manpower. Plans for the entire life of the system, to include the planned transfer of the system from the Active to Reserve Component should be addressed. The estimate shall address whether, during a crisis or war, operational units will be located in areas where the risk of hostile fire or collateral damage is high, since these determinations affect manpower mix.

E1.4.2.3. <u>Maintenance Concept.</u> A brief description of the maintenance concept for both the hardware and software and address intermediate and depot support should be included. The estimate shall identify maintenance support elements by echelon, Manpower Mix Criteria code, and DoD Function code that are required during peacetime and war, to include in-theater depot support elements required during war. It shall specify if, during a crisis or war, any of the maintenance support elements will be located in areas where the risk of hostile fire or collateral damage is high. Analysts shall verify whether "float equipment" kept in storage require maintenance if the workload is significant enough to require additional manpower. The ME shall indicate whether the system requires a "core logistics capability" as defined in section 2464 of title 10, U.S.C. Plans for the entire life of the system, to include the planned transfer of systems from the Active to Reserve Component should be addressed. Plans for interim or life cycle contract support shall be specified once the manpower mix has been determined. It shall indicate if the contract services are "mission essential" as defined in DoD Instruction 3020.37. The estimate shall also address whether the maintenance concept represents a significant departure from how comparable contemporary systems are maintained.

E1.4.2.4. <u>Support Concepts.</u> The ME shall address requirements for supply, repair parts distribution, security, base operating support, life cycle system management, warehousing, disposal, environmental clean-up, and other support. It shall identify direct support elements by echelon, Manpower Mix Criteria code, and DoD Function code that are required during peacetime and war over the life of the system. Ratios may be used to estimate indirect support, to include base operating support, disposal, environmental clean-up. Unique transportation, intelligence mapping, charting, and geodesy requirements and personnel security clearance requirements shall be addressed if they require manpower increases. The ME shall also address whether, during a crisis or war, support elements will be located in areas where the risk of hostile fire or collateral damage is high. Plans for interim or life cycle contract support shall be specified once the manpower mix has been determined. The ME shall indicate if the contract services are "mission essential" as defined in DoD Instruction 3020.37. It shall address plans for the entire life of the system, to include the planned transfer of systems from the Active to Reserve Component. The estimate shall also address whether the support concept represents a significant departure from what is required by comparable contemporary systems.

E1.4.2.5. <u>Training Concept.</u> The ME shall briefly summarize the training concept and address the extent to which the system will rely on training devices, simulators, or embedded training. This description shall cover unit, collective, and joint training. The ME shall identify by fiscal year, echelon, Manpower Mix Criteria code, and DoD Function code, the types and number of training activities (e.g., schoolhouse and training units) receiving the training systems and the number of systems going to each type of training activity. It shall also identify training units that are assigned a training mission during peacetime but have operational missions during wartime. Civilian training shall be addressed if the workload is significant enough to require additional manpower. Plans for interim or life cycle contract training should be specified once the manpower mix is determined. The ME shall indicate if the contract services are "mission essential" as defined in DoD Instruction 3020.37. Also, additional requirements that result from the planned transfer of systems from the Active to Reserve Component shall be reported. The ME should address whether the training approach for the new system differs from training required for comparable contemporary systems.

E1.4.2.6. <u>Individuals Account</u>. The ME shall address the training throughput at training centers and provide estimates for military ES in the Individuals Account.

E1.4.3. <u>Personnel Factors</u>. The estimate shall summarize key personnel decisions or assumptions that have a significant affect on the manpower (e.g., plans for developing new, or restructuring existing, career fields). It shall also address whether there are any occupations which are "hard-to-fill," personnel inventory shortfalls, or other personnel concerns that could adversely affect full operational deployment or sustainment of the system. When appropriate, the ME shall summarize the knowledge, skills, and abilities (KSAs) required by the operators, maintainers, and support personnel, and discuss any significant differences or shortfalls from the current and projected inventory.

E1.4.4. <u>Reengineering Initiatives and Studies</u>. Approved plans for base closures, restructuring initiatives, or OMB Circular A-76 competitions or direct conversions, or other initiatives that will significantly affect the quantity or mix of military and civilian manpower and contract support should be addressed.

E1.4.5. <u>Manpower Summary</u>. The estimate shall report total manpower requirements and authorizations needed to operate, maintain, support, and provide training for the system using the sample format at Table 1. It shall report the military (officer, warrant officer, and enlisted) and civilian (U.S. and foreign national) manpower, and contract work-year equivalents for each fiscal year of the program, beginning with initial fielding and ending with retirement and disposal of the system, to include environmental cleanup. It shall indicate if there are any resource shortfalls

### Table E1.T1.

# MANPOWER ESTIMATE (Program Title) SERVICE

FYxx FYxx+1 FYxx+2 FYxx+3 FYxx+4 (Until fielding is completed)<sup>(2)</sup>

OPERATE: <sup>3</sup> Military Officers Enlisted Civilian Contractor Sub-Total MAINTAIN: <sup>3</sup> Military Officers Enlisted Civilian Contractor Sub-Total SUPPORT: <sup>3</sup> Military Officers Enlisted Civilian Contractor Sub-Total TRAIN: <sup>3</sup> Military Officers Enlisted Civilian Contractor Sub-Total TOTAL:

<sup>①</sup> Provide separate estimates for Active and Reserve Components for each Service.

<sup>②</sup> Report manpower by fiscal year (FY) starting with initial fielding and continuing through retirement and disposal of the system (to include environmental clean-up).

<sup>3</sup> Provide estimates for manpower requirements and authorizations. Provide deltas between requirements and authorizations for each fiscal year.

for any fiscal year covered by the summary and state whether any increases in military ES or civilian FTE beyond what is included in the FYDP are required, and whether waivers to existing manpower constraints are needed to support the system. Active and Reserve Component manpower should be reported separately. For joint programs, each DoD Component shall provide a separate estimate. If sufficient information is not available to develop point estimates at Milestone B, estimates of the range of manpower shall be provided for each fiscal year of the program.

### E1.4.6. Manpower Estimating Methodologies.

E1.4.6.1. The ME shall briefly describe methodologies used to estimate the manpower for each type unit and organization and state whether the DoD Component manpower authority, or designee, has validated the methodologies. It should also identify key factors and assumptions used to estimate the manpower (e.g., maintenance ratios, equipment usage rates, crew ratios, and fielding schedule) and whether they were provided by the PM, based on comparable contemporary systems, or reflect test results.

E1.4.6.2. The source of support for all new and modified systems, regardless of acquisition category, shall be based on the Manpower Mix Criteria and Guidance for Risk Assessments at: "<u>http://dod.mil/prhome/dusdpi.html</u>" Risk mitigation shall take precedence over cost savings in high-risk situations or when there are intelligence or security concerns.

E1.4.7. <u>Affordability</u>. System affordability shall represent the degree to which the lifecycle cost of an acquisition program is in consonance with the long-range investment and force structure plans of the Department and address the following points.

E1.7.1. <u>New, Displaced, and Replaced Equipment.</u> If systems are retired from the inventory or moved from the Active to Reserve Component to support fielding of the new system, the ME shall identify the replaced systems, affected units or platforms, and the replacement rates (e.g., two for one replacement), by fiscal year.

E1.4.7.2. <u>Manpower Requirements and Contract Support</u>. The ME shall compare manpower requirements for the new system with those required for the replaced systems (i.e., systems retired or transferred) and describe increases or decreases in military or civilian manpower requirements. Increases or reductions in contract work-year equivalents shall also be reported. The cause for increases or decreases (e.g., equipment replacement rates; reduced force structure; reduced levels of maintenance; changes in operating tempos, maintenance ratios, or crew ratios, or training through-put) should be reported if significant to the program. If manpower for the new system is significantly higher or lower than what was required by the replaced system, manpower officials shall also assess whether manpower providing indirect support, such as BOS and operational medical and mess, will increase or decrease and report any significant changes.

E1.4.7.3. <u>Manpower Authorizations.</u> The estimate shall address resource shortfalls and state whether any increases in military ES or civilian FTEs beyond what is included in the FYDP, or waivers to existing manpower constraints, will be required to achieve the resource

levels reported in the estimate. Major resource shortfalls shall be identified as risks in the ME and reported to the PM for inclusion in the Acquisition Strategy (AS).

E1.4.7.4. <u>Staffing</u>. In addition to reporting the manpower requirements and authorizations, assurances are needed that skilled personnel required to operate, maintain, train, and support the system will be available upon fielding. Manpower might be required and authorized but the positions not filled due to recruitment, retention, training, or other personnel problems. The ME shall address whether there are any "hard-to-fill" positions, personnel shortfalls, or other issues that could adversely affect fielding. Major personnel shortfalls shall be identified as risks in the ME and AS.

E1.4.8. <u>Risk Assessment</u>. At full-rate production, manpower authorities shall recommend post-fielding verification of high risk factors.

E1.4.8.1. The ME shall clearly state whether the manpower reported in the estimate is subject to change.

E1.4.8.1.1. The ME shall state whether any of the factors or assumptions used to estimate the manpower are significantly different from what is used to determine manpower requirements for comparable contemporary systems, and whether the differences are significant enough to represent a risk to the validity of the ME. When significant manpower reductions or changes in skill sets are expected as a result of technology insertion and/or doctrine and policy changes, the ME shall address the risk of achieving these reductions or changes commensurate with the developmental and programmatic risk of the technology and/or doctrine and policy changes. Estimates for systems under spiral or block development shall indicate whether postfielding verification of the manpower for the initial systems confirmed or invalidated the ME for the initial systems. The estimate shall also address whether the maintenance, support, or training concepts represent a significant enough departure from those of comparable contemporary systems to warrant post-fielding verification of the manpower for the manpower.

E1.4.8.1.2. The ME shall indicate whether approved restructuring initiatives (e.g., reorganizations, functional realignments, or streamlining or reengineering efforts), OMB Circular A-76 competitions, personnel initiatives (e.g., consolidation of military or civilian career fields), or other actions that could affect the manpower or provide for more efficient and effective processes as required by section 3.7.2.1. of DoD Instruction 5000.2 have been completed.

E1.4.8.2. When engineering designs increase individual workloads or task complexities, the impact on human performance and risk of cognitive or physical overload shall be evaluated. The ME shall report whether there is a risk that operators, maintainers, or support personnel do not have the skills or abilities to perform the required duties.

E1.4.8.3. Major manpower resource or personnel shortfalls shall be identified as risks in the ME and AS. The ME shall also state whether the new system meets or exceeds manpower and personnel constraints (objectives and thresholds) in the CDD, and KPPs in the APB.

### E2. ENCLOSURE 2

### STRATEGIC FORECASTS OF DEFENSE MANPOWER

E2.1. Manpower authorities shall develop comprehensive, long-range forecasts of Defense manpower based on estimates of future manpower and contract support. Manpower authorities shall integrate their manpower management reporting processes, as necessary, to develop these forecasts.

E2.1.1. Manpower authorities shall monitor all policy, program, force structure, unit deployment, and resource decisions that affect manpower. This shall include a review of the Strategic Planning Guidance (SPG), Program Decision Memorandum (PDM), and Program Budget Decisions (PBDs). Manpower authorities shall consult with appropriate officials concerning new missions and functions and directed requirements. When warranted, manpower studies shall be scheduled to support these efforts.

E2.1.2. Manpower officials shall track out-year estimates for system acquisitions; base closures; restructuring initiatives (e.g., reorganizations, functional realignments, and reengineering/streamlining efforts), Efficiency Reviews; Office of Management and Budget (OMB) Circular A-76 competitions; direct conversions; manpower surveys and revalidations, and other types of studies that impact manpower.

E2.1.2.1. Manpower Estimates for defense acquisition programs shall serve as the authoritative source for out-year projections of manpower and contract support required for weapon, support, and automated information systems. These estimates report manpower required for the entire life of the system beginning with initial fielding and extending through retirement and demilitarization of the system. Forecasts can range from twenty to fifty or more years, depending on the system. When combined, they provide a comprehensive, long-range projection of that portion of the Defense workforce that is system-related.

E2.1.2.2. Out-year projections of manpower savings from OMB Circular A-76 competitions, direct conversions, Efficiency Reviews, and other study programs shall be based on historical averages of actual reductions from similar studies of activities in the same DoD Function group. For example, actual savings from Most Efficient Organizations (MEOs) for OMB Circular A-76 competitions shall be grouped according to function, and an average of the savings used to estimate manpower reductions for future A-76 studies of activities in the same DoD Function group.

E2.2. Manpower authorities shall develop out-year projections of other program areas based on workload factors. Out-year projections shall reflect workload increases that result from aging facilities and equipment. Projections shall be based on historical averages from legacy systems or studies of comparable systems.