

Department of Defense **DIRECTIVE**

NUMBER 3222.04 March 26, 2014

USD(AT&L)

SUBJECT: Electronic Warfare (EW) Policy

References: See Enclosure 1

- 1. <u>PURPOSE</u>. This directive reissues DoD Directive (DoDD) 3222.4 (Reference (a)) to update EW policy, definitions, and responsibilities within the DoD for providing operational forces with EW capabilities to control the electromagnetic operational environment (EMOE) across the range of military operations.
- 2. <u>APPLICABILITY</u>. This directive applies to the OSD, the Military Departments, the Office of the Chairman of the Joint Chiefs of Staff (CJCS) and the Joint Staff, the Combatant Commands (CCMDs), the Office of the Inspector General of the Department of Defense, the Defense Agencies, the DoD Field Activities, and all other organizational entities in the DoD (referred to collectively in this directive as the "DoD Components").

3. POLICY. It is DoD policy to:

- a. Facilitate synchronization and integration of EW by sharing tactics, techniques, procedures, and technologies among the DoD Components. Employ EW as a cross-cutting capability of the joint capability area framework.
- b. Develop and acquire EW systems that effectively support joint electromagnetic spectrum operations (JEMSO), in accordance with DoDD 5000.01 (Reference (b)).
- c. Prioritize and coordinate all EW requirements for efficient and effective control of the electromagnetic spectrum (EMS) in support of military operations.
- d. Integrate EW into operations and planning efforts across the range of military operations, specifically in conventional operations and in Irregular Warfare, Information Operations, Space Operations, Cyberspace Operations, and Navigation Warfare (NAVWAR).
- e. Incorporate EW capabilities, tactics, techniques, and procedures into joint exercises and training regimes to the maximum extent possible.

- f. Provide training ranges, assets, access to electromagnetic spectrum resources, and test sites to support EW training and capability development. Ranges and test resources must address the requirements of low observable platforms.
- g. Develop and acquire EW weapon systems, automated planning systems, associated EMS databases, EW training systems and feedback, and all source intelligence information to meet validated requirements in accordance with the comprehensive investment strategy in development by the EW/Electronic Protection Priority Steering Council.
- h. Validate EMS-dependent system's capability to operate in the operational environment throughout the system's life cycle, and require the documentation of electronic protection (EP) in a Spectrum Supportability Risk Assessment (SSRA) considered at all Milestone Reviews, in accordance with DoD Instruction (DoDI) 4650.01 (Reference (c)).
- i. Encourage cooperative EW system developments and the application of JEMSO strategies among the United States and its allies.
- j. Where appropriate, integrate EW capabilities in operational requirement documents, mission needs statements, and subsequent development, design, and test of systems.
- k. Evaluate electromagnetic compatibility (EMC) and the potential for mutual electromagnetic interference (EMI) between U.S. and allied spectrum-dependent (SD) systems, subsystems, and equipment. Ensure proper operation in intended electromagnetic environments (EMEs) without suffering unacceptable performance degradation from electromagnetic environmental effects (E3) or causing unintentional performance degradation to other systems in accordance with Reference (c) and DoDD 3222.3 (Reference (d)).
- 1. Provide effective intelligence support over the life cycle of EW systems and their related databases. To the maximum extent possible, ensure related databases are releasable to U.S. allies and applicable foreign mission partners.
- m. Conduct integrated assessments of the main EW threats and track anticipated or potential adversarial forces' trends with respect to the evolving major technologies and strategies.
- n. Encourage cooperative EW systems development and training among interagency partners.
- 4. RESPONSIBILITIES. See Enclosure 2.
- 5. <u>RELEASABILITY</u>. **Unlimited**. This directive is approved for public release and is available on the Internet from the DoD Issuances Website at http://www.dtic.mil/whs/directives.

6. <u>EFFECTIVE DATE</u>. This directive:

- a. Is effective March 26, 2014.
- b. Must be reissued, cancelled, or certified current within 5 years of its publication to be considered current in accordance with DoDI 5025.01 (Reference (e)).
- c. Will expire effective March 26, 2024 and be removed from the DoD Issuances Website if it hasn't been reissued or cancelled in accordance with Reference (e).

Christine H. Fox

Acting Deputy Secretary of Defense

Enclosures

- 1. References
- 2. Responsibilities

Glossary

ENCLOSURE 1

REFERENCES

- (a) DoD Directive 3222.4, "Electronic Warfare (EW) and Command and Control Warfare (C2W) Countermeasures," July 31, 1992 (hereby cancelled)
- (b) DoD Directive 5000.01, "The Defense Acquisition System," May 12, 2003, as amended
- (c) DoD Instruction 4650.01, "Policy and Procedures for Management and Use of the Electromagnetic Spectrum," January 9, 2009
- (d) DoD Directive 3222.3, "DoD Electromagnetic Environmental Effects (E3) Program," September 8, 2004
- (e) DoD Instruction 5025.01, "DoD Directives Program," September 26, 2012, as amended
- (f) DoD Instruction 5200.01, "DoD Information Security Program and Protection of Sensitive Compartmented Information," October 9, 2008, as amended
- (g) DoD Instruction O-3600.02, "Information Operations (IO) Security Classification Guidance (U)," November 28, 2005
- (h) DoD Instruction 2040.02, "International Transfers of Technology, Articles and Services," July 10, 2008
- (i) DoD Directive 3600.01, "Information Operations (IO)," May 2, 2013
- (j) DoD Directive 1322.18, "Military Training," January, 13, 2009
- (k) DoD Instruction 5000.02, "Operation of the Defense Acquisition System," November 25, 2013
- (l) DoD Instruction 5250.01, "Management of Intelligence Mission Data (IMD) in DoD Acquisition," January 22, 2013
- (m) Executive Order 12333, "United States Intelligence Activities," December 4, 1981, as amended
- (n) DoD Directive 5100.20, "National Security Agency/Central Security Service (NSA/CSS)," January 26, 2010
- (o) DoD Instruction O-3115.07, "Signals Intelligence (SIGINT) (U)," as amended
- (p) DoD Directive 8320.02, "Sharing Data, Information, and Information Technology (IT) Services in the Department of Defense," August 5, 2013
- (q) DoD Directive 8320.05, "Electromagnetic Spectrum Data Sharing," August 18, 2011
- (r) DoD Directive 4650.05, "Positioning, Navigation, and Timing (PNT)," February 19, 2008
- (s) National Security Presidential Directive-39, "U.S. Space-Based Position, Navigation, and Timing Policy," December 8, 2004
- (t) Deputy Secretary of Defense Memorandum, "Navigation Warfare Implementation Guidance," November 17, 2004
- (u) Title 10, United States Code
- (v) DoD Directive 5100.01, "Functions of the Department of Defense and Its Major Components," December 21, 2010

ENCLOSURE 2

RESPONSIBILITIES

1. <u>UNDER SECRETARY OF DEFENSE FOR ACQUISITION, TECHNOLOGY, AND LOGSTICS (USD(AT&L))</u>. The USD(AT&L):

- a. Serves as the principal staff advisor to the Secretary of Defense on issues relating to EW acquisition and development.
- b. Oversees the adequacy and sufficiency of all materiel, logistics, and facilities aspects of EW, in coordination with other appropriate OSD offices, the Office of the CJCS (OCJCS), the Military Departments, and the CCMDs.
- c. Oversees the acquisition of EW major defense acquisition programs (MDAPs) and EW capabilities of other MDAPs. Publishes plans and procedures to guide interoperability of EW systems with other SD systems to include smaller EW programs and rapid acquisition capabilities, in coordination with the DoD Chief Information Officer (CIO).
- d. Serves as the focal point for EW research, development, acquisition, and investment within the DoD. Charters the Research and Engineering Executive Committee to:
- (1) Oversee the EW and EP Priority Steering Council's development of the EW implementation roadmap for orderly technology development and prioritized system acquisition.
- (2) Coordinate DoD service investments in accordance with the EW Roadmap to accelerate the development and delivery of EW capabilities.
- e. Reviews EW programs for duplication and maximum multi-Service applications. When common requirements exist and acquisition efficiencies can be realized, ensure the Military Departments consider joint EW designs and acquisitions.
- f. Oversees the measuring and recording of EM signatures and operating parameters for EW systems in the appropriate databases, in coordination with the DoD CIO. Oversees availability and adequacy of joint test and joint training infrastructure for developmental and operational test and evaluation of EW system capabilities. The test and joint training infrastructure includes hardware and software simulations, hybrids, anechoic chambers, emulators and open air ranges.
- g. Requires the measuring and recording of EM signatures and operating parameters for EW systems in the appropriate databases.
- h. Oversees the evaluation of EW systems for vulnerability to potential hostile EW activity, exploitation by foreign intelligence EMS sources and methods, and inadvertent friendly EMI.

- i. Supports international cooperation efforts in the research, development, and acquisition of EW capabilities, and resolves issues associated with these efforts.
- j. Develops and updates DoD EW classification guidelines that conform to requirements set in DoDI 5200.01 (Reference (f)) and DoDI O-3600.02 (Reference (g)), in coordination with the Under Secretary of Defense for Intelligence (USD(I)) and the Secretaries of the Military Departments.
- k. Coordinates, oversees, and assesses the efforts of the DoD Components to plan, program, and develop capabilities in support of EW requirements.
- 1. Publishes an annual EW investment strategy that identifies resources and investments necessary to close known capability gaps and milestones to track progress, in coordination with the Under Secretary of Defense for Policy (USD(P)), CJCS, and the Commander, U.S. Strategic Command (CDRUSSTRATCOM).
 - m. Reviews and approves quick reaction capability programs.
- n. Directs consideration of EW throughout a system's or subsystem's life cycle. Ensures EW is addressed during Milestone Reviews.
- o. Requires the testing of systems in operationally representative EMS environments during development test and evaluation.
- p. Directs science and technology development programs in support of EW strategies. Through the Department's Science and Technology Executive Committee and other stakeholders, oversees development of the EW roadmap for implementation of EW capabilities.
- q. Coordinates support for life cycle intelligence mission data plans (LMDP) through the conceptualization, development, testing, and employment of EW systems, in coordination with USD(I).
- r. Coordinates the provision of databases and specifications of U.S. systems with the Intelligence Community (IC) when EW equipment is transferred subject to foreign military sales or exported via direct commercial sales.

2. $\underline{\text{USD}(P)}$. The $\underline{\text{USD}(P)}$:

a. Incorporates and maintains EW in national security and defense policy as appropriate.

6

b. Oversees the integration of EW into plans to achieve national security objectives, and advises on the forces necessary to implement that strategy.

- c. Provides DoD with overall EW policy development, implementation, and oversight in mission areas under the cognizance of the USD(P), including international activities, homeland defense, stability operations, cyberspace, special operations and low-intensity conflict missions.
- d. Leads interagency and international coordination involving planning and development of EW capabilities, in accordance with DoDI 2040.02 (Reference (h)) and other applicable policies.
- e. Develops policy to integrate intelligence support to EW in support of CCMD requirements, in coordination with the USD(I).
- f. Provides policy guidance and oversight on roles and responsibilities for the integration of EW with cyberspace operations and other information-related capabilities in accordance with DoDD 3600.01 (Reference (i)).

3. <u>UNDER SECRETARY OF DEFENSE FOR PERSONNEL AND READINESS</u> (USD(P&R)). The USD(P&R):

- a. Provides oversight of EW training, personnel assignments and advancements, and organization as it relates to readiness in coordination with other appropriate OSD offices, the OCJCS, the Military Departments, and the CCMDs to establish and maintain EW and EMS Control training and education in support of the EW career force.
- b. Provides policy and oversight for EW training in accordance with DoDD 1322.18 (Reference (j)).

4. USD(I). The USD(I):

- a. Serves as the DoD lead within the IC regarding intelligence support to EW.
- b. Provides oversight of the development of intelligence and collections capabilities in support of EW acquisitions, planning, and execution, including databases and analytic and intelligence support to EW capabilities, in coordination with other appropriate OSD offices, the OCJCS, the Military Departments, and the CCMDs.
- c. Oversees standardization of EW databases to achieve maximum interoperability and compatibility in fulfilling common worldwide requirements.
- d. Assesses the performance and responsiveness of defense and military intelligence activities to support EW planning and execution.
- e. Monitors, evaluates, and provides analysis of foreign threats to U.S. EMS-dependent capabilities.

- f. Provides intelligence on and exploits electronic attack (EA) targets of interest to support the development of required EA capabilities. Assists in the integration of national systems data into DoD platforms, systems, and architectures.
- g. Provides a joint, multi-community national EMS signatures (distinguishing characteristics of waveforms) program with a methodology for developing, storing, accessing, and managing signatures.
- h. Manages the EW Integrated Reprogramming database for the merger and distribution of observed EMS phenomena supported by science and technology assessed from primary, validated, reprogramming data.
- i. Develops current and projected baseline threat data for use in support of EW programs throughout their life cycles.
- 5. <u>DIRECTOR, DEFENSE INTELLIGENCE AGENCY (DIA).</u> Under the authority, direction, and control of the USD(I), the Director, DIA:
- a. Validates DoD Components' system threat assessment reports for ACAT ID programs and validates threat databases and threat assessment procedures used by the DoD Components in preparing system threat assessments for Acquisition Category 1D (ACAT 1D) acquisition programs in accordance with DoDI 5000.02 (Reference (k)).
- b. Provides effective intelligence support to the Intelligence Mission Data Center that approves the LMDP of EW systems and their related databases, in accordance with DoDI 5250.01 (Reference (1)).
- 6. <u>DIRECTOR, NATIONAL SECURITY AGENCY/CHIEF, CENTRAL SECURITY SERVICE (DIRNSA/CHCSS)</u>. Under the authority, direction, and control of the USD(I), and in accordance with Executive Order 12333 (Reference (m)) and DoDD 5100.20 (Reference (n)), the DIRNSA/CHCSS:
- a. Provides signals intelligence in support of EW capabilities development, planning, analysis, and operations.
- b. May provide advisory tasking to U.S. commands in accordance with DoDI O-3115.07 (Reference (o)) and, in conjunction with DIA, the Central Intelligence Agency, and the Military Departments, provides analytical support of EW activities.

7. DoD CIO. The DoD CIO:

a. Provides oversight and guidance for DoD EMS strategy, policy, resource management, and E3 programs pursuant to Reference (c) and Reference (d), to support the USD(AT&L) and USD(P) with assigned responsibilities identified in sections 1 and 2 of this enclosure.

- b. Provides oversight and guidance with respect to programs designated as major automated information systems (MAIS) as they relate to EM battle management, databases, and architectures. Supports data standardization of databases across EW, intelligence, and communications communities of interest.
- c. Provides oversight and guidance for DoD data sharing related to the EME and spectrum-dependent systems, including the identification of all data required to conduct JEMSO and control the EMS, pursuant to DoDI 8320.02 (Reference (p)) and DoDI 8320.05 (Reference (q)). Oversees the establishment and maintenance of the Joint Authoritative Data Source, Joint Spectrum Data Repository, and DoD Data Community of Interest.
- d. Provides policy, oversight, and guidance for the protection of DoD Position, Navigation, and Timing services and the identification of the required capabilities to detect, locate, and mitigate any interference on a global basis that adversely affects use of GPS for military operations. Pursuant to DoDD 4650.05 (Reference(r)), National Security President Directive-39 (Reference (s)), and Deputy Secretary of Defense Memorandum (Reference (t)), supports the DoD Components with the assigned responsibilities identified in this enclosure.
- 8. <u>DIRECTOR, DISA</u>. Under the authority, direction, and control of the DoD CIO, the Director, DISA:
- a. Provides assistance and guidance on the business processes for the consolidation of spectrum-related data that foster the life cycle interoperability and supportability of EW systems, subsystems, and equipment, pursuant to Reference (q), to support the DoD Components with the assigned data responsibilities identified in this enclosure.
- b. Provides assistance and guidance to perform required EMC analyses and studies to support:
 - (1) Effective use of EW systems in EMEs in accordance with References (c) and (d).
- (2) The DoD Components to enable effective use of the EMS, to include spectrum management and interference resolution support to CCMDs.
- 9. <u>DIRECTOR, COST ASSESSMENT AND PROGRAM EVALUATION (DCAPE)</u>. In coordination with other appropriate OSD offices, the OCJCS, the Military Departments, and the CCMDs, the DCAPE:
- a. Analyzes and evaluates plans, programs, and budgets with respect to EMS dependencies within DoD programs.
- b. Provides leadership in developing and promoting improved analytical tools and methods for analyzing the impacts of the EM environment on EMS-dependent systems.

- 10. <u>DIRECTOR</u>, <u>OPERATIONAL TEST AND EVALUATION</u> (<u>DOT&E</u>). In coordination with the Military Departments, U.S. Special Operations Command (USSOCOM), and the IC, the DOT&E oversees the incorporation of interoperability and threat-based EMS vulnerability assessments into the OT&E process to evaluate operational effectiveness and suitability.
- 11. <u>SECRETARIES OF THE MILITARY DEPARTMENTS</u>. Within their respective responsibilities under Title 10, U.S. Code (Reference (u)), the Secretaries of the Military Departments:
 - a. Organize, train, and equip service personnel to satisfy DoD EW requirements.
- b. Establish Military Department EW leadership with responsibilities to plan, program, direct, and manage Service EW policies, capabilities, and organizations to achieve control of the EMOE.
 - c. Develop Military Department EW doctrine and tactics.
- d. Develop, and update as needed, Service EW Roadmaps that support the DoD EW strategy developed and coordinated by the Joint Staff.
- e. Direct that all EMS-dependent capabilities are evaluated for vulnerability to potential hostile EMS activity, exploitation by foreign intelligence sources and methods, and inadvertent friendly EMI.
- f. Direct that test and evaluation of EMS-dependent capabilities are conducted in an operationally representative EM environment.
- g. Conduct research, development, test, and evaluation to develop EW capabilities to satisfy DoD requirements.
- h. Direct that EW programs and databases achieve maximum standardization, interoperability, and compatibility in fulfilling common worldwide requirements, in coordination with the USD(AT&L) and DoD CIO. Establish joint program offices when common EW capabilities are identified.
- i. Develop and conduct education, training, and exercises to provide for the successful planning, integration, and execution of EW in operationally representative environments.
 - j. Support USSTRATCOM's periodic assessments of EW capabilities.
- k. Ensure that EW training capability will be mission driven and be of sufficient quantity and complexity to address present and anticipated needs.

12. CJCS. The CJCS:

- a. Serves as the principal military EW advisor to the President, the National Security Council, and the Secretary of Defense.
- b. Develops and updates the National Military Strategy for EW. Incorporates the requirement to secure and maintain strategic access to the EMS.
- c. Supports the USD(AT&L) in the development and update of the DoD EW investment strategy and the USD(P) in the development and update of the DoD EW strategy.
- d. Oversees the integration and execution of EW-related activities assigned in DoDD 5100.01 (Reference (v)).
- e. Validates capability-based EW requirements through the Joint Requirements Oversight Council.
- f. Reviews regional military plans (operation plan and contingency plan), and monitors military operations in the geographic Combatant Commanders' areas of responsibility. Incorporates EW during the preparation of strategic plans and adequately apportions EW forces to CCMDs based on the Secretary's guidance for employment of the force. As required, constitutes and supervises response cells, crisis operating elements, and time-sensitive planning in support of JEMSO.
- g. Delineates the rules of engagement and the authorities for employment of EW capabilities to DoD personnel.
- h. Requires that tactics and employment are coordinated among the DoD Components and with allied nations as necessary.
- i. Establishes and maintains a uniform system for evaluating the EW preparedness of each CCMD to carry out assigned missions.
- j. Develops and maintains joint policies and doctrine for core, supportive, and related EW capabilities in joint operations. Directs that EW doctrine is adaptable to new and emerging threats and tactics.
- k. Ensures all joint education, training, plans, and operations include, and are consistent with, EW policy, strategy, and doctrine.
- 1. Coordinates joint training and manning requirements for EW in coordination with the Military Departments.

- m. Designates joint, Military Department, and multinational EW database and reprogramming responsibilities, and provides oversight of the joint, Service, and multinational EW database and reprogramming effort.
- n. Oversees continuity of U.S. efforts in the North Atlantic Treaty Organization's Military Committee to improve allied EW capability.
- o. Evaluates the capability of the unified and specified commands to operate in an operationally representative EM environment, and recommends appropriate corrective action to the respective commanders and the Secretary of Defense.

13. <u>COMBATANT COMMANDERS</u>. Through the CJCS, the Combatant Commanders:

- a. Integrate, plan, and execute EW when conducting campaigns across the range of military operations, and identify and prioritize EW operational requirements.
 - b. Support USSTRATCOM's periodic assessments of all EW capabilities.
- 14. <u>CDRUSSTRATCOM</u>. In addition to the duties in paragraph 13a of this enclosure, the CDRUSSTRATCOM advocates for joint EW capabilities to include:
- a. Identifying and prioritizing required joint EW capabilities across doctrine, organization, training, materiel, leadership and education, personnel, facilities and policy in support of CCMD missions and in accordance with DoD guidance for programming and planning.
 - b. Ensuring CCMD equities are integrated into strategic DoD goals and objectives for EW.
 - c. Providing contingency support of EW to other CCMDs.
 - d. Supporting CCMD joint training and planning related to controlling the EMS.
- e. Assisting CCMDs and Military Departments' components to plan, execute, and assess JEMSO across all domains.
- f. Collaborating with CCMDs and Military Departments' components in the development and evaluation of JEMSO-related tactics, techniques, and procedures in support of warfighter requirements.
- g. Coordinating with CCMDs and Military Departments' components to incorporate JEMSO into joint training and exercises.
 - h. Providing oversight of joint EW training.

- i. Sponsoring periodic joint exercises to develop, demonstrate, and assess EW capabilities and JEMSO tactics, techniques, and procedures.
 - j. Developing periodic assessments of DoD EW capabilities in coordination with CCMDs.
- 15. <u>COMMANDER, USSOCOM (CDRUSSOCOM)</u>. In addition to the duties in section 13 of this enclosure, the CDRUSSOCOM determines and articulates EW capabilities required in special operations and supports the other Combatant Commanders through the joint employment of special operations-specific EW capabilities.

GLOSSARY

PART I. ABBREVIATIONS AND ACRONYMS

ACAT ID Acquisition Category 1 (Defense Acquisition Executive is Decision

Authority)

CCMD Combatant Commands

CDRUSSOCOM Commander, United States Special Operations Command

CDRUSSTRATCOM Commander, United States Strategic Command

CJCS Chairman of the Joint Chiefs of Staff

DCAPE Director, Cost Assessment and Program Evaluation

DIA Defense Intelligence Agency

DIRNSA/CHCSS Director, National Security Agency/Chief, Central Security Service

DoD Clio DoD Chief Information Officer

DoDD DoD Directive
DoDI DoD Instruction

DOT&E Director, Operational Test and Evaluation

E3 electromagnetic environmental effects

EA electronic attack

EMC electronic compatibility

EME electromagnetic environment
EMI electromagnetic interference

EMOE electromagnetic operational environment

EMS electromagnetic spectrum
EP electronic protection

ES electronic warfare support

EW electronic warfare

FY fiscal year

IC Intelligence Community

JEMSO Joint Electromagnetic Spectrum Operations

LMDP Life Cycle Intelligence Mission Data Plans

MAIS major automated information system
MDAP major defense acquisition program

NAVWAR navigation warfare

OCJCS Office of the Chairman of the Joint Chiefs of Staff

SD spectrum dependent

USD(AT&L) Under Secretary of Defense for Acquisition, Technology, and Logistics

USD(I) Under Secretary of Defense for Intelligence

USD(P) Under Secretary of Defense for Policy

USD(P&R) Under Secretary of Defense for Personnel and Readiness

USSOCOM United States Special Operations Command

USSTRATCOM United States Strategic Command

PART II. DEFINITIONS

Unless otherwise noted, these terms and their definitions are for the purposes of this directive.

<u>EA</u>. Division of EW involving the use of EM energy, directed energy, or anti-radiation weapons to attack personnel, facilities, or equipment with the intent of degrading, neutralizing, or destroying enemy combat capability.

<u>electronic warfare support (ES)</u>. Division of EW involving actions tasked by, or under direct control of, an operational commander to search for, intercept, identify, and locate or localize sources of intentional and unintentional radiated EM energy for the purpose of immediate threat recognition, targeting, planning and conduct of future operations.

<u>EMOE</u>. The background EM environment and the friendly, neutral, and adversarial EM order of battle within the EM area of influence associated with a given operational area.

<u>EP</u>. Division of EW involving actions taken to protect personnel, facilities, and equipment from any effects of friendly or enemy use of the EMS that degrade, neutralize, or destroy friendly combat capability.

<u>EW</u>. Military action involving the use of EM and directed energy to control the EMS or to attack the enemy. EW consists of three divisions: EA, EP, and ES.

<u>IC</u>. A federation of Executive Branch agencies and organizations that work separately and together to conduct intelligence activities necessary for the conduct of foreign relations and the protection of the national security of the United States.

<u>JEMSO</u>. Activities consisting of EW and joint EM spectrum management operations used to exploit, attack, protect, and manage the EMOE.

<u>Joint Electromagnetic Spectrum Management Operations</u>. Interrelated functions of frequency management, host-nation coordination, and joint spectrum interference resolution that together, enable the planning, management, and execution of operations within the EMOE during all phases of military operations.

<u>MAIS</u>. A DoD program for the acquisition of an automated information system (either as a product or a service) if:

The program is designated by the Secretary of Defense, or a designee of the Secretary, as a MAIS program; or

The dollar value of the program is estimated to exceed:

\$32,000,000 in fiscal year (FY) 2000 constant dollars for all program costs in a single FY;

\$126,000,000 in FY 2000 constant dollars for all program acquisition costs for the entire program; or

\$378,000,000 in FY 2000 constant dollars for the total life cycle costs of the program (including operation and maintenance costs).

MDAP

A DoD acquisition program that is not a highly sensitive classified program (as determined by the Secretary of Defense) and:

That is designated by the Secretary of Defense as a major defense acquisition program; or

That is estimated by the Secretary of Defense to require an eventual total expenditure for research, development, test, and evaluation of more than \$300,000,000 (based on fiscal year 1990 constant dollars) or an eventual total expenditure for procurement of more than \$1,800,000,000 (based on fiscal year 1990 constant dollars).

The Secretary of Defense may adjust the amounts (and the base fiscal year) provided in subsection (a)(2) on the basis of DoD escalation rates. An adjustment under this subsection will be effective after the Secretary transmits a written notification of the adjustment to the Committee on Armed Services of the Senate and the Committee on Armed Services of the House of Representatives.

<u>NAVWAR</u>. Deliberate defensive and offensive action to assure and prevent positioning, navigation, and timing information through coordinated employment of space, cyberspace, and electronic warfare operations.

17 GLOSSARY