CJCS MOP 37
14 May 1992

DISTRIBUTION A

CHAIRMAN OF THE JOINT CHIEFS OF STAFF

MEMORANDUM OF POLICY NO. 37
(Issued--14 May 1992)

MILITARY SATELLITE COMMUNICATIONS SYSTEMS

1. Circulation. The Enclosure is circulated as a current statement of policy.

2. Supersession. This memorandum of policy supersedes JCS MOP 178 (2d Revision), 4 September 1986.

3. Distribution. Copies are being sent to ASD(C3I); CINCs; CINCNORAD; Directors, DISA, DIA, DLA, DMA, and DNA; Director, NSA/Chief, CSS; and Secretary, Military Communications-Electronics Board.

4. Summary of Changes. This revision:

a. Incorporates the appropriate statutory responsibilities of the Chairman of the Joint Chiefs of Staff, as delineated in the Goldwater-Nichols Act of 1986.

b. Provides a CJCS source document for Military Satellite Communications (MILSATCOM) operational policy.

c. Amplifies the MILSATCOM requirements process regarding CINC, Service, and Defense agency responsibilities, and the influence of requirements on the acquisition process.

d. Describes current MILSATCOM responsibilities, to include those for system management, and deletes references to executive agents.

e. Provides an updated MILSATCOM prioritization scheme.

f. Incorporates guidance for integrating commercial Satellite Communications (SATCOM) use into the SATCOM data base in support of architecture development.

For the Chairman of the Joint Chiefs of Staff:

HENRY VICCELLIO, JR.
Lieutenant General, USAF
Director, Joint Staff

ENCLOSURE

MILITARY SATELLITE COMMUNICATIONS SYSTEMS

SECTION I. GENERAL

1. Purpose. To establish operational policy and procedures and provide guidance on military satellite communications (MILSATCOM) systems as directed by DOD Directive 5105.44.

2. References. See Appendix A.

3. Applicability. This MOP provides CJCS policy and procedural direction to all operational planners, providers, and users of MILSATCOM systems.

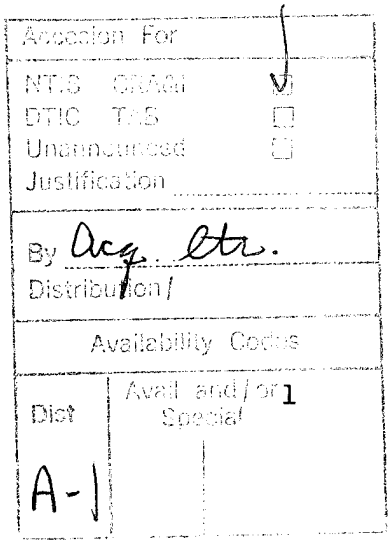
4. Scope. This MOP concerns:

a. Overall DOD MILSATCOM operational policy and objectives.

b. Responsibilities of the Chairman of the Joint Chiefs of Staff; Joint Staff; commanders of unified and specified commands; the Military Departments; Director, DISA; and all users of MILSATCOM.

c. Operational policy and procedures relative to MILSATCOM systems planning and employment.

5. Definitions. The terms and abbreviations used in this MOP are defined in Joint Pub 1-02 and in the Glossary.



SECTION II. MILSATCOM SYSTEMS AND US NATIONAL MILITARY STRATEGY

6. Strategy. The need for and use of MILSATCOM systems will be consistent with the national military strategy of the United States and will be considered in the context of the overall military communications architecture. US national security strategy will continue to include the elements of strategic deterrence, forward presence (includes basing), and power projection for theater or contingency operations, though the relative importance of these elements may change. MILSATCOM support to strategic nuclear operations and warning functions will continue as a high priority. MILSATCOM systems are critical to the full scope of military operations including theater warfare, national mobilization, and strategic reconstitution. MILSATCOM systems will be vital for warfighting forces responding to crisis or contingency situations in areas where a telecommunications infrastructure is unavailable or inadequate. MILSATCOM systems also support day-to-day operations for all major mission areas.

7. Levels of Requirements and Capabilities. MILSATCOM systems support the mission areas required by US national security strategy with a hierarchy of performance capability levels (system characteristics). These levels of capability are all required to describe the spectrum of DOD requirements. The requirements and capability levels are categorized as core warfighting (hard core and soft core) and general purpose

(see Glossary for definitions). An illustration of the relationship between requirement levels and mission areas being supported is provided in Appendix A. Current and planned MILSATCOM systems are all necessary to support the full spectrum of requirement levels. A system's capability is characterized by how robustly it supports the performance feature of survivability while maintaining the features of mobility, flexibility, data handling capacity, and coverage. Survivability includes other key features, such as endurability, antijam capability, nuclear effects protection, and low probability of intercept.

SECTION III. BASIC OBJECTIVES AND POLICY

8. Overview. MILSATCOM systems consist of three primary segments: earth terminal (airborne, ground, sea) segment, space segment, and control segment. MILSATCOM systems are vital to the Department of Defense as they satisfy certain essential communications connectivity needs more effectively than other media. The key advantages of MILSATCOM systems are broad geographical coverage, mobility, survivability, and flexibility. The term "MILSATCOM systems" includes those systems owned or leased and operated by the Department of Defense and those commercial satellite communications (SATCOM) services used by the Department of Defense. This MOP provides guidance with respect to operational user connectivity requirements, system access, and system use for DOD-operated systems. User requirements will be integrated with commercial SATCOM service requirements in the Integrated SATCOM Data Base (ISDB) to support SATCOM architecture development. MILSATCOM systems are an integral part of the total DOD C3I structure and their capabilities are thoroughly integrated into the C3I architectures and systems of the CINCs, Services, and Defense agencies. MILSATCOM systems also are a collective and constrained resource of the DOD supporting communications connectivity vital to national interests. The employment of current MILSATCOM capabilities to satisfy user needs is governed by the principle that constrained resources

will be applied against CJCS-validated and prioritized connectivity requirements for maximum mission requirement satisfaction. ASD(C3I) provides policy and programmatic oversight for MILSATCOM systems and approves the DOD communications and SATCOM architectures.

9. Objectives. The overall objective of this MOP is to ensure essential MILSATCOM support for mission accomplishment. This MOP provides guidance and defines responsibilities covering the life-cycle of MILSATCOM systems. Specific objectives are to:

a. Identify requirements for MILSATCOM communications connectivity through a standard, defined process (Appendix A) that ensures that valid connectivity needs are also valid candidates for a SATCOM solution. Requirements will be based on CJCS-approved missions and maintained in a single integrated data base. The data base will indicate the degree to which requirements can be satisfied with current or programmed systems.

b. Prioritize requirements to ensure satisfaction of the most critical needs and the effective and efficient use of resources.

c. Develop and maintain a joint MILSATCOM integrated systems architecture based on CJCS-approved requirements for influencing the PPBS process.

d. Promote a joint approach to planning, programming, and budgeting for MILSATCOM systems.

e. Support the design of MILSATCOM systems that address user operational needs and provide interoperability among users of specific systems.

f. Support the acquisition of MILSATCOM capability in accordance with DOD Directives 5000.1, 5000.2, 5000.2M, the joint architecture, approved system standards, and fiscal guidance.

g. Describe assigned responsibilities for management of MILSATCOM systems.

h. Prepare operationally responsive MILSATCOM management and control procedures to optimize the allocation of communications resources and provide for access to specific systems (Appendix A).

i. Support sustainment of MILSATCOM systems consistent with mission needs.

j. Support development of flexible operational capabilities that provide for interoperability and promote survivability commensurate with missions supported.

10. Policy. MILSATCOM systems will be made available to users commensurate with approved priorities for day-to-day operations, for the execution of approved operational plans, and as directed by the NCA. Access to MILSATCOM space segments will be in accordance with the priorities provided in Appendix B. Operational priorities for critical national security services

will be assigned in consonance with the National Communications System Telecommunications Service Priority guidance contained in DCA Circular 310-130-4. Detailed policy principles for MILSATCOM systems are as follows:

a. The space segments of all MILSATCOM systems are controlled as joint assets to meet CJCS-approved requirements.

b. OPLAN and CONPLAN planning will address the use of MILSATCOM systems through the deliberate planning process.

c. Interoperability and standardization among US forces and with allies will be an essential consideration in MILSATCOM system planning, development, funding, and design. This interoperability focus is not only among SATCOM media capabilities but must also address the larger DOD C4 architectures.

d. MILSATCOM operational management and system control will be standardized and streamlined to the maximum extent practical.

e. Certification of compliance with approved MILSATCOM technical standards is required before access to the space segment will be granted (see Appendix C).

SECTION IV. RESPONSIBILITIES

11. Structured responsibilities provide a framework to implement MILSATCOM systems policy. These responsibilities promote system effectiveness and efficiency.

a. The CJCS focal point for operational direction of MILSATCOM systems is the Joint Communications Satellite Center (JCSC). The JCSC will consult with unified and specified commands, Services, MILSATCOM system managers, and DOD and non-DOD agencies to coordinate actions requiring CJCS approval and adjudicate disputes regarding apportionment and allocation of operational MILSATCOM capacity. Consistent with the unified command plan, USCINCSPACE will execute responsibilities associated with combatant command of MILSATCOM assets to include providing command and control and support for MILSATCOM systems. Organizational responsibilities for MILSATCOM systems are described in the following paragraphs. A summary of major responsibilities is provided in Table 1.

b. Each MILSATCOM system has been assigned a system manager that exercises authority over the planning, direction, and control of tasks and associated functions essential for support of their system. The Military Departments and DISA are system managers for specific MILSATCOM systems.

TABLE

Table 1: SUMMARY OF KEY MILSATCOM ROLES AND RESPONSIBILITIES

ASD(C3I)

- Provide overall policy; program, planning, guidance, and direction (includes architecture and roadmap approval); and PPBS and acquisition focus for the DOD
- Approve standards
- Provide for non-DOD MILSATCOM requirements approval

CJCS

- Oversee operational MILSATCOM activities
- Establish doctrine and procedures for MILSATCOM use
- Specify operational responsibilities
- MILSATCOM requirements
  - Define process
  - Review and approve or disapprove
- Provide operational resource apportionment guidance and adjudicate related conflicts
- Approve satellite positions
- Coordinate on architecture
- Ensure compliance with MILSATCOM standards
- Advocate the need for systems supporting CINC requirements

CINCs

- Conduct biennial deliberate planning for MILSATCOM
- Provide operational control of allocated MILSATCOM resources
- Determine, review, and prioritize MILSATCOM requirements
- Establish procedures for components to submit MILSATCOM access requests
- Advocate the need for systems supporting CINC requirements

Joint Staff

- Provide JCSC
- Act as DOD focal point for apportionment
- Support the Chairman of the Joint Chiefs of Staff in resource conflict adjudication
- Manage MILSATCOM requirements process

USCINCSPACE

- Conduct space operations
  - Execute responsibilities associated with COCOM of MILSATCOM assets
  - Health, status, surveillance of space segment
  - Tracking, station-keeping, and ephemeris generation
  - Execute spacecraft control and communications payload control
  - Satellite C2 operations centers
  - Satellite movements and provide position recommendations
- Provide space assessment of CINCs' MILSATCOM requirements
- Support DISA in DOD SATCOM architecture development
- Advocate for systems supporting CINC requirements

System Managers (Services and DISA)

- Acquire (except DISA) MILSATCOM systems (satellites, terminals, and control segments and launch) and implement system and interoperability standards
- Assist in developing architecture, roadmap, MILSATCOM system standards and system requirements
- Prepare programs and budgets and identify shortfalls
- Maintain system program plans
- Advocate the need for systems supporting the DOD SATCOM architecture and CINC requirements

Director, DISA

- Develop DOD SATCOM architecture
- Develop MILSATCOM architecture roadmap and technology plan
- MILSATCOM systems engineer
- Develop system concepts and assist in development of system requirements
- Develop MILSATCOM system and interoperability standards
  - Certify conformance to system and interoperability standards
- Support the Chairman of the Joint Chiefs of Staff on MILSATCOM requirements
- Support OSD, Joint Staff, and MILSATCOM working groups on technical issues
- Support USSPACECOM in DOD space architecture development
- Advise on PPBS, system acquisition, and DSCS operational issues
- Advocate the need for systems supporting the DOD SATCOM architecture and CINC requirements

System Operational Manager

- Develop System Control and Operations Concept
- Allocate system resources and/or capacity to approved users
- Provide technical assessment of requirements
- Provide technical direction (communications taskings) for payload control to USCINCSPACE components, if applicable
- Recommend satellite position
- Advise the Chairman of the Joint Chiefs of Staff
- Recommend MILSATCOM system resource allocation

Systems and system managers are shown below with the accompanying PPBS responsible Service.

System	System Manager	PPBS Responsibility
FLTSAT	Dept of Navy	Navy
LEASAT	Dept of Navy	Navy
GAPFILLER	Dept of Navy	Navy
UHF follow-on	Dept of Navy	Navy
EHF on FLTSAT (FEP)	Dept of Navy	Navy
EHF on UFO	Dept of Navy	Navy
UHF DAMA control-Navy	Dept of Navy	Navy
DSCS	DISA	
Space segment		Air Force
Network Control		Army
AFSATCOM	Dept of Air Force	Air Force
LES	Dept of Air Force	Air Force
UHF DAMA Control-AF	Dept of Air Force	Air Force
SCTS	Dept of Air Force	Air Force
Milstar	Dept of Air Force	Air Force

c. Military Departments will designate system operational managers to perform the responsibilities associated with day-to-day system operations. This function is inclusive in the DISA responsibilities for DSCS.

d. For MILSATCOM earth terminal segments, a lead Military Department has been assigned, as shown below, for terminal development and acquisition to eliminate redundancy of efforts.

(1) Chief of Staff, US Army: Ground, except Milstar ground command post and Milstar ground strategic nuclear mission terminals.

(2) Chief of Naval Operations: Shipborne, submarine, and naval aircraft.

(3) Chief of Staff, US Air Force: Airborne, Milstar ground command post and Milstar ground strategic nuclear terminals.

e. ASD(C3I) (as documented in referenced DOD publications) provides:

(1) Overall MILSATCOM policy, program, and planning guidance and direction, architecture approval, and PPBS and acquisition focus for the DOD as defined in reference 16.

(2) Standards approval.

(3) Non-DOD MILSATCOM requirements approval.

f. The Chairman of the Joint Chiefs of Staff will:

(1) Allocate operational MILSATCOM resources to satisfy national defense requirements at all levels of conflict through peace, crisis, and war.

(2) Specify operational procedures and responsibilities for system managers, operators, and users of MILSATCOM systems.

(3) Review and recommend appropriate action to the Secretary of Defense on any agreement or arrangement for shared use of MILSATCOM system assets and services by the Department of Defense and Federal agencies.

(4) Review any proposed cooperative agreement or arrangement between the Department of Defense and an allied government or agency for shared use of MILSATCOM systems in accordance with CJCS MOP 43.

(5) Resolve differences among DOD users of MILSATCOM systems with respect to operational responsibilities, allocation of satellite capacity, control, validation, and prioritization of user requirements.

(6) Define the process to document MILSATCOM user connectivity requirements.

(7) Provide deliberate planning guidance to unified and specified commands and allocation planning guidance to the Services and Defense and Federal agencies for use of MILSATCOM resources.

(8) Review and approve MILSATCOM user connectivity requirements.

(9) Approve the initial positioning and repositioning of all MILSATCOM satellites.

(10) Support the resolution of launch conflicts in accordance with MCM-17-90.

(11) Approve the allocation, use, and location of fixed and transportable (vanized) DOD military earth terminals. (This does not apply for mobile, airborne, shipborne, or GMF transportable tactical terminals.)

(12) Provide guidance to ensure compliance with joint MILSATCOM system standards.

g. The CINCs will:

(1) Conduct biennial reviews of OPLANs and applicable CONPLANs in accordance with the JSCP and Joint Pub 5-03.1. This review will ensure that critical MILSATCOM requirements are current and adequately identified. Planned satisfaction of requirements will be based on apportioned UHF channels contained in JSCP Annex I, C3 Systems, and on DSCS GMF assessments conducted in accordance with JSCP Annex I, C3 Systems. Shortfalls (e.g., validated requirements that cannot be filled with apportioned assets) will be identified. The goal of this review is to ensure that CJCS-approved OPLANs, CONPLANs, and missions can be executed within apportioned and/or expected capacity. The CINCs will consolidate and prioritize all MILSATCOM requirements (including requirements of components and supporting CINCs or commands) that support validated OPLANs, CONPLANs, and assigned missions at all levels of conflict within their area

of responsibility/area of operations (AOR/AOO). Supporting CINCs will validate, and submit through the supported CINC, their MILSATCOM requirements. Supported CINCs will forward a listing of prioritized requirements, including shortfalls that could not be filled using apportioned assets, to the Joint Staff and provide an information copy to USCINCSPACE. The listing of prioritized requirements will be submitted not later than 1 February of even-numbered years. The results will be used to revise deliberate planning guidance in the JSCP and its Annex I, C3 Systems, containing MILSATCOM apportionments for planning.

(2) Provide operational control for allocated MILSATCOM resources by:

(a) Validating and prioritizing all MILSATCOM access requests for supporting and component commands, including exercise and training requirements.

(b) Establishing access priorities for all levels of conflict.

(c) Adjudicating theater-unique MILSATCOM allocation conflicts.

(d) Provide annual training requirements, with quarterly updates, to the appropriate MILSATCOM system manager.

(3) Establish procedures for supporting CINCs and component commands to submit MILSATCOM access requests.

h. The Joint Staff will:

(1) Maintain a JCSC to perform the following (Appendix E, references 9, 14, and 23):

(a) Be the DOD focal point for monitoring, coordinating, and formulating actions requiring CJCS approval for all MILSATCOM tactical and contingency operational access.

(b) Resolve conflicts in resource allocation and implement CJCS direction for all matters relating to allocation of MILSATCOM resources in support of contingency operations.

(c) Be the DOD focal point for apportionment of MILSATCOM capacity in support of exercises, contingencies, crises, and war.

(d) Monitor the health and operational status of MILSATCOM systems.

(e) Assist users in gaining satellite access in emergency situations.

(2) Review and assess the results of the CINCs' biennial reviews. Provide recommendations to the Chairman of the Joint Chiefs of Staff, as required, in consonance with established procedures for deliberate planning.

(3) Manage, for the Chairman of the Joint Chiefs of Staff, the MILSATCOM requirements process (Appendix A) and chair the Joint MILSATCOM Panel.

(4) Initiate a joint action on a biennial basis to review and revalidate all MILSATCOM requirements contained in the ISDB. This update will be completed by 1 January of odd-numbered years to support the DOD MILSATCOM Architecture update.

(5) Chair joint working groups that address MILSATCOM system and program issues in support of CJCS responsibilities.

i. USCINCSPACE will:

(1) Serve as a principal advocate and adviser to the Chairman of the Joint Chiefs of Staff for MILSATCOM systems that support CINC operational requirements.

(2) Plan for and execute the health, status, and survivability aspects of the space segment.

(3) Plan for and execute tracking, station-keeping, and ephemeris generation.

(4) Provide spacecraft control and support of DOD-operated MILSATCOM satellites after a satellite is declared operational by the system manager or developer.

(5) Provide communications payload control at the direction of the Chairman of the Joint Chiefs of Staff and in coordination with the system manager.

(6) Direct the operation of satellite C2 operations centers.

(7) Plan for constellation protection, defense, and reconstitution.

(8) Assess the worldwide impact on the space force to unified and specified commands of proposed satellite movements and provide recommendations to the Chairman of the Joint Chiefs of Staff.

(9) Execute satellite movements as directed by the Chairman of the Joint Chiefs of Staff in coordination with the appropriate system manager.

(10) Develop a space assessment based upon the warfighting CINCs' MILSATCOM operational requirements.

(11) Augment the JCSC during crises or contingencies as a liaison to USSPACECOM and its components.

(12) Support the Director, DISA, in the development of the DOD SATCOM architecture.

j. System managers, in accordance with assigned functions, will:

(1) Ensure system acquisition (except DISA) and sustainment in consonance with the joint MILSATCOM integrated systems architecture.

(2) Identify annually to the Chairman of the Joint Chiefs of Staff the impact of budget shortfalls on programs, systems, and segments supporting validated MILSATCOM requirements.

(3) Advise the Chairman of the Joint Chiefs of Staff on the system impact of POM and budget decisions.

(4) Collaborate with the Director, DISA, in the development of the DOD MILSATCOM Architecture.

(5) Support the Director, DISA, in the development of MILSATCOM system standards.

(6) Ensure that systems developed and/or fielded to forces comply with MILSATCOM system and interoperability standards.

(7) Develop integration, transition, and implementation plans for all segments (space, control, and earth terminal) of the system.

(8) Perform engineering analyses and other studies of system performance as requested by the Chairman of the Joint Chiefs of Staff, USCINCSPACE, and Director, DISA.

(9) Maintain a direct liaison with other system managers; the Joint Staff; USCINCSPACE; Director, DISA; and users of the MILSATCOM system.

(10) Establish and maintain a 6-year program plan for the system based on the overall MILSATCOM system architecture, validated user requirements, and available funding.

(11) Designate system operational manager(s) to perform the following:

(a) Support the system manager, as required.

(b) Provide communications payload system-level operational planning.

(c) Develop and publish a system control and operations concept (SCOC) in accordance with Appendix D.

(d) Develop facilities, as appropriate, and procedures to allocate the system's communications capacity to satisfy validated operational requirements through all levels of conflict. Such allocation procedures for all MILSATCOM systems will be in accordance with priorities in Appendix B and will be approved by the Chairman of the Joint Chiefs of Staff.

(e) Maintain a data base, based upon the ISDB, of active users of the system.

(f) Provide information on system use and status to the Joint Staff, USCINCSPACE, and Director, DISA.

(g) Conduct an annual system assessment to determine the total satellite capacity available for allocation planning in each satellite coverage area. The results of the review will be forwarded to the Chairman of the Joint Chiefs of Staff by 1 February each year for use in developing future MILSATCOM apportionment in the JSCP.

(h) Develop and maintain:

1. Operational network management procedures.

2. Communications control system procedures.

3. In conjunction with USCINCSPACE, satellite, and payload control system procedures.

(i) Provide technical and operational analyses of user requirements forwarded in preparation for review by the joint MILSATCOM panel.

(j) Negotiate and conclude agreements with appropriate US commands or agencies, as necessary, to manage assigned resources and coordinate such agreements with the Chairman of the Joint Chiefs of Staff.

(l) Provide communications resource management at the direction of the Chairman of the Joint Chiefs of Staff by coordinating network control with the appropriate user and payload control executed by USSPACECOM C2 centers or other appropriate agency.

(m) Provide technical direction (communications taskings) to USSPACECOM satellite C2 operations centers.

(n) Assess the impact of proposed satellite movements and reconfigurations on communications and provide recommendations to the Joint Staff.

(o) Perform engineering analyses and other studies of system performance, as necessary.

(p) Recommend to the Joint Staff allocation of MILSATCOM capacity for day-to-day system management, deliberate planning, and architecture development.

(q) Maintain a direct liaison with other system managers; the Joint Staff; USCINCSPACE; Director, DISA; and users of the MILSATCOM system.

k. The Director, DISA, in accordance with assigned functions:

(1) Serves as the principal DOD SATCOM architect, to include development, preparation, and maintenance of a biennial architecture. The architecture is supported by a DISA-developed acquisition roadmap for use by executive agents and a future requirements forecast that looks ahead 6, 10, and 20 years. The architecture and roadmap is coordinated with the Chairman of the Joint Chiefs of Staff and forwarded annually by 1 April to ASD(C3I) for approval. Major architecture revisions will be conducted on odd-numbered years with updates provided on even-numbered years.

(2) Administers for the Chairman of the Joint Chiefs of Staff the ISDB of approved MILSATCOM requirements for day-to-day system management, deliberate planning, and as the primary source for architecture development.

(3) Advises the Army and Air Force on DSCS programmatic, technical, and operational matters necessary to optimize the expenditure of fiscal resources.

(4) Serves as the Joint MILSATCOM Panel Administrator (JMPA).

(5) Serves as the executive agent for the development, coordination, and integration of MILSATCOM system standards.

(6) Chairs joint configuration control boards for life-cycle management of technical interface specifications and C3 systems standards.

(7) Certifies conformance to MILSATCOM standards and system(s) interoperability.

(8) In collaboration with the Chairman of the Joint Chiefs of Staff, system managers, USCINCSPACE, and submitting organizations, assesses the feasibility of satisfying requirements by MILSATCOM.

(9) Assists the Chairman of the Joint Chiefs of Staff in analyzing user requirements and reviewing program documentation to ensure satisfaction of interoperability requirements.

(10) Collaborates with MILSATCOM system managers in the engineering development and design of MILSATCOM systems to ensure interoperability and compliance with MILSATCOM system standards.

(11) Reviews all SCOCs and advises system managers and the Chairman of the Joint Chiefs of Staff of areas that may adversely affect joint tactical interoperability. Recommend courses of action to correct discrepancies.

(12) Conducts MILSATCOM studies and analyses and provides technical support to the Joint Staff, ASD(C3I), and CINCs, as requested.

(13) Integrates SATCOM requirements processing and architecture support with DISA responsibilities for Management of Base and Long-Haul Telecommunications Equipment and Services (DOD Directives 4640.13 and 4640.14). This includes ensuring eventual access compatibility between the ISDB and the Telecommunications Management Program (TMP) data base.

(14) Manages the DOD TSP program and data base for implementing DCA Circular 310-130-4.

APPENDIX A

MILITARY SATELLITE COMMUNICATIONS REQUIREMENTS PROCESS (SYSTEM ACCESS REQUIREMENTS AND SYSTEM ACQUISITION REQUIREMENTS)

SECTION I. GENERAL

1. Overview. The MILSATCOM requirements process is vital to the proper management of all aspects of DOD MILSATCOM systems. Documented and approved MILSATCOM requirements will support the development of the MILSATCOM architecture, programming and budgeting decisions, acquisition program decisions, and the effective operational use of MILSATCOM systems. The process through which MILSATCOM requirements are approved and documented is described in the following paragraphs. Key elements of the process include:

a. A standardized method of stating requirements.

b. CJCS validation of approved requirements.

c. Timely feedback on the status of requirements submissions.

d. A central repository of approved requirements (ISDB).

e. Guidance for gaining access to MILSATCOM systems.

f. Assessment of user requirements in support of the MILSATCOM architecture and in formulating system requirements for systems acquisition.

As directed in reference 1, the Chairman of the Joint Chiefs of Staff is responsible for the requirements process. The Joint Staff will manage the requirements process for the Chairman of the Joint Chiefs of Staff.

2. The Integrated SATCOM Data Base. The Director, DISA, will maintain the single consolidated data base of all CJCS-approved MILSATCOM requirements, the ISDB (Appendix E, references 1 and 17). The ISDB will contain, but not be limited to, information necessary to support day-to-day operational management of all MILSATCOM systems; wartime deliberate planning; and future needs for architecture preparation and system development. The ISDB design will provide the capability to document requirements for connectivity regardless of whether the requirement can be satisfied on current or planned systems or a new future system. Access to the ISDB is controlled by the Joint Staff/JCSC. Timely access of the complete ISDB will be available to the Joint Staff, DISA, MILSATCOM system managers, Services, USSPACECOM, CINCs, and selected activities designated by the Joint Staff. The remainder of the MILSATCOM community will have access to ISDB information associated with their specific systems and requirements.

3. Justification. The need to use a MILSATCOM system for connectivity is based on operational considerations (current and future), the warfighting requirements of military forces, and the satisfaction of national defense goals. Specific considerations will include but not be limited to the following: feasibility of alternate media, area of coverage, survivability, mobility, reliability, security (including the need to be under US control), and flexibility. The statement of requirements for MILSATCOM connectivity will include indicating the warfighting level for the requirement as either hard core, soft core, or general purpose. The definitions of these terms are provided in the Glossary, and an illustration of their applicability to DOD missions is depicted in Figure A-1.

4. Format. Requirements for connectivity using a MILSATCOM system will be submitted in the format of the MILSATCOM Requirement Request in accordance with instructions provided by the Joint Staff/JCSC (Appendix E, reference 6).

5. Applicability. All requirements for MILSATCOM connectivity will be addressed in accordance with this appendix, including US military requests for access to allied MILSATCOM systems; e.g., the UK SKYNET and France's SYRACUSE. Additionally, all CINCs, Services, and Defense agencies will document their current and planned use of fixed and mobile commercial satellite services in the JCSC format (Appendix E, reference 6).

MILSATCOM Requirements Survivability Hierarchy

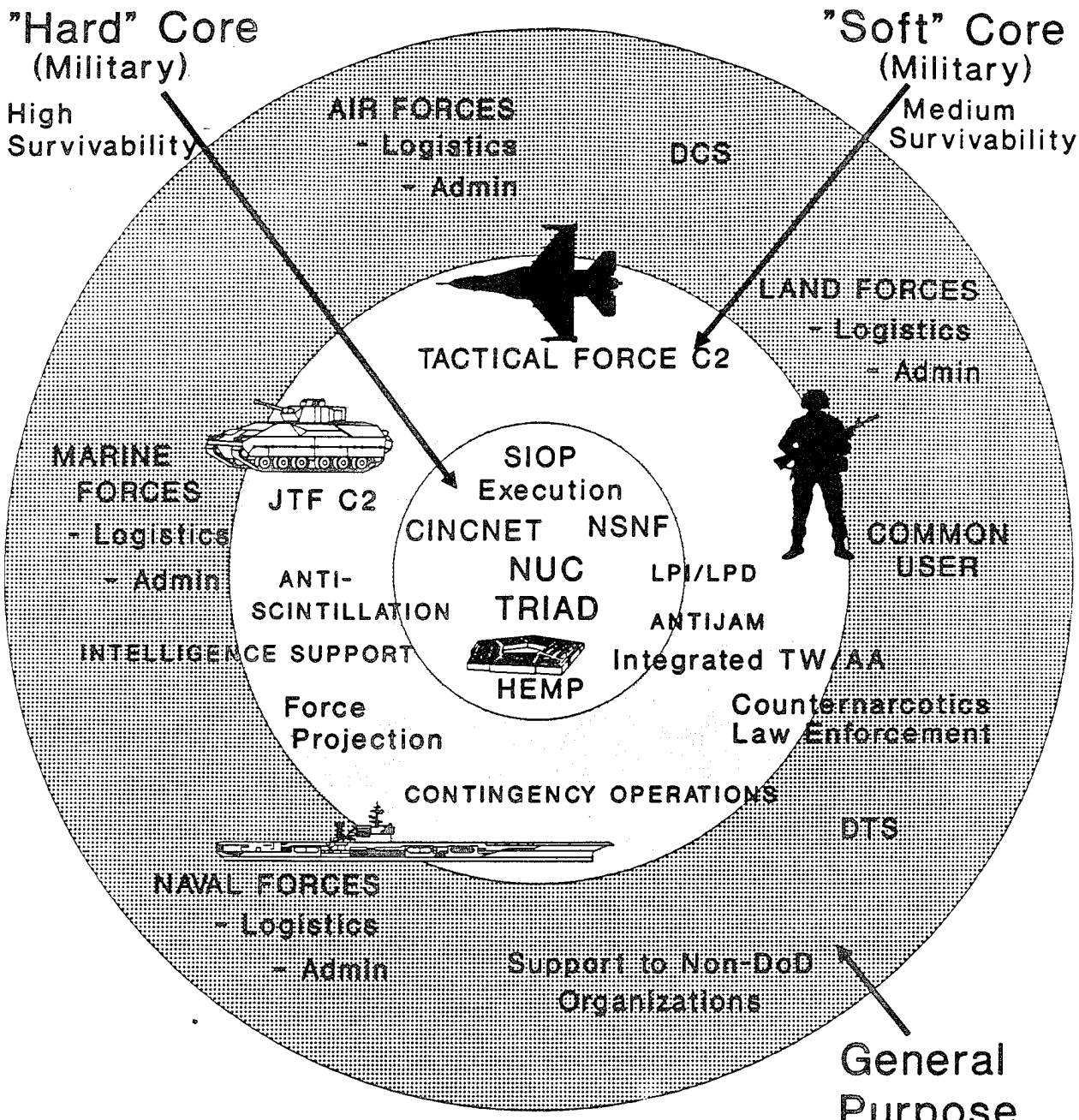


Figure A-1.

NOTE: Forces and mission depictions are notional.

SECTION II. REQUIREMENTS SUBMISSION

6. DOD SATCOM Requirements

a. The Chairman of the Joint Chiefs of Staff, CINCs, Services, and Defense agencies are the advocates of all MILSATCOM requirements. The CINCs are the advocates for their respective AOR/AOO. Each CINC will consolidate, validate, and prioritize all requests for use of MILSATCOM systems within the AOR/AOO. The Services and USSOCOM will validate and submit, through appropriate channels, Service- and SOF-unique requirements for system development and/or testing, training, organizing, and equipping forces. Defense agencies will validate and submit, to the Joint Staff, requirements in support of their agency mission and/or function. See Figure A-2.

b. CINCs, Services, and Defense agencies will carefully review each requirement and the associated performance characteristics and attributes identified to ensure each requirement:

(1) Is valid.

(2) Has a clear operational concept.

(3) Identifies all OPLANs, OPORDs, CONPLANs, and implementation directives supported.

(4) Identifies mission(s) supported.

(5) Provides a mission impact if not satisfied.

c. DOD MILSATCOM requirements will be forwarded to the

Joint MILSATCOM Panel Administrator (JMPA) for requirements processing.

7. Urgent Requirements. DOD MILSATCOM requirements can be urgent or routine. An urgent request is submitted directly to the Joint Staff/JCSC, with information copies to the JMPA. The request will contain justification for urgent processing.

8. Other MILSATCOM Requirements. Non-DOD and Federal agencies' MILSATCOM access requirements will be submitted to ASD(C3I). If ASD(C3I) concurs in the requirement, it will be forwarded to Joint Staff/J-6 for review and action. See Figure A-3.

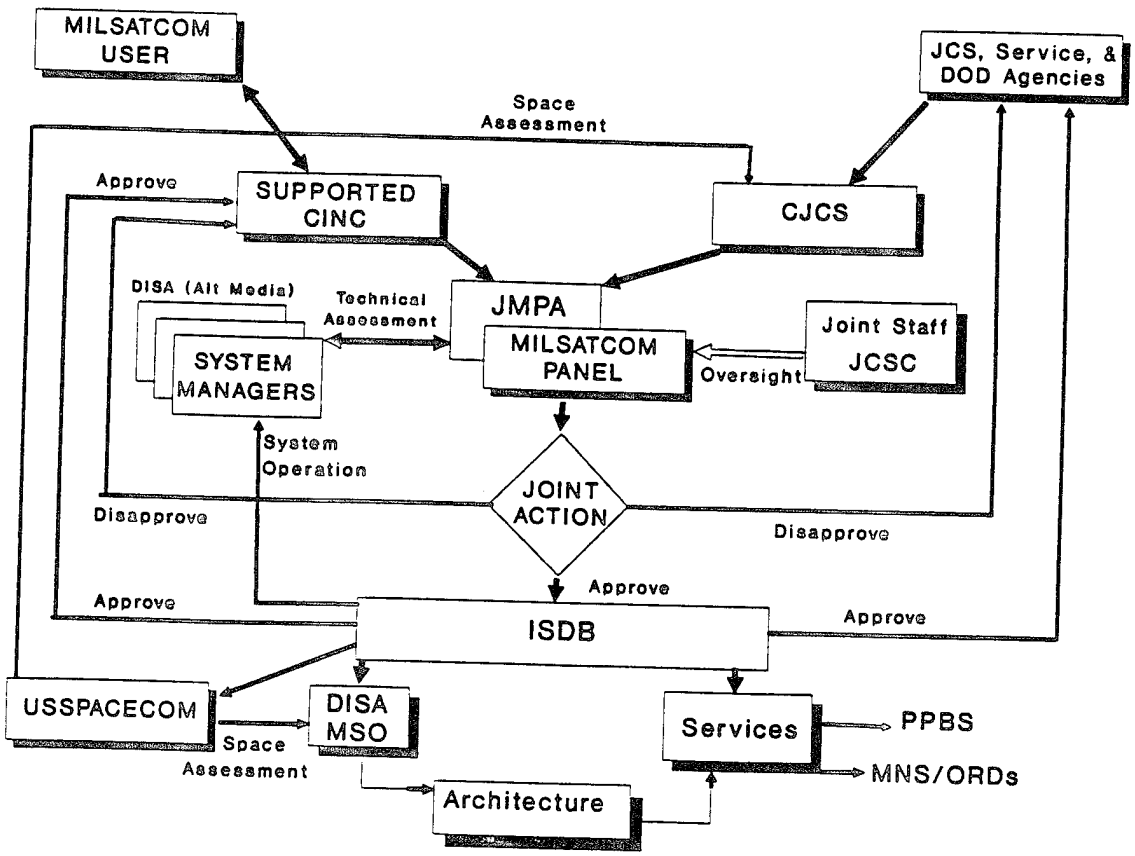


Figure A-2. DOD MILSATCOM Requirements Requests

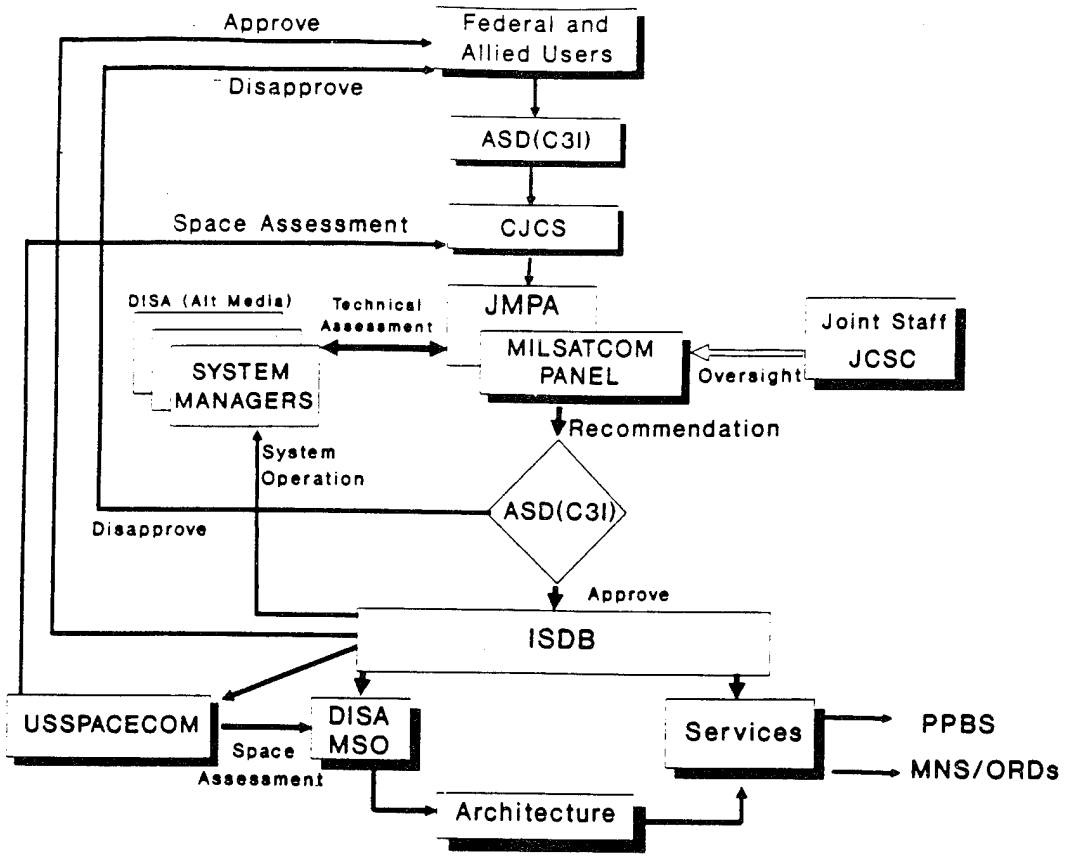


Figure A-3. Non-DOD MILSATCOM Requests

SECTION III. REQUIREMENTS PROCESSING

9. Technical Assessment. When a requirement is received by the JMPA, it will be distributed to the appropriate system manager(s) and DISA. The system operational manager(s) and DISA (as applicable) will prepare a technical assessment within 6 weeks for routine requirements. Urgent requirements will be processed expeditiously. Technical assessments will be

forwarded to the JMPA (routine) or Joint Staff/JCSC (urgent). Technical assessments will discuss the capability of current or programmed systems to satisfy the requirement. Requirements that cannot be satisfied by current or programmed systems or that will only be partially satisfied will be indicated as such. (DISA will use this information in assessing the need for future systems in architecture development.) The technical assessment will address the schedule relationship between the requirement and the system capability, detail the impact to other users if the requirement is implemented, and offer alternatives if service cannot or will not be provided. DISA will assess the potential for satisfying requirements via alternate media.

10. Joint MILSATCOM Panel. The Joint MILSATCOM Panel reviews MILSATCOM requirements with the associated assessments and makes a recommendation for approval or disapproval to the Chairman of the Joint Chiefs of Staff.

a. The Joint Staff will chair the Joint MILSATCOM Panel comprising representatives from each Service. User representatives may attend panel meetings in support of requirements under consideration.

b. The panel will meet at least monthly.

c. The JMPA will consolidate all assessments into one package for dissemination to the Joint MILSATCOM Panel members before scheduled meetings.

d. Results of the panel meeting will be incorporated into a joint action to approve or disapprove the requirements.

e. The JMPA will enter into the ISDB all approved MILSATCOM requirements and provide timely notification to users whether requirements were approved or disapproved.

11. Requirements Update. Joint Staff/JCSC will initiate a review of all MILSATCOM requirements in the ISDB every 2 years. The purpose of this review is to ensure all ISDB requirements are current and accurately stated. The action begins in July of odd-numbered years when CINC and user excerpts from the ISDB are distributed. All users then review, update, and recommend continuation, change, or deletion of requirements in the ISDB. Users will forward requirements updates to the Joint Staff/JCSC by 1 October of odd-numbered years for presentation to the Joint MILSATCOM Panel and subsequent revalidation. It is essential the ISDB be kept accurate and current to serve its intended purposes.

12. Space Assessment. USSPACECOM will develop a space assessment based upon the warfighting CINCs' MILSATCOM operational requirements (as documented in the ISDB) on an as-required basis.

SECTION IV. ACCESS TO MILSATCOM SYSTEMS

13. Access to a MILSATCOM Space Segment

a. Access to a MILSATCOM system (Figure A-4) is predicated on having a CJCS-approved requirement and following processes described in applicable SCOC documents. MILSATCOM system operational managers will ensure only valid requests for MILSATCOM system access are satisfied. Each request will cite the associated approval number assigned in the ISDB. Users will forward access requests in accordance with procedures established in each system's SCOC. MILSATCOM systems (and certain subelements) operate in technically very different ways and each system will address dedicated or dynamic user requirements in the most efficient manner.

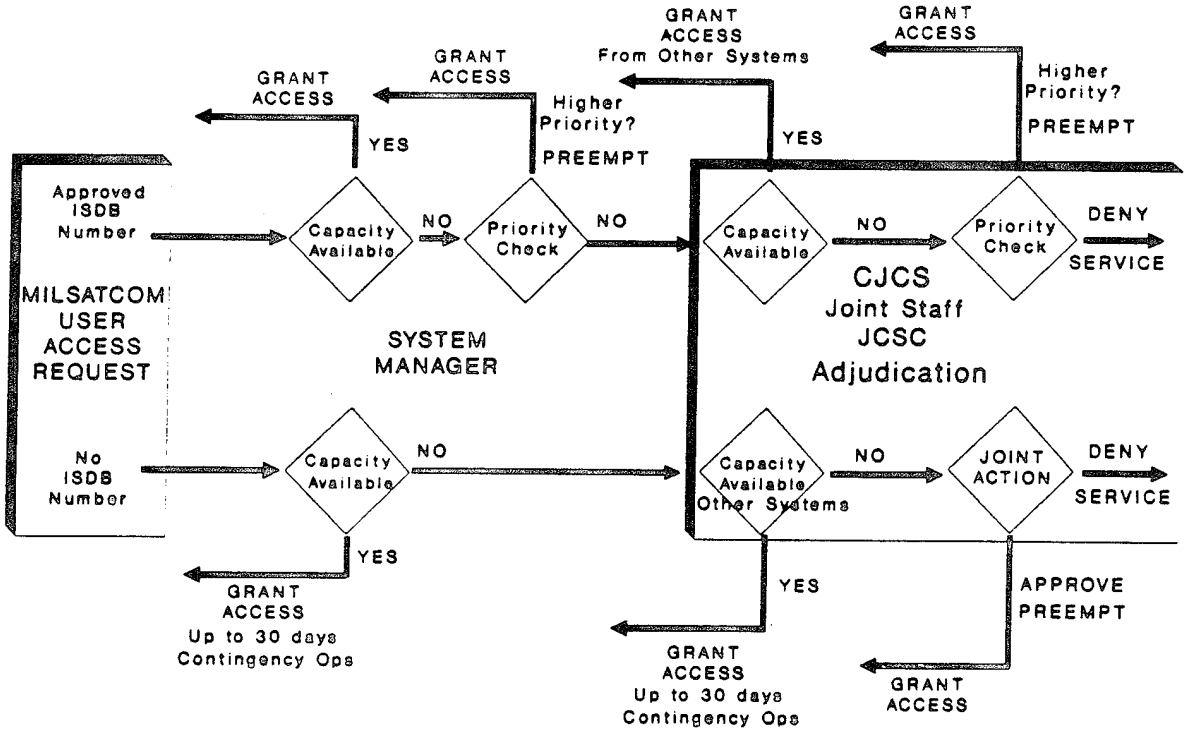


Figure A-4. MILSATCOM Access

b. Exceptions

(1) System operational managers may grant temporary access to a user with short-term, one-time, or nonrecurring requirements (less than 30 days duration) provided it can be supported without adversely impacting other validated users.

(2) Joint Staff/JCSC may authorize MILSATCOM access to users with emergency requirements that have not obtained CJCS approval.

14. Prioritization and Allocation of MILSATCOM System Capacity

a. MILSATCOM systems support critical C3I requirements vital to national defense. Their use is integrated into the connectivity architectures and operations of all user communities. Though both global and theater apportionments for MILSATCOM resources are established under the Deliberate Planning process, reallocation of MILSATCOM capacity may be necessary based on the current operational situation, threat conditions, and warfighting requirements.

b. MILSATCOM users will prioritize all requests for MILSATCOM access. Users will rank-order newly approved requirements against existing, approved requirements (current and future) by the satellite system (UHF, SHF, EHF) to which requirements have been allocated. This facilitates the optimum use of constrained resources against all approved requirements.

c. Access will be based on priorities assigned in accordance with Appendix B. These values are consistent with DISA Circular 310-130-4. The Chairman of the Joint Chiefs of Staff will approve more detailed access priority lists for incorporation into each system's SCOC. The Chairman of the Joint Chiefs of Staff, through the JCSC, can adjust channel access priority and allocation to meet the operational situation at hand.

d. The Chairman of the Joint Chiefs of Staff has final adjudication authority over competing requirements for MILSATCOM access. The Joint Staff/JCSC will administer the adjudication process and advise MILSATCOM system operational managers on which users to preempt when required. Users will accept direction from MILSATCOM system operational managers and immediately terminate their access when so directed. Coordination with preempted users will be accomplished as early as possible before actual service termination.

SECTION V. MILSATCOM REQUIREMENTS AND THE ACQUISITION PROCESS

15. SATCOM Architecture. An approved architecture is necessary to guide MILSATCOM system managers and lead Services as they develop and procure new systems or upgrade current systems to satisfy valid user needs. The architecture must be based on a solid requirements foundation. The ISDB will provide a central repository for all CJCS-approved current and future MILSATCOM connectivity requirements (both DOD and non-DOD). Results of the biennial MILSATCOM requirements update cycle will be used by DISA as the primary source for updating the DOD SATCOM architecture. Other requirements sources such as MNSs and ORDs will also influence the architecture. All MNSs and ORDs leading to a SATCOM system solution will have the associated connectivity requirements eventually documented in the ISDB.

16. MILSATCOM Acquisition Roadmap. The SATCOM architecture, developed by DISA, includes a SATCOM acquisition roadmap that identifies decision points, program and architecture options, SATCOM shortfalls, and key architectural issues. The SATCOM architecture and roadmap are coordinated with the Chairman of the Joint Chiefs of Staff, the Services, and CINCs and forwarded to ASD(C3I) by 1 April of each year for approval. The approved architecture and roadmap is the basis for future system MNSs and ORDs and provides guidance to system managers and lead Services for the PPBS process. Specific system ORDs will include

system-level performance criteria based on an analysis of user requirements from the ISDB. Development of system-level performance criteria will be the responsibility of the system manager and/or lead Service and supported by the Joint Staff and DISA.

17. New MILSATCOM Systems. MNSs and ORDs must be submitted to the Joint Requirements Oversight Council (JROC) for validation as required by DOD Directive 5000.1 and DOD Instruction 5000.2 acquisition publications and JROCSM 019-92. All MNSs and ORDs for MILSATCOM systems will be certified by the Joint Staff/J-6 as to their need and/or operational requirement and for conformance to joint C4 policy and doctrine, architectural integrity, and interoperability before JROC validation. The JROC validation of a system MNS or ORD will be used in accordance with DOD Directive 5000.1 and DOD Instruction 5000.2 to support systems acquisition.

APPENDIX B

MILITARY SATELLITE COMMUNICATIONS PRIORITIZATION

PRIORITY	USER CATEGORY
PRIORITY I.	STRATEGIC ORDER (Essential to national survival)

A. System control/orderwire
B. National Command Authorities
   - Presidential support
   - Secretary of Defense support
C. Strategic warning/intelligence
D. SIOP requirements

PRIORITY II. WARFIGHTING REQUIREMENTS

A. Department of State diplomatic negotiations
B. CJCS
C. CINC
D. JTF/CTF
E. Component support (e.g., theater forces)
F. Tactical warning/intelligence
G. CJCS-sponsored and other selected exercises
H. Counternarcotics operations

PRIORITY III. ESSENTIAL SUPPORT

A. Other intelligence (e.g., technical, economic)
B. Weather
C. Logistics
D. MIJI support (for efforts supporting a specific user problem, effort will have priority of user being affected
E. Diplomatic post support
F. Minimum circuits for TT&C from space vehicles and primary circuits for manned space flights
G. Other Service support

PRIORITY IV. TRAINING

PRIORITY	USER CATEGORY
PRIORITY V.	VIP SUPPORT
	A. Service Secretaries B. Chiefs of the Services and commanders of unified and specified commands C. Other
PRIORITY VI.	RDT&E
	A. DOD test and demonstration
PRIORITY VII.	MISCELLANEOUS
	A. DOD Support to law enforcement agencies B. Non-DOD support C. Non-US support D. Other

APPENDIX C

MILITARY SATELLITE COMMUNICATIONS STANDARDS

1. UHF

a. MIL-STD-188-181 (Draft), "Interoperability standard for dedicated 5 kHz and 25 kHz UHF satellite communications."

b. MIL-STD-188-182 (Draft), "5 kHz UHF DAMA waveform."

c. MIL-STD-188-183 (Draft), "25 kHz UHF TDMA/DAMA terminal waveform."

d. MIL-STD-188-184, "UHF SATCOM Advanced Data Controller" (in development).

e. MIL-STD-188-185, "UHF SATCOM 5 kHz and 25 kHz DAMA controller" (in development).

2. SHF. The antijam interoperable waveform standard, specification document S2351, developed for the Universal Modem is designated as the SHF low data rate antijam modem standard. Use of this waveform is required for future SHF antijam modem development.

3. EHF

a. MIL-STD-1582C, "Military standard extremely high frequency (EHF) low data rate (LDR) satellite data link standards (SDLS) uplinks and downlinks."

b. MIL-STD-1810, Military standard extremely high frequency (EHF) medium data rate (MDR) satellite data link standards (SDLS) uplinks and downlinks" (in development).

APPENDIX D

SYSTEM CONTROL AND OPERATIONS CONCEPT

1. The SCOC defines the operational capability of the MILSATCOM system, provides the operational concept for system control, and provides system policies and procedures for effective communications resource management and user resource employment. The MILSATCOM system operational manager will publish a SCOC following coordination with the Joint Staff, CINCs, Services, and Defense agencies. The SCOC will be updated as required, but at least every 5 years.

2. The SCOC will contain, but not be limited to:

   a. An overall description of the system.

   b. An overall description of system operations and control, including interoperability and survivability.

   c. Identification of major system missions, users, and key functions.

   d. Procedures for system access or allocation of system capacity.

   e. Procedures to implement approved restoration priorities (as appropriate).

   f. Procedures for reaction to a stressed environment.

   g. A user deployment concept (as appropriate).

   h. A detailed MILSATCOM prioritization scheme based on Appendix B priorities.

APPENDIX E

REFERENCES

1. DOD Directive 5105.44, 9 October 1973, "Military Satellite Communications (MILSATCOM) Systems Organization"

2. CJCS MOP 43, 11 March 1992, "Military Telecommunications Agreements Between the United States and Regional Defense Organizations of Friendly Foreign Nations"

3. JCS MOP 160, 7 January 1986, "Compatibility and Interoperability of Tactical Command, Control, Communications, and Intelligence Systems"

4. CJCS MOP 3, 31 January 1990, "CJCS-Controlled Tactical Communications Assets"

5. Joint Pub 1-02, 1 December 1989, "Department of Defense Dictionary of Military and Associated Terms"

6. DISA/TVB, August 9, 1991, "Integrated MILSATCOM Management System, User Requirements Request Form"

7. SM-416-84, 9 July 1984, "The Use of Space Systems in Threat Environments"

8. MJCS-33-87, 6 March 1987, "Technical Criteria for UHF SATCOM Terminals Accessing Nonprocessed Satellite Channels"

9. MJCS-11-88, 2 February 1988, "MILSATCOM C2 Operations Concept"

10. MJCS-29-89, 16 February 1989, "Super High Frequency (SHF) Antijam Communications Using DOD Satellites (U)"

11. MJCS-36-89, 28 February 1989, "UHF Satellite Communications Secure Voice Policy"

12. MJCS-37-89, 28 February 1989, "EHF Standards for MILSATCOM Systems"

13. MJCS-63-89, 17 April 1989, "UHF Satellite Communications Demand Assigned Multiple Access (DAMA) Requirement"

14. JCSM-74-85, 4 March 1985, "Charter for the Joint Communications Satellite Center"

15. MJCS-170-87, 2 October 1987, "Military Satellite Communications Deliberate Planning"

16. DOD Directive 5137.1, 27 March 1990, "Assistant Secretary of Defense for Command, Control, Communications and Intelligence"

17. DOD Directive 5105.19, 25 June 1991, "Defense Information Sytems Agency (DISA)"

18. DOD Directive 5000.1, 23 February 1991, "Defense Acquisition"

19. DOD Directive 5000.2, 23 February 1991, "Defense Acquisition Management Policies and Procedures"

20. ASD(C3I) memorandum, 3 September 1991, "Executive Agent for DOD Information Standards."

21. DOD Directive 4640.13, 5 December 1991, "Management of Base and Long-Haul Telecommunications Equipment and Services"

22. DOD Directive 4640.14, 6 December 1991, "Base and Long-Haul Telecommunications Equipment and Services"

23. CM-1127-91, 25 November 1991, "C2 Functional Analysis and Consolidation Review Panel Report"

24. DOD Directive 4630.5, 9 October 1985, "Compatibility and Interoperability of Tactical Command, Control, Communications, and Intelligence Systems (C3I)"

25. DCA Circular 310-130-4, 10 September 1990, "Defense User's Guide to the Telecommunications Service Priority (TSP) System"

26. DOD 5000.2M, February 1991, "Defense Acquisition Management Documentation and Reports"

27. Joint Pub 5-03.1, "Joint Operations Planning and Execution System, Volume I (Procedures Description)" (draft, 20 December 1991)

28. MCM-17-90, 15 February 1991, "Space Launch Decision Process"

29. MCM-168-91, 7 October 1992, "Joint Strategic Capabilities Plan for CY 1993-1995 (JSCP CY 93-95)"

30. JROCSM 019-92, 3 February 1992, "Requirements Generation System Policies and Procedures"

31. MCM-59-92, 24 April 1992, "Annex I (C4 Systems) to the Joint Strategic Capabilities Plan for CY 1993-1995 (JSCP CY 93-95)"

GLOSSARY

PART I--ABBREVIATIONS AND ACRONYMS

AFSATCOM	Air Force Satellite Communications
AOO	area of operations
AOR	area of responsibility
ASD(C3I)	Assistant Secretary of Defense (Command, Control, Communications and Intelligence)
C2	command and control
C3	command, control, and communications
C3I	command, control, communications, and intelligence
C4	command, control, communications, and computers
CINCs	commanders of unified and specified commands
CINCNET	CINCs' network
CINCNORAD	Commander in Chief, North American Aerospace Defense Command
CJCS	Chairman of the Joint Chiefs of Staff
COCOM	combatant command
CONPLAN	operation plan in concept format
CTF	combined task force
DAMA	Demand Assigned Multiple Access
DCS	Defense Communications System
DIA	Defense Intelligence Agency
DISA	Defense Information Systems Agency
DLA	Defense Logistics Agency
DMA	Defense Mapping Agency
DOD	Department of Defense
DSCS	Defense Satellite Communications System
DTS	Diplomatic Telecommunications Service
EHF	extremely high frequency
FEP	FLTSAT EHF package
FLTSAT	fleet satellite
GMF	ground mobile forces
HEMP	high-altitude electromagnetic pulse
ISDB	Integrated SATCOM Data Base
ITW/AA	integrated tactical warning and attack assessment

JCS	Joint Chiefs of Staff
JCSC	Joint Communications Satellite Center
JMPA	Joint MILSATCOM Panel Administrator
JOPES	Joint Operations Planning and Execution System
JROC	Joint Requirements Oversight Council
JSCP	Joint Strategic Capabilities Plan
JTF	joint task force
kHz	kilohertz
LDR	low data rate
LEASAT	leased satellite
LES	Lincoln Laboratories Experimental Satellite
LPI/LPD	low probability of intercept/low probability of detection
MDR	medium data rate
MIJI	meaconing, intrusion, jamming, and interference
MILSATCOM	military satellite communications
MNS	Mission Need Statement
MOP	memorandum of policy
MSO	MILSATCOM Systems Organization
NCA	National Command Authorities
NSA/CSS	National Security Agency/Central Security Service
NCS	national communications system
NSNF	nonstrategic nuclear forces
OPLAN	operations plan
OPORD	operations order
ORD	Operational Requirements Document
OSD	Office of the Secretary of Defense
POM	Program Objectives Memorandum
PPBS	Planning, Programming, and Budgeting System
RDT&E	research, development, testing, and evaluation
SATCOM	Satellite Communications (to include commercial services)
SCOC	System Control and Operations Concept
SCTS	Single Channel Transponder System
SHF	superhigh frequency
SIOP	Single Integrated Operational Plan
SLC	Satellite Laser Communications
SOF	special operations forces

TDMA	time division multiple access
TMP	telecommunications management program
TT&C	telemetry, tracking, and commanding
TW/AA	tactical warning and attack assessment
UHF	ultrahigh frequency
UFO	UHF Follow-On Satellite System
US	United States
USSOCOM	United States Special Operations Command
USSPACECOM	United States Space Command
VIP	very important person

PART II--DEFINITIONS*

access. The right to enter or make use of a MILSATCOM system. The state or quality of being easy to approach or enter a MILSATCOM system. "Emergency Access" is a sudden crisis, emergency, or state requiring a user to obtain the right to enter or make use of a MILSATCOM system.

adjudication. Rationalization of distributed communications resources when the apportioned and allocated resources are insufficient in the amount of priority to achieve the mission objectives; performed by communications managers, at each command level, until the insufficiency is resolved. The ultimate adjudication authority is the Chairman of the Joint Chiefs of Staff working through the JCSC.

advocate. In the context of MILSATCOM, a designated representative who supports MILSATCOM needs on behalf of a select group of users. Advocates develop MNSs that reflect users' requirements; lead development of architectures to fully integrate systems with operating forces; and seek DOD and congressional support for MILSATCOM systems.

allocation. The operational real-time assignment of MILSATCOM communications resources (for example: channels on UHF, bandwidth and power at SHF, and uplink demodulators/crosslinks/downlink hops for EHF) to a CINC and/or user for use in activating a communications link and/or network. Allocation is dependent on the apportionment process. (Joint Pub 1-02 defines allocation as "the translation of the apportionment into total numbers of sorties by aircraft type available for each operation or task").

approval. The decision to regard a MILSATCOM recommended requirement favorably. To confirm or consent to officially sanction the MILSATCOM requirement or request for access. (Note: a MILSATCOM requirement can be approved and documented in the ISDB but not be granted access to a MILSATCOM system. Because requirements commonly exceed capacity, access is granted under a priority scheme as outlined in Appendix E. An approved ISDB requirement entitles the user to contend for MILSATCOM resources).

apportionment. An infrequent determination and assignment of each MILSATCOM system's total communications resources (percentage capacity and/or priority) for planning purposes to users. Apportionment is based on operational tasks for major mission areas as influenced by war plans for specific theater(s) of operation. The objective is to plan the equitable distribution of limited resources among critical prioritized requirements. The result is a CJCS-approved document recording the percentage capacity and priority for each mission area in each geographic area of operations for support of the Chairman of the Joint Chiefs of Staff and the unified and specified commands. (Joint Pub 1-02 defines apportionment as "the determination and assignment of the total expected effort by percentage and/or by priority that should be devoted to the various air operations and/or geographic areas for a given period of time").

communications resource management. Managing the communications payload resources (channels, bandwidth, capacity) of a MILSATCOM system to maximize the satisfaction of user requirements.

general purpose satellite communications. Provides communications connectivity to support day-to-day operations for logistic, administrative, intelligence, and common-user networks, and counternarcotics requirements, as well as non-DOD organizations.

hard core satellite communications. Supports critical C3I needs of the SIOP, ITW/AA, and NSNF missions. Characteristics include survivability against the maximum threat for jamming, HEMP attack, scintillation, and includes LPI/LPD, global coverage, and near-real-time access and network reconfiguration.

network control. Directing the use of assigned payload resources (e.g., channel, circuit, capacity, or antenna (for Milstar)) and user terminals in support of user communications. Normally accomplished by the user. (Note: For DSCS, network control, payload control, and communications resource management are very interrelated functions).

payload control. Antenna pointing, power or gain changes, antenna discrimination, transmission security key distribution, crosslink reconfiguration, payload processor configuration, and payload commanding. Includes the changing of payload operating modes (e.g., frequency plans, antijam frequency hopping) to support operational requirements.

SATCOM user connectivity requirements. An established need justifying the timely allocation of MILSATCOM resources to achieve a capability to accomplish approved objectives, missions, or tasks.

soft core satellite communications. Provides communications connectivity to support theater/contingency operations, force projection, tactical intelligence support, and counternarcotics requirements. Characteristics include survivability against a medium threat for jamming (tactical jammer) and limited LPI/LPD.

spacecraft control. Spacecraft station-keeping, stabilization, maneuvering and repositioning, anomaly resolution, tracking, telemetry, commanding, and ephemeris generation.

system manager. Those organizations identified by the Chairman of the Joint Chiefs of Staff to exercise authority over the planning, direction, and control of tasks and associated functions essential for support of designated weapons or equipment systems. When relating to a specific system manager, this term will be preceded by the appropriate designation (e.g., FLTSATCOM system manager, DSCS system manager). Joint Pub 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.

system standards. System standards will include information, information processing, and information transfer standards required for interoperability and system performance.

---

* Unless identified as extracted from Joint Pub 1-02, terminology herein is not standardized within the Department of Defense and is applicable only in the context of this document.