SUBJECT: Information Assurance (IA) in the Defense Acquisition System

References: See Enclosure 1

1. PURPOSE. This Instruction, in accordance with the authority in JTF CAPMED-D 5106.01 (Reference (a)):

   a. Establishes policy, assigns responsibilities, and prescribes procedures under Chapter 25 of title 40; DoD Directive 8500.1; and DoD Instruction 8500.2 (References (b), (c), and (d)) necessary to integrate IA into the Defense Acquisition System described in DoD Directive 5000.1 and DoD Instruction 5000.2 (References (e) and (f)).

   b. Describes required and recommended levels of IA activities relative to the acquisition of systems and services.

   c. Describes the essential elements of an Acquisition IA Strategy, its applicability, and prescribes an Acquisition IA Strategy submission and review process.

2. APPLICABILITY. This Instruction applies to:

   a. Joint Task Force National Capital Region Medical (JTF CapMed) and all Joint Medical Treatment Facilities (MTFs) and Centers in the National Capital Region (i.e., Fort Belvoir Community Hospital, Walter Reed National Military Medical Center, and the Joint Pathology Center).

   b. All acquisitions of automated information systems (AIS), outsourced information technology (IT)-based processes, and platforms or medical systems with IT interconnections to the Joint Medical Network and Global Information Grid (GIG).

3. DEFINITIONS. See Glossary
4. **POLICY.** It is JTF CapMed policy that:

   a. IA shall be implemented in all system and services acquisitions at levels appropriate to the system characteristics and requirements throughout the entire life cycle of the IT acquisition.

   b. All acquisitions of mission critical or mission essential IT systems, as defined in Reference (f), shall have an adequate and appropriate Acquisition IA Strategy that shall be reviewed prior to all acquisition milestone decisions, program decision reviews, and acquisition contract awards.

5. **RESPONSIBILITIES.** See Enclosure 2

6. **PROCEDURES.** See Enclosure 3

7. **RELEASABILITY.** UNLIMITED. This Instruction is approved for public release and is available on the Internet from the JTF CapMed Web Site at: www.capmed.mil.

8. **EFFECTIVE DATE.** This Instruction is effective immediately.

   [Signature]

   SCOTT WARDELL
   Executive Director for Administrative Operations
   By direction of the Commander

Enclosures

1. References
2. Responsibilities
3. Procedures

Glossary
ENCLOSURE 1

REFERENCES

(a) JTF CAPMED-D 5106.01, "Information Assurance Advisory Group (IAAG) Charter," May 10, 2011
(b) Chapter 25 of title 40, United States Code
(c) DoD Directive 8500.1, "Information Assurance," October 24, 2002
(d) DoD Instruction 8500.2, "Information Assurance (IA) Implementation," February 6, 2003
(g) DoD Instruction 8510.01, "DoD Information Assurance Certification and Accreditation Process (DIACAP)," November 28, 2007
(i) Office of Management and Budget Circular A-130, "Management of Federal Information Resources, Transmittal"
RESPONSIBILITIES

1. **JTF CAPMED CHIEF INFORMATION OFFICER (CIO).** The JTF CapMed CIO shall:
   
   a. Oversee implementation of this Instruction in coordination with the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)).
   
   b. Support the USD(AT&L) in developing guidance necessary to integrate IA into the Defense Acquisition System and the essential elements of an Acquisition IA Strategy submission and review process.
   
   c. Ensure IA is included for consideration prior to all acquisition milestone decisions, program decision reviews, and acquisition contract awards.
   
   d. Establish and implement procedures for the review of Acquisition IA Strategies from programs acquiring mission critical or mission essential IT.

2. **JTF CAPMED DEPUTY CIO.** The JTF CapMed Deputy CIO shall:
   
   a. Ensure IA is included for consideration prior to all acquisition milestone decisions, program decision reviews, and acquisition contract awards.
   
   b. Support the JTF CapMed CIO in overseeing implementation of this Instruction.
   
   c. Ensure that detailed procedures and processes for implementing IA in defense acquisitions and for developing an Acquisition IA Strategy are incorporated in guidance issued to the defense acquisition workforce.
   
   d. Ensure that principles and processes for implementing IA in defense acquisitions are included in the education and training of the defense acquisition workforce.

3. **JTF CAPMED CHIEF, IA.** The JTF CapMed Chief, IA shall provide support and guidance, as required, to Program Managers in developing an IA approach, and obtaining information systems security engineering services, to include describing information protection needs, defining and designing system security to meet those needs, and assessing the effectiveness of system security.

4. **JOINT MTF COMMANDERS AND CENTER DIRECTORS IN THE NATIONAL CAPITAL REGION.** The Directors, JTF CapMed and all Joint MTFs and Centers in the National Capital Region shall:
a. Ensure that IA is implemented in all system and service acquisitions in accordance with USD(AT&L) guidance, as issued.

b. Establish and implement internal management processes for the preparation and review of Acquisition IA Strategies at the DoD Component levels.

c. Designate a principal point of contact to represent the directorate on policy and procedural matters regarding IA in the IT acquisition system.

d. Establish and implement procedures for the submission and review of IT Acquisition IA Strategies from programs acquiring IT other than mission critical or mission essential IT, as desired.

5. PROGRAM MANAGERS. The Program Managers shall ensure that IA is fully integrated into all phases of their acquisition, upgrade, or modification programs, including initial design, development, testing, fielding, and operation.
PROCEDURES

1. Program Managers and other acquisition officials shall comply with the policy and procedures of References (c) and (d) for all acquisitions, except where the system or service being acquired does not utilize any IT, or where the IT component of the system being acquired consists solely of platform IT with no interconnection to external information systems or networks.

2. Significant features of compliance include:
   
a. Appointment of an IA Manager for the project.

   b. Determination of system Mission Assurance Category (MAC) and Confidentiality Level.

   c. Identification and implementation of appropriate system Baseline IA Controls according to Enclosure 4 of Reference (d).

   d. Planning and execution of the certification and accreditation process according to DoD Instruction 8510.01 (Reference (g)) and Director of Central Intelligence Directive 6/3 (Reference (h)), if applicable.

3. Program Managers shall also provide updated program IA status to all the stakeholders.

4. IT Acquisition IA strategy:

   a. Submission Requirements. Program Managers for acquisitions that include IT and are designated "mission critical" or "mission essential" systems as defined in Reference (i), shall prepare and submit an IT Acquisition IA Strategy. The directors may develop submission requirements for IT Acquisition IA Strategies for all other acquisitions as they deem appropriate.

   b. Review Process. IT Acquisition IA Strategies for all Acquisition Category (ACAT) identity and access management, ACAT Information Analysis Center, and ACAT identification programs shall be approved by the JTF CapMed Medical Center/Community Hospital CIOs and submitted to the JTF CapMed CIO for review prior to all acquisition milestone decisions, program decision reviews, and acquisition contract awards. The Directors are delegated the authority to conduct reviews of Acquisition IA Strategies on the behalf of the JTF CapMed CIO for all other acquisitions, and may delegate authority to approve Acquisition IA Strategies. The results of all reviews shall be documented and retained.
GLOSSARY
DEFINITIONS

acquisition program. A directed, funded effort that provides new, improved, or continuing material, medical, or information system or service capability in response to an approved need.

AIS. See DoD Information System.

AIS Application. For DoD IA purposes, an AIS application is the product or deliverable of an acquisition program such as those described in Reference (e). An AIS application performs clearly defined functions for which there are readily identifiable security considerations and needs that are addressed as part of the acquisition. An AIS application may be a single software application (e.g., Integrated Consumable Items Support); multiple software applications that are related to a single mission (e.g., payroll or personnel); or a combination of software and hardware performing a specific support function across a range of missions (e.g., Global Command and Control System, Defense Messaging System). AIS applications are deployed to enclaves for operations, and have their operational security needs assumed by the enclave. An AIS application is analogous to a "major application" as defined in Office of Management and Budget A-130 (Reference (j)); however, this term is not used in order to avoid confusion with the DoD acquisition category of Major Automated Information System.

confidentiality level. Applicable to DoD information systems, the confidentiality level is primarily used to establish acceptable access factors, such as requirements for individual security clearances or background investigations, access approvals, and need-to-know determinations; interconnection controls and approvals; and acceptable methods by which users may access the system (e.g., intranet, Internet, wireless). The Department of Defense has defined three confidentiality levels: classified, sensitive, and public.

data. Representation of facts, concepts, or instructions in a formalized manner suitable for communication, interpretation, or processing by humans or by automatic means. Any representations, such as characters or analog quantities, to which meaning is or might be assigned.

DoD Information Assurance Certification and Accreditation Process. The standard DoD process for identifying information security requirements, providing security solutions, and managing information system security activities.

DoD Information System. Set of information resources organized for the collection, storage, processing, maintenance, use, sharing, dissemination, disposition, display, or transmission of information. Includes AIS applications, enclaves, outsourced IT-based processes, and platform IT interconnections.

enclave. Collection of computing environments connected by one or more internal networks under the control of a single authority and security policy, including personnel and physical
security. Enclaves always assume the highest MAC and security classification of the AIS applications or outsourced IT-based processes they support, and derive their security needs from those systems. They provide standard IA capabilities such as boundary defense, incident detection and response, and key management, and also deliver common applications, such as office automation and electronic mail. Enclaves are analogous to general support systems, as defined in Reference (i). Enclaves may be specific to an organization or a mission, and the computing environments may be organized by physical proximity or by function independent of location. Examples of enclaves include local area networks and the applications they host, backbone networks, and data processing centers.

GIG. Globally interconnected, end-to-end set of information capabilities, associated processes, and personnel for collecting, processing, storing, disseminating, and managing information on demand to warfighters, policy makers, and support personnel. The GIG includes all owned and leased communications and computing systems and services, software (including applications), data, security services, and other associated services necessary to achieve information superiority. It also includes National Security Systems as defined in Reference (b). The GIG supports all DoD, National Security, and related Intelligence Community missions and functions (strategic, operational, tactical, and business) in war and in peace. The GIG provides capabilities from all operating locations (bases, posts, camps, stations, facilities, mobile platforms, and deployed sites). The GIG provides interfaces to coalition, allied, and non-DoD users and systems. Non-GIG IT is stand-alone, self-contained, or embedded IT that is not or shall not be connected to the enterprise network. The GIG includes any system, equipment, software, or service that meets one or more of the following criteria:

Transmits information to, receives information from, routes information among, or interchanges information among other equipment, software, and services.

Provides retention, organization, visualization, IA, or disposition of data, information, and/or knowledge received from or transmitted to other equipment, software, and services.

Processes data or information for use by other equipment, software, and services.

IA. Measures that protect and defend information and information systems by ensuring their availability, integrity, authentication, confidentiality, and non-repudiation. This includes providing for the restoration of information systems by incorporating protection, detection, and reaction capabilities.

IA Control. An objective IA condition of integrity, availability, or confidentiality achieved through the application of specific safeguards or through the regulation of specific activities that is expressed in a specified format (i.e., a control number, a control name, control text, and a control class). Specific management, personnel, operational, and technical controls are applied to each DoD information system to achieve an appropriate level of integrity, availability, and confidentiality in accordance with Reference (1).
information. Any communication or representation of knowledge, such as facts, data, or opinion in any medium or form, including textual, numerical, graphic, cartographic, narrative, or audiovisual forms.

IT. Any equipment or interconnected system or subsystem of equipment that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information by the DoD Component. For purposes of the preceding sentence, equipment is used by a DoD Component if the equipment is used by the DoD Component directly or is used by a contractor under a contract with the DoD Component that requires the following:

The use of such equipment; or

The use, to a significant extent, of such equipment in the performance of a service or the furnishing of a product. The term "information technology" includes computers, ancillary equipment, software, firmware and similar procedures, services (including support services), and related resources. Notwithstanding the above, the term "information technology" does not include any equipment that is acquired by a Federal contractor incidental to a Federal contract.

MAC. Applicable to DoD information systems, the MAC reflects the importance of information relative to the achievement of DoD goals and objectives, particularly the warfighters' combat mission. MACs are primarily used to determine the requirements for availability and integrity. The Department of Defense has three defined MACs:

MAC I. Systems handling information that is determined to be vital to the operational readiness or mission effectiveness of deployed and contingency forces in terms of both content and timeliness. The consequences of loss of integrity or availability of a MAC I system are unacceptable and could include the immediate and sustained loss of mission effectiveness. MAC I systems require the most stringent protection measures.

MAC II. Systems handling information that is important to the support of deployed and contingency forces. The consequences of loss of integrity are unacceptable. Loss of availability is difficult to deal with and can only be tolerated for a short time. The consequences could include delay or degradation in providing important support services or commodities that may seriously impact mission effectiveness or operational readiness. MAC II systems require additional safeguards beyond best practices to ensure adequate assurance.

MAC III. Systems handling information that is necessary for the conduct of day-to-day business, but does not materially affect support to deployed or contingency forces in the short term. The consequences of loss of integrity or availability can be tolerated or overcome without significant impacts on mission effectiveness or operational readiness. The consequences could include the delay or degradation of services or commodities enabling routine activities. MAC III systems require protective measures, techniques, or procedures generally commensurate with commercial best practices.
Major Automated Information System. An acquisition program where the dollar value estimated by the DoD Component Head is to require program costs (all appropriations) in any single year in excess of $32 million in fiscal year (FY) 2000 constant dollars, total program costs in excess of $126 million in FY 2000 constant dollars, or total life-cycle costs in excess of $378 million in FY 2000 constant dollars, or Milestone Decision Authority designation as special interest.

Mission Critical Information System. A system that meets the definitions of "information system" and "national security system" in Reference (b), the loss of which would cause the stoppage of warfighter operations or direct mission support of warfighter operations. (The designation of mission critical shall be made by a Component Head, a Combatant Commander, or their designee. A financial management IT system shall be considered a mission-critical IT system as defined by the USD(Comptroller). A "Mission-Critical Information Technology System" has the same meaning as a "Mission-Critical Information System."

Mission Essential Information System. A system that meets the definition of "information system" in Reference (b), that the acquiring Component Head or designee determines is basic and necessary for the accomplishment of the organizational mission. (The designation of mission essential shall be made by a Component Head, a Combatant Commander, or their designee. A financial management IT system shall be considered a mission-essential IT system as defined by the USD(Comptroller). A "Mission-Essential Information Technology System" has the same meaning as a "Mission-Essential Information System."

outsourced IT-based process. For DoD IA purposes, an outsourced IT-based process is a general term used to refer to outsourced business processes supported by private sector information systems, outsourced information technologies, or outsourced information services. An outsourced IT-based process performs clearly defined functions for which there are readily identifiable security considerations and needs that are addressed in both acquisition and operations.

platform IT interconnection. For DoD IA purposes, platform IT interconnection refers to network access to platform IT. Platform IT interconnection has readily identifiable security considerations and needs that must be addressed in both acquisition and operations. Platform IT refers to computer resources, both hardware and software, that are physically part of, dedicated to, or essential in real time to the mission performance of special purpose systems, such as weapons, training simulators, diagnostic test and maintenance equipment, calibration equipment, equipment used in the research and development of weapons systems, medical technologies, transport vehicles, buildings, and utility distribution systems such as water and electric. Examples of platform IT interconnections that impose security considerations include communications interfaces for data exchanges with enclaves for mission planning or execution, remote administration, and remote upgrade or reconfiguration.

Program Manager. The designated individual with responsibility for and authority to accomplish program objectives for development, production, and sustainment to meet the user's operational needs. The Program Manager shall be accountable for credible cost, schedule, and performance reporting to the Milestone Decision Authority.