COMMUNICATIONS AND INFORMATION MANAGEMENT GUIDANCE AND RESPONSIBILITIES

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

NOTICE: This publication is available digitally on the SAF/AAD WWW site at: http://afpubs.hq.af.mil. If you lack access, contact your Publishing Distribution Office (PDO).

This instruction implements Air Force Policy Directive (AFPD) 33-1, *Command, Control, Communications, and Computer (C^4) Systems*. It provides management procedures for commanders to ensure availability, interoperability, and maintainability of communications and information systems in support of mission readiness and war fighting capability. This instruction covers general guidance and responsibilities for effective and efficient management of systems throughout their life-cycle. Specific communications and information guidance and procedures are in other Air Force 10, 21, 33 and 36-series publications. Guidance on requirements processing and acquisition of communications and information systems costing $5 million or more to acquire, requiring development, an interface to support joint operations, or specifically selected by Headquarters United States Air Force (HQ USAF), is found in Air Force Instruction (AFI) 10-601, *Mission Needs and Operational Requirements Guidance and Procedures,* and the Air Force 63-series publications. Refer recommended changes and conflicts between this and other publications, using Air Force Form 847, **Recommendation for Change of Publication**, through channels, to Headquarters Air Force Communications Agency (HQ AFCA)/XPXP, 203 West Losey Street, Room 1060, Scott AFB IL 62225-5233. See **Attachment 1** for a glossary of references, abbreviations, acronyms, and terms used in this instruction.

SUMMARY OF REVISIONS

This revision updates the title of the AFI and Air Force organizational terminology from C^4 to communications and information to reflect the Air Force integration of the communications (SC) and information management (IM) functions. It adds duties as a result of the SC-IM integration as well as those required by Chairman Joint Chiefs of Staff (CJCS) Memorandum of Policy (MOP) 37, *Military Satellite Communication System.* Air Force Space Command also assumes responsibilities as a result of CJCS MOP 37. The revision adds the responsibility for appointing a major command (MAJCOM) and field operating agency (FOA) Data Administrator and the requirement to use the Defense Integration Support Tool (DIST), where applicable. The revision changes responsibilities of HQ USAF Functional Managers. It

rewords their responsibilities during operational reviews of fielded systems to include MAJCOM involvement; and requires them to include Air Force-wide programs in the base communications and information systems blueprint; and involve FOAs and direct reporting units (DRU) in planning efforts. The revision reorganizes and changes MAJCOM responsibilities. It requires the MAJCOM to appoint a Command, Control, Communications, Computers and Intelligence (C^4I) Architect and to functionally review MAJCOM-unique communications and information systems at least once every three years. The revision requires both base and MAJCOM activities to ensure architectural compliance, proper classification and functional support during approval of the base communications and information systems blueprint. The revision adds installation commander's responsibilities where a wing commander is not authorized. It adds the responsibility for tenant unit commanders to coordinate with the base Communications and Information Systems Officer (CSO) to ensure integration and interoperability. The revision adds information about electronic mail and the internet. The revision prescribes AF Form 209, **Information Management Operations After-Action Report**. It adds **Attachment 2** to help users develop a checklist that manages taskings imposed by this publication. AF Form 2519, **All Purpose Checklist,** can be used as a tool to create the checklist.

1. Responsibilities and Authorities.

1.1. HQ USAF/SC. The director for Communications and Information, through the Air Force Communications and Information Center (AFCIC), a DRU and its FOAs, develops Air Force doctrine and policy for communications and information management. This includes strategic planning, programming, management, security, and use of systems, including systems that fall under the information resources management (IRM) program. HQ USAF/SC, as the Deputy to the Chief Information Officer, Assistant Secretary of the Air Force for Acquisition (SAF/AQ), manages the IM and information technology (IT) portion of the IRM Program and advises on IT resource acquisition policy. HQ USAF/SC and HQ AFCIC:

1.1.1. Develop and coordinate the Air Force position on policy and procedures. Represent Air Force interests to the Assistant Secretary of Defense/C3I in matters concerning communications and information systems. Also provide liaison with other Department of Defense (DoD) components that develop policies that affect the DoD and Air Force.

1.1.2. Ensure effective and efficient management of Air Force systems worldwide and provide management oversight for fielded Air Force systems (see 33-series publications). Recommend approval or disapproval of waiver requests to SAF/AQR on United States Air Force (USAF) programming language policy, according to DoD Directive 3405.1, *Computer Programming Language Policy,* April 2, 1987. Resolve disagreements on noncompliance with the planning and architectural guidance between MAJCOM or functional managers.

1.1.3. Responsible for information policy under AFPD 37-1, *Air Force Information Management* (will convert to AFPD 33-3). See the 37-series publications (will convert to 33-series publications) for detailed policy and procedures.

1.1.4. Provide information protection management for the Air Force (see AFPD 33-2, *Information Protection*).

1.1.5. Coordinate with SAF/AQ and HQ Air Force Materiel Command (AFMC) on standards developed as part of the mission critical computer resources standardization area. Serve as the Air

Force co-representative with SAF/AQ to the Standards Coordinating Committee. Implement and monitor policy for software work force development and software technology and transition to include the development, execution and maintenance of the Air Force Software Management Plan, and continuous Air Force-wide software engineering process improvement.

1.1.6. Serve as the Air Force executive agent for the Defense Information Systems Network.

1.1.7. Functionally manage Air Force specialty codes (AFSC) 3VXXX, 33XX 3AXXX, 3CXXX, 3RXXX and 8MOOO officer and enlisted career fields.

1.1.8. Serve as Air Force senior representative for visual information (VI).

1.1.9. Serve as Air Force C^4I Architect responsible for ensuring codes, standards, and architectural compliance in all Air Force-wide and Air Force portions of joint or combined C^4I systems and capabilities.

1.1.10. Serve as the Systems Manager for those Military Satellite Communications Systems delegated to the Air Force by CJCS MOP 37.

1.2. HQ Air Force Functional Managers. Functional managers chair their own requirements boards (see AFI 33-103, *Requirements Development and Processing*). They prepare and process requirements documents for Air Force-wide systems that support their areas. They will:

1.2.1. Prepare and annually update a functional area plan as part of their Mission Area or Mission Area Support Plans.

1.2.2. Provide their plan to MAJCOM functional managers for inclusion in the MAJCOM Mission Area Plans.

1.2.3. Prepare, coordinate, validate, and approve Operational Requirements Documents.

1.2.4. Validate and coordinate Program Management Directives.

1.2.5. Develop and maintain operational architectures.

1.2.6. Perform operational systems reviews of fielded systems that directly support the functional area at least once every three years in conjunction with the using or affected MAJCOM functional and communications and information staffs. The purpose of the review is to ensure the continued need for the system. The review entails a review of the functional requirement that resulted in the system and the systems continued ability to support the requirement. Determine if the operation and maintenance costs warrant continued operation.

1.2.7. Develop and maintain standard data elements needed to support their functional area and share data with other functional areas. (DoD Directive 8320.1, *DoD Data Administration*, September 26, 1991, and AFI 33-110, *Data Administration Program*).

1.2.8. Ensure Air Force-wide programs are included in base communications and information systems blueprints.

1.2.9. Ensure DRUs and FOAs are included in planning for Air Force-wide programs.

1.3. MAJCOM Responsibilities.

1.3.1. Designate a CSO and a single staff element for overall management of communications and information systems. The CSO provides technical advice to the commander.

1.3.2. Appoint a MAJCOM C^{4}I Architect responsible for ensuring compliance with planning, requirements and architectural processes in all MAJCOM-wide systems and capabilities. Command architects should develop architectures consistent with direction and guidance of Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) Architecture Framework published by the Office of the Assistant Secretary of Defense/C3I. When designated as lead command, the MAJCOM architect is also responsible for ensuring compliance of assigned systems. The MAJCOM Architect is usually the MAJCOM CSO. (See AFIs 33-102, *Command, Control, Communications, Computers, and Intelligence (C^{4}I) Capabilities Planning Process*, 33-103; 33-104, *Base-Level Planning and Implementation;* 33-108, *Compatibility, Interoperability, and Integration of Command, Control, Communications, and Computer (C^4) Systems;* 10-901, *Lead Operating Command--Command, Control, Communications, Computers, and Intelligence (C^{4}I) Systems Management*; and AFMAN 33-125, *Technical Reference Codes*).

1.3.3. Serve as the Air Force lead command and Air Force-wide systems manager for assigned systems according to AFI 10-901. A lead command is the advocate for multi-command (Air Force-wide) systems. Advocacy includes planning and programming for acquisition, installation, training, sustainment, testing and initial operating capability for new systems. The lead command has total system oversight.

1.3.4. MAJCOMs implement DoD Directive-C-3222.5, *Electromagnetic Compatibility (EMC) Management Program for SIGINT Sites (U)*, April 22, 1987.

1.3.5. MAJCOMs and FOAs . Designate a MAJCOM Data Administrator to manage the data administration program (see AFI 33-110).

1.3.6. The CSO and Communications and Information staff element will:

1.3.6.1. Develop MAJCOM policy, plans, and architectures.

1.3.6.2. Plan, program, and budget for engineering, installation, operation, and maintenance of MAJCOM-unique and the command's portion of Air Force-wide systems.

1.3.6.3. Establish a MAJCOM systems integration function to model and maintain current architecture.

1.3.6.4. Ensure the integrity and interoperability of systems using configuration management methods according to AFI 33-108.

1.3.6.5. Establish a system to redistribute excess software and hardware within the MAJCOM to meet MAJCOM needs and report the excess not redistributed to AFCIC/SYSS, 1250 Air Force Pentagon, Washington DC 20330-1250 (AFI 33-112), *Automatic Data Processing Equipment (ADPE) Management.*

1.3.6.6. Appoint a MAJCOM frequency manager according to AFI 33-118, *Radio Frequency Spectrum Management*.

1.3.6.7. Appoint a MAJCOM VI manager according to AFI 33-117, *Visual Information (VI) Management*.

1.3.6.8. Identify and collect new requirements and incorporate into the MAJCOM and base communications and information systems blueprints, as necessary.

1.3.6.9. Coordinate planned requirements with the command-level systems telecommunications engineering manager (STEM-C).

1.3.6.10. Approve subordinate base communications and information systems blueprints, ensuring architectural compliance, proper classification, and functional support. Ensure the appropriate information in the communications and information systems blueprints is provided to the civil engineer for use in the civil engineer's base comprehensive plans and military construction programs.

1.3.6.11. Appoint a MAJCOM Equipment Control Officer (MECO) for computers and information technology equipment (see AFI 33-112).

1.3.6.12. Appoint MAJCOM primary and alternate focal points to review and comment on draft standards; develop and represent MAJCOM positions on standards-related issues; identify, document and forward standards-related problems to HQ AFCA/TC, 203 W. Losey St., Room 2000, Scott AFB IL 62225-5224, for action; and assist with the development of standards when requested by HQ AFCA.

1.3.6.13. Support and assist functional managers with their operational systems reviews for fielded Air Force and MAJCOM-unique systems.

1.3.6.14. Develop a process to review MAJCOM requirements (see AFI 33-103).

1.3.7. MAJCOM functional managers will:

1.3.7.1. Ensure that functional area planning is included in the MAJCOM Mission Area Plans according to AFI 10-1401, *Modernization Planning Documentation.* Involve the communications and information staff.

1.3.7.2. Review their MAJCOM-unique systems at least once every three years to ensure the continued need for the system. Review the requirement that resulted in the system and the system's continued ability to support the requirement. Determine if the operation and maintenance costs warrant continued operation. Involve the MAJCOM communications and information staff in the review.

1.4. In addition to other MAJCOM responsibilities, AFMC will:

1.4.1. Provide specific common-user Air Force-wide systems and services, and support these systems throughout their life-cycle.

1.4.2. Engineer and install communications and information, weather, and air traffic control and landing systems when directed or requested.

1.4.3. Maintain Communications and Computer Systems Installation Records (CSIRs) according to AFI 21-404, *Developing and Maintaining Communications and Computer Systems Installation Records*.

1.4.4. Provide system telecommunications engineering managers (STEM) for each MAJCOM and base.

1.4.5. Serve as the Air Force focal point for development and maintenance of base communications and information systems blueprints.

1.5. In addition to other MAJCOM responsibilities, Air Mobility Command will:

1.5.1. Manage the Air Force combat camera program and resources to include readiness training for all Air Force combat camera forces.

1.5.2. Provide advisory services, as requested, for base VI activities, to include maintaining a model performance work statement for use in contracting for VI products and services.

1.5.3. Act as the Mystic Star systems manager according to AFI 33-106, *Managing High Frequency Radios, Land Mobile Radios, Cellular Telephones and the Military Affiliate Radio Systems.*

1.6. In addition to other MAJCOM responsibilities, Air Force Space Command will:

1.6.1. Serve as the System Operational Manager of the communications systems and payloads on the Military Satellite Communications (MILSATCOM) systems for which the Air Force is the Systems Manager under CJCS MOP 37.

1.7. HQ AFCA will provide HQ USAF/SC and the AFCIC the capability to promote integration and interoperability among systems across the Air Force as prescribed in Air Force Mission Directive (AFMD) 24, *Headquarters Air Force Command, Control, Communications, and Computer Agency* (will convert to AFCIC MD 1)*.*

1.8. HQ Air Force Frequency Management Agency serves as the Air Force executive agent for managing Air Force use of the radio frequency spectrum as detailed in AFI 33-118 and AFCIC MD 2, *Air Force Frequency Management Agency.*

1.9. Commanders at all levels will:

1.9.1. Plan for and manage communications and information systems under their control.

1.9.2. Ensure the supporting CSO reviews all operation plans, concept plans, continuity of operations plans, contingency plans, support plans, and other plans involving communications and information resources or activities, and develops sound comprehensive annexes and appendices (where applicable) to support the commander's mission (see 10-series publications).

1.10. Wing commanders (Installation commander at installations without a wing commander) will:

1.10.1. Designate the host wing communications officer as the base CSO. The CSO is responsible for meeting the wing's and assigned tenant's communication and information mission needs. The CSO also serves as the focal point for the installation's non-mission systems needs and as the accountable officer for computer hardware and software.

1.10.2. Appoint a C^4I Architect to ensure compliance with requirements, plans and architectures. The C4I Architect is usually the base CSO. (See AFIs 33-102, 33-103, 33-104, 33-108, 10-901, and AFMAN 33-125.)

1.10.3. Serve as the base-level approval authority for the base communications and information systems blueprint, blueprint phase implementation directive (BPID), and requirements documents submitted for implementation of communications and information systems. Ensure architectural compliance, proper classification, and functional review and support prior to communications and information systems blueprint approval. The base civil engineer's review is essential to ensure the base military construction program, and comprehensive plan are consistent with the communications and information systems blueprint. (See AFIs 33-102, 33-103, and 33-104.)

1.11. Commanders of tenant activities:

1.11.1. Appoint a CSO to serve as their single focal point and accountable officer for their activity's systems when they have a large quantity of communications and information systems. Define specific tenant and base CSO responsibilities in the support agreement.

1.11.2. All tenant units must coordinate with the base CSO to ensure their systems will integrate and interoperate, when necessary, with the Defense Information Infrastructure, and Air Force and host base systems.

1.12. Base CSOs will:

1.12.1. Organize, train and lead all assigned communications and information personnel.

1.12.2. Meet the wing's communications and information mission needs (to include planning, organizing and deploying communications and information systems to support the wing or it's elements when they deploy).

1.12.3. Ensure elements of the base communications and information environment and infrastructure, including mobile assets, continue to satisfy customers' mission needs.

1.12.4. Manage the base-level infrastructure, host systems, and tenant systems as defined in support agreements, and establish a base systems integration function.

1.12.5. Plan the evolution of systems supporting the base user's missions; ensure war, support, and contingency planning are accomplished for communications and information requirements.

1.12.6. Develop communications and information annexes and appendices, contingency plans and support plans, and review and assist with the development of tenant plans involving communications and information resources or activities.

1.12.7. Identify and collect communications and information systems infrastructure requirements and incorporate into the base communications and information systems blueprint, as necessary.

1.12.8. Coordinate plans and requirements with the base-level STEM (STEM-B) to ensure incorporation into the base communications and information systems blueprint, which serves as the base's comprehensive communications and information planning and implementation document.

1.12.9. Coordinate STEM-B visits with base-level functional area managers.

1.12.10. Coordinate the communications and information systems blueprint with the host wing and other tenant units. Ensure the communication and information systems blueprint, the base comprehensive plan, and military construction programs complement each other (see AFI 33-104 and AFI 32-7062, *Air Force Comprehensive Planning*.)

1.12.11. Serve as the base-level approval authority for BPID and other requirements documents submitted for implementation of communications and information systems, if the wing commander delegates the approval authority.

1.12.12. Serve as the overall interface with the STEM-B to establish priorities and render decisions concerning the base communications and information infrastructure.

1.12.13. Manage communications and information projects (see AFI 33-104).

1.12.14. Maintain a master file of CSIRs for base-supported systems or facilities.

1.12.15. Prevent or minimize electromagnetic interference and electromagnetic radiation hazards.

1.12.16. Manage the base frequency management program (see AFI 33-118).

1.12.17. Establish a focal point for determining base-level training requirements, and provide for customer training.

1.12.18. Account for all computer hardware and software in the information processing management system (IPMS) (see paragraph 6.1. and AFI 33-112).

1.12.19. Appoint a base visual information manager (BVIM) to manage base VI activities. The BVIM establishes clearly defined local controls to ensure visual information resources are used for official purposes and are managed in the most effective and efficient manner. The BVIM will coordinate on host and tenant unit VI supply and equipment requests, as required, before base supply processes them (see AFI 33-117).

1.12.20. Establish a single customer contact for automated systems and network problems, system administration requirements, and system and network protection requirements (such as Air Force Network Control Center) (see AFI 33-115, *Network Management*).

1.12.21. For bases with deployable wings, provide trained personnel and sufficient equipment to support the wing's deployable commitments.

1.12.22. Establish a periodic wing-level planning forum to discuss current and future issues affecting the wing's communications and information infrastructure and the various systems it supports (see AFI 33-104).

1.12.23. Assign an individual as the functional manager with collateral responsibility, to the personnel community, for accession, training, classification, utilization, and career development of enlisted information management (3A0X1) personnel. These personnel operate in every functional area and although most are not assigned to the communications unit, they are specialized extensions of the total capability for SC to support the Air Force mission. A network of open communications is critical among these personnel at all levels.

1.13. STEM Responsibilities. (Note: All STEMs are assigned to the 38 EIW and perform duties to ensure their customers have integrated, interoperable communications and information systems in support of the base, MAJCOM, Air Force, and joint missions.)

1.13.1. STEM-C will:

1.13.1.1. Serve as a communications and information systems technical advisor to the MAJCOM commander and CSO.

1.13.1.2. Assist the MAJCOM in developing communications and information systems target architecture.

1.13.1.3. Provide the MAJCOM information to support program objective memorandum (POM) submittals.

1.13.1.4. Interface between the MAJCOM and STEM-Bs to facilitate development of base communications and information systems blueprints.

1.13.1.5. Assist the MAJCOM in developing standard configurations for implementation of the base infrastructure.

1.13.1.6. Review all base communications and information systems blueprints with the MAJ-COM, and coordinate approval through the MAJCOM.

1.13.1.7. Develop an overall MAJCOM communications and information systems blueprint.

1.13.2. STEM-B will:

1.13.2.1. Coordinate with the host base CSO, tenants and all functional area managers at the base to determine plans that will impact the base communications and information systems infrastructure.

1.13.2.2. Serve the wing (or installation) commander and CSO as a communications and information technical advisor.

1.13.2.3. Develop, update, and maintain the base communication and information systems blueprint.

1.13.2.4. Develop BPIDs, as requested, to further define the requirements. Provide technical solutions and cost estimates when the requirement is not in the communications and information systems blueprint.

1.13.2.5. Review all requirements that have an infrastructure impact.

1.13.3. STEM Telecommunications Manager (STEM-TM) will:

1.13.3.1. Serve as functional area advisors for planning, programming and budgeting for communications and information facilities or systems to implement MAJCOM and base architectures.

1.13.3.2. Directly support the STEM-B and STEM-C with programmatic planning support.

1.13.3.3. Serve as liaison to the MAJCOMs and bases, for near and long-term requirements.

1.13.3.4. Provide administrative management of the development, maintenance, and implementation of communication and information system blueprints.

1.13.3.5. Process requirements and implementation documents, such as program management documents (PMD), communications and information system requirements documents (CSRD), and BPIDs.

1.13.3.6. Implement policies and procedures and support all aspects of the communications and information systems blueprint process.

1.13.4. The Joint STEM (STEM-J) will:

1.13.4.1. Promote interoperability by providing an interface between CINCs, Joint Staff and Defense Information Systems Agency (DISA), and the Air Force MAJCOMs and bases.

2. General Guidance.

2.1. Commanders plan, acquire, operate, and maintain systems consistent with the Technical Architecture Framework for Information Management (TAFIM), Joint Technical Architecture, Air Force Technical Reference Codes (TRC), Air Force and MAJCOM plans, architectures, and communications and information systems blueprints. They develop and maintain their communication and information plans and architectures according to AFI 33-102, 33-2XX-series publications and AFMAN

33-125. Commanders manage information and data according to appropriate information management policies in 37-series publications and AFI 33-110.

2.2. All levels of command ensure compatibility and interoperability with those of other functional communities where operational requirements dictate. Satisfy compatibility, interoperability, and security requirements before fielding a system, and maintain them throughout the life of each system (see DoD Directive 4630.5, *Compatibility, Interoperability, and Integration of Command, Control, Communications, and Intelligence (C³I) Systems*, November 12, 1992).

2.3. Provide specific performance-based requirements and associated language in Air Force acquisition documents to ensure compliance with mandatory systems standards. Find additional information in DISA Technical Reference Model. Find additional information concerning acquisition of communications and information equipment requiring research and development in Military Standard (MIL-STD)-188-100 series.

2.4. Include information management public law issues in all planning. This includes records management, reports control, information collection control, Privacy Act, Freedom of Information Act, The Paperwork Reduction Act, Information Technology Management Reform Act, and the Government Performance Results Act.

2.5. Air Force Engineering and Installation (EI) standards establish guidelines for uniformity of project EI practices. All personnel must ensure their facilities are standardized, where possible, using preferred items of equipment.

2.6. Document Air Force automated information systems according to MIL-STD-498, *Defense System Software Development*. Note: MIL-STD-498 will be replaced by International Standards Organization (ISO)/IEC 12207, J-STD-0162.2/Institute of Electrical and Electronic Engineers P1448/EIA PN3764 (US implementation of ISO/IEC 12207). Use these standards, and best commercial practices, when available.

2.7. Provide adequate security for all systems, to protect the information they process and the availability of the system.

2.8. Embedded computers are normally not communications and information assets. They are part of a weapon system and managed according to procedures prescribed by AFI 10-601.

2.9. To provide for life-cycle management of communications and information assets, base-level CSOs and AFMC develop and maintain CSIRs for all Air Force-owned, organic or contractor-maintained, fixed-plant, systems (see AFI 21-404). The supporting CSO provides the single point of contact for maintenance whether performed by contract, DoD civilian, or active-duty military resources.

2.10. Consolidate VI activities at headquarters and base level. Control and authorize Air Force VI activities through issuance of a Defense Visual Information Activity Number (DVIAN) (AFI 33-117). MAJCOMs inform AFCIC/SYSM of additions, changes or deletions to the DVIAN database.

2.11. The base communications and information systems blueprint, developed and maintained by the STEM-B in coordination with the base CSO, serves as part of the base's planning, and may be used as a basis for requirements development and implementation. Coordinate all requirements that impact the infrastructure with the STEM-B to maintain the integrity of the communications and information systems blueprint. BPIDs may direct implementation of a portion of the communications and information systems blueprint and authorize expenditure of resources.

2.12. Communication and information personnel participating in deployments or exercises may use AF Form 209, **Information Management Operations After-Action Report,** RCS: HAF-SC(AR)8703 (formerly RCS: SAF-AAI(AR)8702) to report their pre-deployment preparation status and deployment duties. Base-level communications and information units will use the results of these reports to improve pre-deployment briefings in order to better prepare personnel tasked to deploy. In addition, MAJCOM and Air Staff Functional Area Managers and planners will analyze the results to more accurately assess deployed requirements versus individual qualifications (e.g., were the duties performed commensurate with the grade requested? Was the correct AFSC requested?). This report is designated emergency status code D (i.e., discontinue reporting during emergency conditions).

2.12.1. Unit planners will provide communications and information personnel with AF Forms 209 before they deploy and advise them to return completed forms to the unit OPR upon their return to the duty station. The unit uses the information to improve planning and deployment operations at base level and forwards a copy to the MAJCOM/FOA functional area managers (FAM) for IM, VI, and other communications and information areas.

2.12.2. FAMs analyze requirements and discrepancies, suggest corrective actions, share lessons learned, and send analyses and associated data to the Air Force Communications and Information Center, Tactical Systems Branch (AFCIC/SYOT), 1250 Air Force Pentagon, Washington DC 20330-1250, for use in Air Force planning.

3. Planning.

3.1. AFI 33-102 describes a management process for developing architectures and plans, and it provides general guidance in applying policy, standards, and resources to develop and maintain strategic plans. Certify all systems developed for joint operations, as defined by CJCSI 6212.01, *Compatibility, Interoperability, and Integration of Command, Control, Communications, Computers, and Intelligence Systems*, as interoperable with systems that they have a requirement to exchange information with. See AFI 33-108 for more information.

3.2. Functional area offices survey their area of responsibility and then create functional and physical models to lay the foundation for developing plans and architectures. Develop strategic plans and ensure inclusion of supporting communications and information in Mission Area Plans and Mission Support Plans.

3.3. Include information protection in all planning (see AFPD 33-2*).*

3.4. Include communications services prewiring for all major and minor construction projects according to AFPD 32-80, *Facility Design and Construction,* and HQ USAF Engineering Technical Letter 87-9.

4. Requirements Development. This instruction and AFI 33-103 cover requirements for new non-developmental capabilities or to sustain existing systems with an expected acquisition cost of less than $5 million. Process requirements costing $5 million or more, requiring development, requiring an interface to support joint operations, or specifically selected by HQ USAF, according to AFI 10-601 and manage these requirements under the 63-series directives.

4.1. Tenant units on Air Force installations coordinate with the supporting CSO to determine the impact of their required systems on the base infrastructure. The CSO and tenant organizations may

negotiate a list of requirements that do not require CSO coordination. Tenant units requiring support from the host CSO submit requirements according to local procedures.

4.2. The STEM-B reviews requirements impacting the base infrastructure. The STEM-B reviews technical solutions for these requirements and incorporates them into the base communications and information systems blueprint.

4.3. After the CSO provides a technical solution that ensures architectural compliance, allocation of resources by the appropriate authority constitutes approval for implementation.

5. Project Implementation.

5.1. CSOs must manage project implementation to deliver a product on time that fulfills the requirement and is supportable throughout its life-cycle. They must make sure project acquisition conforms to the law as reflected in the Federal Acquisition Regulation (FAR), the DoD and Air Force FAR Supplements, Air Force Acquisition Circulars, and other applicable DoD and Air Force guidance. They ensure the use of competitive procurement practices to obtain resources at the lowest cost and offering the best value to the Air Force over the life-cycle for all projects. They must plan projects under a phased, life-cycle oriented approach to implement, operate, and support the projects.

5.2. The Implementing Activity Commander will:

5.2.1. Designate a single project manager to head each project.

5.2.2. Act as the project decision authority, and oversee project accomplishments, actual cost, and progress.

5.2.3. Reuse excess computer hardware and software where possible.

5.2.4. Reuse or adapt for use Air Force-owned software listed in the DIST for projects to satisfy requirements whenever economically possible. Review (or update) the DIST database on-line at *http://dist.disa.mil*.

5.2.5. List all Air Force-developed software requiring over 80 man-hours to develop, or contracted software costing over $5,000 in the DIST.

5.2.6. Use DoD and Air Force infrastructure support contracts whenever possible.

5.3. The CSO:

5.3.1. The CSO meets all Air Force computer needs, including network acquisitions, using DoD and Air Force infrastructure support contracts, when possible. Based on technical requirements, critical time constraints, or significant cost savings; however, MAJCOM CSOs may grant waivers. Each waiver request must demonstrate why the user requirement should not be satisfied by the mandatory use contracts.

5.3.2. The CSO or the program manager, orders, receives, and accepts centrally managed national stock numbered resources and supplies according to AFMAN 23-110V2, *USAF Supply Manual (FOUO)*.

5.3.3. The CSO or the program manager, orders all communication and information equipment, to include hardware and software, through base supply or the supporting procurement office. The contracting office obligates funds only for those resources identified in the technical solution (i.e., resulting from a CSRD, BPID, or as otherwise prescribed in AFI 33-103) or required for mainte-

nance. When a CSO, or program management office orders resources for distribution to other bases, they must notify the CSO and the user at the receiving base prior to ordering the resources.

5.3.4. Accounts for computer hardware and software in the IPMS according to AFI 33-112. The CSO or user is responsible for government acceptance of the equipment.

5.3.5. Coordinates with the STEM-B for development of the BPIDs and other project implementing directives.

5.4. The using organization is responsible for installation of computer hardware and software unless it has made previous arrangements (such as vendor installation or CSO installation). The CSO and the using organization plan and execute installation requirements. When a computer system processes classified information, users must contact the base emission security (EMSEC) manager for specific EMSEC installation requirements.

6. Systems Operation and Support.

6.1. IPMS. The IPMS is the official Air Force record of computer equipment authorization, inventory, transactions, and status. The CSO accounts for all computer equipment that cost more than $500, and software that costs $5,000 or more in IPMS. When cost cannot be determined or equipment is obtained through the reuse program account for computer equipment with a replacement value of $500 or more in IPMS. For registering computer system security accreditation as a minimum the main central processing unit of each system must be included in the IPMS regardless of unit cost. Inventory all items annually.

6.2. Air Force Equipment Management System (AFEMS). The AFEMS is the official inventory system and accounts for communications, electronics, and other equipment centrally managed by AFMC. The CSO assists users to account for their assets.

6.3. Consolidation of Resources. Commanders at all levels consolidate assets to maximize resource effectiveness and reduce costs where mission requirements do not require redundancy.

6.4. Contract Review. The program manager reviews systems support and service contracts annually. When systems or components require modernization to ensure cost-effective mission accomplishment, the system manager initiates the required programming and acquisition actions. Reviews will include:

6.4.1. Determination of contractor performance.

6.4.2. Cost and mission effectiveness.

6.4.3. Essentiality of services.

6.4.4. Identification of critical functions for contingency operations.

6.5. Telephone Service. The Air Force provides telephone service for official use only. The Air Force offers service to unofficial users only in an emergency or when an installation cannot reasonably obtain commercial service for its unofficial needs. See AFI 33-111, *Telephone Systems Management,* for more information.

6.6. Computer Systems. Activities or individuals use only Air Force-owned or licensed software and hardware, unless authorized in the AFIs referenced below. Individuals using commercial-off-the-shelf software must ensure they are using legally acquired software and are not violating

copyright laws nor other contractual agreements. Air Force activities use DoD and service-owned software and share Air Force-owned software when possible. Commanders may authorize use for personal projects in accordance with DoD 5500.7-R, Joint Ethics Regulation. See AFI 33-112; AFI 33-113, *Telecommunication Centers and Data Processing Centers Management*; and AFI 33-114, *Software Management,* for more information.

6.7. Bulletin Boards. Activities may establish or subscribe to electronic bulletin boards to satisfy approved requirements. Information placed on an Air Force bulletin board, with unrestricted access, must be processed and approved for public release through the appropriate public affairs office. See AFI 33-129, *Transmission of Information Via the Internet*, for more information.

6.8. Small Computer Contingency Use. Users often require their small computers during the exercise of contingency plans and deployments. Conduct operational tests of these plans to ensure support and security requirements are adequately addressed. Review AFI 33-112 for support considerations.

6.9. Combat Communications Assets. While primarily for use during wartime, combat communications assets are available for temporary peacetime use. The normal period of use is less than 120 days. Request support according to AFI 10-414, *Requesting and Employing Combat Communications Resources in Peacetime*.

6.10. Engineering and Installation (EI) Products and Service. EI products and services are available for peacetime support of Air Force and DoD communications and information systems maintenance, engineering, installation, relocation and removal. EI assets are also available as unit type codes for wartime and contingency support. (**NOTE:** Refer to AFMAN 33-103, *Engineering and Installation Services*, when published.)

6.11. Electronic Mail (E-mail). E-mail represents a unique communication medium between Air Force organizations and with outside activities. Technological advancements have brought the opportunity for more timely, efficient, and effective communications using E-mail. Use E-mail to supplement or replace mail, facsimile, telephone, and other messaging systems. However, E-mail also carries inherent limitations and risks that you must address during the conduct of normal operations within the Air Force. See AFI 33-119, *Electronic Mail (E-Mail) Management and Use,* for more information.

6.12. Internet. Using the Internet has dramatically increased in popularity as a means of obtaining and disseminating information worldwide. See AFI 33-129 for more information about the using the public Internet and web technology such as; web servers, web browsers, file transfer protocol software purchased and licensed by the US Air Force, or privately licensed software used with the proper approval on Air Force-owned systems. AFI 33-129 defines the roles and responsibilities of personnel using and maintaining Internet access; outlines responsibilities and procedures for accessing information and properly establishing, reviewing, posting, and maintaining government information on the Internet; and covers responsibilities and procedures for sending E-mail across the Internet.

7. Management Checklist. To help you better manage the tasks imposed by this publication, you may use the questions at **Attachment 2** and AF Form 2519.

8. Form Prescribed. AF Form 209, **Information Management Operations After Action Report (RCS: HAF-SC(AR)8703)**.

WILLIAM J. DONAHUE,   Lt General, USAF
Director, Communications and Information

Attachment 1

GLOSSARY OF REFERENCES, ABBREVIATIONS, ACRONYMS, AND TERMS

References

CJCSI 6212.01, *Compatibility, Interoperability, and Integration of Command, Control, Communications, Computers, and Intelligence Systems*

DoD Directive-C-3222.5, *Electromagnetic Compatibility (EMC) Management Program for SIGINT Sites (U)*, April 22, 1987

DoD Directive 3405.1, *Computer Programming Language Policy,* April 2, 1987

DoD Directive 4630.5, *Compatibility, Interoperability, and Integration of Command, Control, Communications, and Intelligence (C3I) Systems*, November 12, 1992

DoD Directive 8320.1, *DoD Data Administration,* September 26, 1991

JCS Memorandum of Policy (MOP) 37, *Military Satellite Communication Systems*

AFMD 24, *Headquarters Air Force Command, Control, Communications, and Computer Agency*

AFPD 33-1, *Command, Control, Communications, and Computer (C^4) Systems*

AFPD 33-2, *Information Protection*

AFPD 37-1, *Air Force Information Management* (will convert to AFPD 33-3)

AFI 10-414, *Requesting and Employing Combat Communications Resources in Peacetime*

AFI 10-601, *Mission Needs and Operational Requirements Guidance and Procedures*

AFI 10-901, *Lead Operating Command--Command, Control, Communications, Computers, and Intelligence (C^4I) Systems Management*

AFI 10-1401, *Modernization Planning Documentation*

AFI 21-404, *Developing and Maintaining Communications and Computer Systems Installation Records*

AFI 32-7062, *Air Force Comprehensive Planning*

AFI 33-102, *Command, Control, Communications, Computers, and Intelligence (C^4I) Capabilities Planning Process*

AFI 33-103, *Requirements Development and Processing*

AFI 33-104, *Base-Level Planning and Implementation*

AFI 33-106, *Managing High Frequency Radios, Land Mobile Radios, Cellular Telephones, and the Military Affiliate Radio Systems*

AFI 33-108, *Compatibility, Interoperability, and Integration of Command, Control, Communications, and Computer (C^4) Systems*

AFI 33-110, *Data Administration Program*

AFI 33-111, *Telephone Systems Management*

AFI 33-112, *Automatic Data Processing Equipment (ADPE) Management*

AFI 33-113, *Telecommunications Centers and Data Processing Centers Management*

AFI 33-114, *Software Management*

AFI 33-115, *Network Management*

AFI 33-117, *Visual Information (VI) Management*

AFI 33-118, *Radio Frequency Spectrum Management*

AFI 33-119, *Electronic Mail (E-Mail) Management and Use*

AFI 33-129, *Transmission of Information Via the Internet*

AFMAN 23-110V2*, USAF Supply Manual* (FOUO)

AFMAN 33-125, *Technical Reference Codes*

MIL-STD-498, *Defense System Software Development*

MIL-STD-188 Series

Abbreviations and Acronyms

ADPE—Automatic Data Processing Equipment

AFCA—Air Force Communications Agency

AFCIC—Air Force Communications and Information Center

AFEMS—Air Force Equipment Management System

AFI—Air Force Instruction

AFMC—Air Force Materiel Command

AFPD—Air Force Policy Directive

BVIM—Base Visual Information Manager

BPID—Blueprint Phase Implementation Directive

C^{3}I—Command, Control, Communications, and Intelligence

C^4—Command, Control, Communications, and Computers

C^{4}I—Command, Control, Communications, Computers, and Intelligence

CJCS—Chairman Joint Chiefs of Staff

CSIR—Communications and Computer Systems Installation Records

CSO—Communications and Information Systems Officer

DISA—Defense Information Systems Agency

DIST—Defense Integration Support Tool

DoD—Department of Defense

DRU—Direct Reporting Unit

DVIAN—Defense Visual Information Activity Number

E-Mail—Electronic Mail

EI—Engineering and Installation

EMSEC—Emission Security

FAM—Functional Area Managers

FAR—Federal Acquisition Regulation

FOA—Field Operating Agency

HQ AFCA—Headquarters Air Force Communications Agency

HQ USAF—Headquarters United States Air Force

IM—Information Management

IPMS—Information Processing Management System

IRM—Information Resources Manager

ISO—International Standards Organization

IT—Information Technology

JTA—Joint Technical Architecture

MAJCOM—Major Command

MECO—MAJCOM Equipment Control Officer

MILSATCOM—Military Satellite Communications

MIL-STD—Military Standard

MOP—Memorandum of Policy

PMD—Program Management Document

POM—Program Objective Memorandum

SAF—Secretary of the Air Force

SC—Communications and Information

STEM—Systems Telecommunications Engineering Manager

STEM-B—Base-Level Systems Telecommunications Engineering Manager

STEM-C—Command-Level Systems Telecommunications Engineering Manager

STEM-J—Joint Systems Telecommunications Engineering Manager

STEM-TM—Systems Telecommunications Engineering Manager-Telecommunications Manager

TAFIM—Technical Architecture Framework for Information Management

TRC—Technical Reference Code

USAF—United States Air Force

VI—Visual Information

Terms

Acquisition Cost—The total cost to procure, test and install a communications system. This does not include operation and support costs beyond user acceptance of the system.

Air Force Functional Manager—The HQ USAF activity within a specific directorate responsible for providing management oversight of the assigned function and its associated communications and information systems.

Architecture—There are many different types of architectures, each with its own definition. The following are the DoD-approved definitions. General Definition: A framework or structure that portrays relationships among all the elements of the subject force, subject, or activity. The standard definitions for **Operational**, **System**, and **Technical** Architecture: **Operational Architecture:** A description of the tasks, operational elements, and information flows required to accomplish or support a warfighting function. **Systems Architecture:** A description, including graphics, of the systems and interconnections providing for or supporting a warfighting function. **Technical Architecture:** A minimal set of rules governing the arrangement, interaction, and interdependence of the parts or elements of a system, whose purpose is to ensure that a conformant system satisfies a specific set of requirements.

Base-Level Communications and Information Infrastructure—Communications and information systems used by host and tenant activities. They include voice, data, video transmission, switching, processing, system control and network management systems, equipment, and facilities.

Blueprint Phase Implementation Directive (BPID)—Directs implementation of specific items of the infrastructure requirements shown in the base communications and information systems blueprint.

Command, Control, Communications, and Computer System—An integrated system of doctrine, procedures, organizational structures, personnel, equipment, facilities, and communications designed to support a commander's exercise of command and control across the range of military operations. Also called C^4 systems. (Approved by JMTGM# 081-95). Within the Air Force, also called communications and information systems.

Configuration Management—1. In computer modeling and simulation, a discipline of applying technical and administrative oversight and control to identify and document the functional requirements and capabilities of a model or simulation and its supporting databases, control changes to those capabilities, and document and report the changes. (JP 1-02) 2. A discipline applying technical and administrative direction and surveillance to: (a) identify and document the functional and physical characteristics of a C^4 system; (b) to control changes of those characteristics and; (c) record and report changes to processing and implementation status.

Communications and Information Systems Blueprint—Document that provides the requirements engineering plan to modernize the base-level infrastructure with cost-effective, base-wide capability to support digital transmission of voice, data, video, imagery, and telemetry needs. It documents the baseline, identifies a target base configuration to support present and future requirements, and provides a time-phased plan and estimated costs for logical transition.

Communication and Information Systems Officer (CSO)—The term CSO identifies the supporting

communications and information systems officer at all levels. At base-level, this is the commander of the communications unit responsible for carrying out base systems responsibilities, the base CSO. Tenant organizations may also have CSOs. At MAJCOM, and other activities responsible for large quantities of assets, it is the person designated by the commander as responsible for overall management of assets budgeted and funded by the MAJCOM or activity. The CSO function, when under the base communications unit, uses the office symbol "SC" that expands to three and four digits to identify specific functional areas.

Data Administrator—A person or group that ensures the utility of data used within an organization by defining data policies and standards, planning for the efficient use of data, coordinating data structures among organizational components, performing logical data base design, and defining data security.

Embedded Computers—Computer hardware and software that are an integral part of a product, where the principal function of the product is not the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information. An embedded computer would require major modification to be used for general purpose computing and is managed as a component of the system in which it is embedded (i.e., flight control computer within a fighter aircraft).

Joint Technical Architecture (JTA)—A common set of mandatory information technology standards and guidelines used in all new and upgraded DoD C^4I acquisitions. The standards are used for sending and receiving information, for understanding the information, and for processing that information. The JTA also includes a common human-computer interface and "rules" for protecting the information. The JTA draws on the TAFIM, which provides general guidance and documents the processes and framework for defining the JTA and other technical architectures.

Lead Command—The MAJCOM or FOA assigned as systems advocate and oversight authority for communications and information systems used by more than one command. Specific responsibilities of the lead command are in AFI 10-901.

System Manager—A general term of reference to those organizations directed by individual managers, exercising authority over the planning, direction, and control of tasks and associated functions essential for support of designated weapons or equipment systems. The authority vested in this organization may include such functions as research, development, procurement, production, materiel distribution, and logistic support, when so assigned. When intended to relate to a specific system manager, this term will be prescribed by the appropriate designation (e.g., Chinook system manager, Sonar System Manager, F-4 System Manager). This term is normally used in lieu of system support manager, weapon system manager, program manager, and project manager when such organizations perform these functions. (JP 1-02)

System Operational Manager—Lead organization responsible for day-to-day operations of a MILSATCOM system. Normally designated as having primary responsibility for managing the system to maximize the satisfaction of user communications requirements. (JCS MOP 37)

Systems Telecommunications Engineering Manager—A communications and information engineer who provides technical engineering planning services in support of facilities and base infrastructures. The STEM-B has technical responsibility for engineering management and assists the base CSO in system engineering and configuration control. The STEM-C provides technical assistance to the MAJCOM and coordinates with STEM-Bs on future MAJCOM mission changes, programs and efforts at the MAJCOM-level. The STEM-J is assigned to CINCs, Joint Staff and DISA to promote interoperability

by providing an interface between those activities and the Air Force MAJCOMs and bases. The STEM-TM assists the STEM-B and C.

Technical Architecture Framework for Information Management (TAF—IM)--1**.** A DISA Center for Architecture multi-volume publication that provides guidance for the evolution of the DoD technical infrastructure. The TAFIM does not provide a specific system architecture. It provides the services, standards, design concepts, components, and configurations used to guide the development of technical architectures that meet specific mission requirements. The TAFIM applies to information system technical architectures at all DoD organizational levels and environments (tactical, strategic, sustaining base). The TAFIM uses Federal and National Standards adopted by industry and international standards accepted worldwide by US allies. 2. The TAFIM, Version 2.0 consists of eight volumes: 1) Overview; 2) Technical Reference Model; 3) Architecture Concepts and Design Guidance; 4) DoD Standards-Based Architecture Planning Guide; 5) Support Plan; 6) DoD Goal Security Architecture; 7) Information Technology Standards Guidance; and 8) DoD Human Computer Interface Style Guide.

Technical Reference Codes (TRC—)--1. Reference documents consisting of standards, policies, and implementation guidelines governing the interoperability of communications and information systems design, implementation, and integration. 2. Air Force TRCs are the Air Force's implementing vehicle for volume 7 of the TAFIM and the JTA. They provide an Air Force slant to the TAFIM and JTA by organizing its information more effectively, adding Air Force policy information, providing implementation guidance, and addressing a broader range of topics than the TAFIM (such as addressing voice and messaging capabilities). 3. There are two types of Air Force TRCs: 1) User Service and 2) System Component.

Technical Solution—A detailed and costed description of a system that satisfies the requirement, can be incorporated into the base infrastructure, and is compliant with downward directed architectures and standards.

Attachment 2

QUESTIONS FOR DEVELOPING A COMMUNICATION AND INFORMATION MANAGE-MENT CHECKLIST

A2.1. General.

A2.1.1. Do commanders plan, acquire, operate, and maintain systems consistent with the TAFIM, JTA, Air Force TRCs, Air Force & MAJCOM plans, architectures, and communications and information systems blueprints? (2.1.)

A2.1.2. Are information management public law issues included in all planning? (2.4.)

A2.1.3. Are all systems developed for joint operations certified as interoperable with systems they are required to exchange information with? (3.1.)

A2.1.4. Is information protection included in all planning according to AFPD 33-2? (3.3.)

A2.1.5. Are communications services prewiring included in all major and minor construction projects according to AFPD 32-80 and HQ USAF Engineering Technical Letter 87-9? (3.4.)

A2.1.6. Does the contracting office only obligate funds for those resources identified in technical solutions or required for maintenance? (5.3.3.)

A2.1.7. Do users contact the base EMSEC manager for specific installation requirements when a computer will process classified information? (5.4.)

A2.1.8. Do commanders consolidate assets to maximize resource effectiveness and reduce costs, where mission requirements don't require redundancy? (6.3.)

A2.1.9. Do activities and individuals use only Air Force-owned or licensed software? (6.6.)

A2.1.10. Do individuals using commercial-off-the-shelf software ensure they are using legally acquired software and not violating copyright laws? (6.6.)

A2.1.11. Is information placed on Air Force bulletin boards with unrestricted access, processed and approved for public release through the appropriate public affairs office? (6.7.)

A2.1.12. Do individuals requiring or using E-mail use AFI 33-119 to understand the limitations and address the risks? (6.11.)

A2.1.13. Do individuals requiring or using Internet services use AFI 33-129? (6.12.)

A2.2. HQ USAF Functional Managers.

A2.2.1. Has the HQ USAF Functional Manager prepared and annually updated the functional plan as part of their Mission Area or Mission Area Support Plan? (1.2.1.)

A2.2.2. Has the HQ USAF Functional Manager provided the functional plan to MAJCOM Functional Managers? (1.2.2.)

A2.2.3. Has the HQ USAF Functional Manager performed an operational review of fielded systems at least once every three years in conjunction with the using or affected MAJCOM functional and communications and information staffs? (1.2.6.)

A2.2.4. Has the HQ USAF Functional Manager included all Air Force-wide programs in base communications and information systems blueprints? (1.2.8.)

A2.2.5. Has the HQ USAF Functional Manager included DRUs and FOAs in planning for Air Force systems? (1.2.9.)

A2.3. MAJCOM (or FOA, where applicable).

A2.3.1. Has the MAJCOM designated a CSO and single staff element for overall management of systems? (1.3.1.)

A2.3.2. Has the MAJCOM appointed a MAJCOM C4I Architect? (1.3.2.)

A2.3.3. Has the MAJCOM (or FOA) designated a MAJCOM Data Administrator to manage the data administration program? (1.3.5.)

A2.3.4. Has the MAJCOM Functional Manager included functional area planning in the MAJCOM Mission Area Plan? (1.3.7.1.)

A2.3.5. Has the MAJCOM Functional Manager reviewed their MAJCOM-unique systems at least once every three years? (1.3.7.2.)

A2.4. MAJCOM CSO.

A2.4.1. Has the MAJCOM established a MAJCOM systems integration function to model and maintain the current architecture? (1.3.6.3.)

A2.4.2. Has the MAJCOM established a system to redistribute excess software and hardware? (1.3.6.5.)

A2.4.3. Has the MAJCOM appointed a MAJCOM Frequency Manager? (1.3.6.6.)

A2.4.4. Has the MAJCOM appointed a VI Manager? (1.3.6.7.)

A2.4.5. Has the MAJCOM identified and collected requirements and incorporated them into MAJCOM and the base communications and information systems blueprint, as necessary? (1.3.6.8.)

A2.4.6. Has the MAJCOM coordinated requirements with the STEM-C? (1.3.6.9.)

A2.4.7. Has the MAJCOM CSO approved subordinate units' communications and information systems blueprints? (1.3.6.10.)

A2.4.8. Has the MAJCOM CSO appointed a MECO? (1.3.6.11.)

A2.4.9. Has the MAJCOM CSO appointed a primary and alternate focal point for standards? (1.3.6.12.)

A2.4.10. Has the MAJCOM CSO supported HQ USAF and MAJCOM functional managers with their operational systems reviews of fielded systems? (1.3.6.13.)

A2.4.11. Has the MAJCOM CSO developed a process to review and validate MAJCOM requirements? (1.3.6.14.)

A2.5. Wing commanders (or installation commanders, as applicable).

A2.5.1. Has the commander designated the host wing communications officer as the base CSO? (1.10.1.)

A2.5.2. Has the commander appointed a C4I architect? (1.10.2.)

A2.5.3. Is the commander the base-level approval authority for the communications and information systems blueprint, blueprint phase implementation directive, and other requirement's documents? (1.10.3.)

A2.6. Commanders of tenant activities.

A2.6.1. When the tenant unit has a large quantity of systems, has the commander appointed a CSO to serve as the focal point and accountable officer for their communications and information systems? (1.11.1.)

A2.6.2. Do tenant units coordinate with the base CSO to ensure their systems integrate and interoperate with relevant systems? (1.11.2.)

A2.7. Base CSO.

A2.7.1. Does the CSO meet the wing's communications and information mission needs? (1.12.2.)

A2.7.2. Does the CSO ensure elements of the base environment and infrastructure continue to satisfy customers' mission needs? (1.12.3.)

A2.7.3. Does the CSO manage the base-level infrastructure, host systems and tenant systems as defined in support agreements, and has the CSO established an integration function? (1.12.4.)

A2.7.4. Does the CSO plan the evolution of systems supporting the base user's missions; ensure war, support and contingency planning are accomplished for requirements? (1.12.5.)

A2.7.5. Has the CSO developed annexes and appendices to base plans and coordinated on tenant activities' plans involving resources? (1.12.6.)

A2.7.6. Has the CSO identified, collected, and incorporated systems requirements in the communications and information systems blueprint? (1.12.7.)

A2.7.7. Has the CSO coordinated plans and requirements with the STEM-B? (1.12.8.)

A2.7.8. Has the CSO coordinated the communications and information systems blueprint with the host wing and tenant units and does the CSO ensure it complements the base comprehensive plan and military construction programs? (1.12.10.)

A2.7.9. Does the CSO maintain a master file of installation records for base supported systems or facilities? (1.12.14.)

A2.7.10. Does the CSO prevent or minimize electromagnetic interference and electromagnetic radiation hazards? (1.12.15.)

A2.7.11. Does the CSO manage the base frequency management program according to AFI 33-118? (1.12.16.)

A2.7.12. Has the CSO established a focal point for determining base-level training requirements and provided customer training? (1.12.17.)

A2.7.13. Has the CSO accounted for all computer hardware and software in the IPMS? (1.12.18.)

A2.7.14. Has the CSO appointed a BVIM to manage base VI activities according to AFI 33-117? (1.12.19.)

A2.7.15. Has the CSO established a single customer contact for automated systems and network problems, system administration requirements, and system and network protection requirements according to AFI 33-115? (1.12.20.)

A2.7.16. Has the CSO that supports deployable wings provided trained personnel and sufficient equipment to support the deployable commitments? (1.12.21.)

A2.7.17. Has the CSO established a periodic planning forum? (1.12.22.)

A2.7.18. Has the CSO assigned an individual as the functional manager for enlisted information management matters? (1.12.23.)

A2.7.19. Does the CSO manage project implementation and ensure project acquisition conforms to the law? (5.1.)

A2.7.20. Does the CSO meet all Air Force computer needs using DoD and Air Force infrastructure support contracts, when possible? (5.3.1.)

A2.7.21. Does the CSO order all equipment through base supply or the supporting procurement office? (5.3.3.)

A2.7.22. Does the CSO account for computer hardware and software in the IPMS according to AFI 33-112? (5.3.4.)

A2.7.23. Does the CSO coordinate with the STEM-B for development of the BPID? (5.3.5.)

A2.8. STEM.

A2.8.1. Does the STEM-C serve as a technical advisor to the MAJCOM commander and CSO? (1.13.1.1.)

A2.8.2. Does the STEM-C assist the MAJCOM in developing the target architecture? (1.13.1.2.)

A2.8.3. Does the STEM-C provide the MAJCOM information to support POM submittals? (1.13.1.3.)

A2.8.4. Does the STEM-C interface between the MAJCOM and STEM-Bs to facilitate development of communications and information systems blueprints? (1.13.1.4.)

A2.8.5. Does the STEM-C assist the MAJCOM in developing standard configurations for implementation of the base infrastructure? (1.13.1.5.)

A2.8.6. Does the STEM-C review all MAJCOM's bases communications and information system blueprints and coordinate approval through the MAJCOM? (1.13.1.6.)

A2.8.7. Does the STEM-C develop an overall MAJCOM communications and information systems blueprint? (1.13.1.7.)

A2.8.8. Does the STEM-B coordinate with the host base CSO, tenants, and base functional area managers to identify plans that will impact the infrastructure? (1.13.2.1.)

A2.8.9. Does the STEM-B serve the wing (or installation) commander and CSO as a technical advisor? (1.13.2.2.)

A2.8.10. Does the STEM-B develop, update, and maintain the base communications and information systems blueprint? (1.13.2.3.)

A2.8.11. Does the STEM-B develop BPIDs as requested and provide technical solutions and cost estimates when the requirement is not in the communications and information systems blueprint? (1.13.2.4.)

A2.8.12. Does the STEM-B review all requirements that impact the infrastructure? (1.13.2.5.)

A2.8.13. Does the STEM-TM directly support the STEM-B and STEM-C with programmatic planning support? (1.13.3.2.)

A2.8.14. Does the STEM-TM serve as a liaison to the MAJCOMs and bases for near and long term requirements? (1.13.3.3.)

A2.8.15. Does the STEM-TM process requirements documents such as PMDs, CSRDs, and BPIDs? (1.13.3.5.)

A2.9. Implementing Activity Commander .

A2.9.1. Has the implementing activity commander designated a single project manager to head each project? (5.2.1.)

A2.9.2. Does the implementing activity commander reuse excess computer hardware and software where possible? (5.2.3.)

A2.9.3. Does the implementing activity commander reuse or adapt for use Air Force-owned software listed in the DIST for projects where economically possible? (5.2.4.)

A2.9.4. Does the implementing activity commander list all Air Force-developed software requiring over 80 man-hours to develop, or contracted software costing over $5,000 in the DIST? (5.2.5.)

A2.9.5. Does the implementing activity commander use DoD and Air Force infrastructure support contracts whenever possible? (5.2.6.)