CJCSI 6250.01F
26 February 2019

DEPARTMENT OF DEFENSE SATELLITE COMMUNICATIONS

JOINT STAFF
WASHINGTON, DC 20318

(INTENTIONALLY BLANK)

CHAIRMAN OF THE JOINT CHIEFS OF STAFF INSTRUCTION

J-6 CJCSI 6250.01F
DISTRIBUTION: A, B, C, S 26 February 2019

DEPARTMENT OF DEFENSE SATELLITE COMMUNICATIONS

References: See Enclosure F.

1. Purpose. This instruction provides high-level operational policy, direction, and procedures for the planning, management, employment, and use of operational Department of Defense (DoD) satellite communications (SATCOM) resources for authorized users. The primary purpose of this instruction is to define the processes necessary to ensure essential DoD SATCOM support for mission accomplishment. Specific objectives are to:

a. Maintain an integrated joint approach toward DoD SATCOM operational management, access, control, and planning of support to authorized users in current and future satellite systems.

b. Assign responsibilities for system-level operational management and positive control of DoD SATCOM resources.

c. Designate the SATCOM Database (SDB) as the Joint Requirements Oversight Council (JROC)-endorsed DoD repository for documenting all current and future military and commercial SATCOM requirements of the DoD and its mission partners.

d. Assign the Joint SATCOM Panel (JSP) responsibility for reviewing and approving validated requirements to be entered into the SDB.

e. Provide a standing process for submitting DoD SATCOM user connectivity requirements to obtain access to current systems and shape future system planning.

f. Provide high-level direction for DoD SATCOM resource apportionment, allocation, arbitration, and adjudication.

g. Define the DoD SATCOM prioritization and precedence scheme that enables effective and efficient use of current resources and facilitates operational planning and employment.

h. Define processes for senior-level operational oversight of DoD SATCOM requirements management, resource allocation, policies and service management.

i. Describe DoD SATCOM resource operational monitoring and control.

j. Provide guidance for the certification of SATCOM terminals and modems standards for Conformance, Operational Performance, and Joint Interoperability.

2. Superseded/Cancellation. Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 6250.01E, "Satellite Communications," 15 February 2013 is hereby superseded and CJCSI 6251.01 Series, "Narrowband Satellite Communications Requirements," is hereby canceled.

3. Applicability. This instruction applies to authorized users of DoD SATCOM that plan, use, manage, control, provide or are provided, exchange, and sustain operational DoD SATCOM resources. These resources include DoD-owned satellites, control, and terminal infrastructure (commonly referred to as military satellite communications (MILSATCOM)); hosted payloads; leased and acquired commercial satellite communications (COMSATCOM) resources including ground infrastructure; Joint (refer to glossary) and International partner systems used by the DoD. Nothing in this instruction alters or supersedes the existing authorities and policies of the Director of National Intelligence regarding the protection of sensitive compartmented information or timely transmission of critical intelligence as directed by Executive Order 12333.

4. Scope. This instruction provides policy for integrated DoD SATCOM management to ensure effective and efficient communications support to Combatant Commands (CCMDs), Services, Agencies (C/S/A), International Partners, and other authorized users. Specifically, it identifies the user connectivity requirements process for operational planning and access to current satellite systems as well as for planning future communications capabilities. It also articulates the categories and priorities of DoD SATCOM services and identifies operational processes and management responsibilities. This instruction also addresses Service and Agency responsibilities for certification (Conformance, Operational Performance, and Joint Interoperability) of SATCOM systems and components.

5. Policy. See Enclosure A.

6. Definitions. See Glossary.

7. Responsibilities. See Enclosure B.

8. Summary of Changes. This instruction clarifies DoD SATCOM roles and responsibilities of the Office of the Secretary of Defense (OSD), the Joint Staff (JS), U.S. Strategic Command (USSTRATCOM), and the Defense Information Systems Agency (DISA). Content herein is aligned to current and emerging Department-level DoD SATCOM policy. Applicable information from CJCSI 6251.01 Series was merged and expanded in this instruction.

9. Releasability. UNRESTRICTED. This directive is approved for public release; distribution is unlimited on NIPRNET. DoD Components (to include the CCMDs) and other Federal agencies may obtain copies of this directive via the NIPRNET CJCS Directives Electronic Library at <http://www.jcs.mil/library>. Joint Staff activities may also obtain access via the SIPR Directives Electronic Library web sites.

10. Effective Date. This INSTRUCTION is effective upon receipt.

For the Chairman of the Joint Chiefs of Staff:

KENNETH F. MCKENZIE, JR.
LtGen, U.S. Marine Corps
Director, Joint Staff

Enclosures:

A -- Department of Defense (DoD) Satellite Communications (SATCOM) Operational Policy
B -- Department of Defense (DoD) Satellite Communications (SATCOM) Management Responsibilities
C -- Department of Defense (DoD) Satellite Communications (SATCOM) Requirements Process
D -- Apportionment, Allocation, Operational Performance Terminal Certification and Waivers
E -- Department of Defense (DoD) Satellite Communications (SATCOM) Oversight and Requirements Assessments
F -- References
GL -- Glossary

(INTENTIONALLY BLANK)

DISTRIBUTION

Distribution A, B, and C plus the following:

	Copies
Secretary of State	2
Department of Defense Chief Information Officer	2
Director of the Central Intelligence Agency	2
Commander, Joint Spectrum Center	2
Director of National Intelligence	2

"OPR for the subject directive has chosen electronic distribution to the above organizations via e-mail. The JS Information Management Division has responsibility for publishing the subject directive to the SIPRNET and NIPRNET Joint Electronic Library Web sites."

(INTENTIONALLY BLANK)

TABLE OF CONTENTS

Page

ENCLOSURE A -- DEPARTMENT OF DEFENSE (DoD) SATELLITE COMMUNICATIONS (SATCOM) OPERATIONAL POLICY A-1

Purpose A-1
Definitions and Categories A-1
Use of Department of Defense (DoD) Satellite Communications (SATCOM) A-3
Department of Defense (DoD) Satellite Communications (SATCOM) Operational Policies A-4
Operational Goals A-5
Operational Management A-6

ENCLOSURE B -- DEPARTMENT OF DEFENSE (DoD) SATELLITE COMMUNICATIONS (SATCOM) MANAGEMENT RESPONSIBILITIES B-1

Purpose B-1
Responsibilities B-1

ENCLOSURE C -- DEPARTMENT OF DEFENSE (DoD) SATELLITE COMMUNICATIONS (SATCOM) REQUIREMENTS PROCESS C-1

Purpose C-1
Applicability C-1
Authority C-1
User Connectivity Requirements C-1
Purpose of Current Requirements C-2
Purpose of Future Requirements C-2
Satellite Communications (SATCOM) Database (SDB) C-2
National Security Satellite Communications (SATCOM) Systems Synchronization Roadmap (NS4R) C-3

APPENDIX A -- THE SATELLITE COMMUNICATIONS (SATCOM) DATABASE C-A-1

ENCLOSURE D -- Apportionment, Allocation, Operational Performance Terminal Certification and Waivers D-1

Purpose D-1
Terminology D-1
Narrowband D-3
Wideband Allocation D-4
Protected Allocation D-4
Commercial Allocation D-5
Prioritization and Precedence D-8

APPENDIX A -- Department of Defense (DoD) Satellite Communications (SATCOM) Priority and Precedence D-A-1
APPENDIX B -- Waiver Process D-B-1

ENCLOSURE E -- DEPARTMENT OF DEFENSE (DoD) SATELLITE COMMUNICATIONS (SATCOM) OVERSIGHT AND REQUIREMENTS ASSESSMENTS E-1

Overview E-1
Military Command, Control, Communications, and Computers Executive Board (MC4EB) Purpose E-1
Satellite Communications (SATCOM) Requirements and Capabilities Assessments E-1

APPENDIX A -- HOST NATION CERTIFICATION AND AUTHORIZATION TO OPERATE E-A-1

ENCLOSURE F -- REFERENCES F-1

GLOSSARY GL-1

PART I -- ABBREVIATIONS AND ACRONYMS GL-1
PART II -- DEFINITIONS GL-5

LIST OF TABLES

1. Basis for Foreign Nations' Access to DoD SATCOM Resources C-A-2

ENCLOSURE A

DEPARTMENT OF DEFENSE (DoD) SATELLITE COMMUNICATIONS (SATCOM) OPERATIONAL POLICY

1. Purpose. This Enclosure describes authorized use of DoD SATCOM resources and provides operational policies and goals for DoD SATCOM support.

2. Definitions and Categories

a. Satellite Communications (SATCOM). The use of satellites to provide beyond line of sight communications and networking services (including relay and amplification of data, messaging, video, and voice signals) to and from various points on or around the Earth.

b. Department of Defense (DoD) Satellite Communications (SATCOM). DoD SATCOM comprises DoD owned and operated SATCOM resources, DoD owned SATCOM resources operated by non-DoD entities, SATCOM resources acquired by the DoD from commercial providers, and SATCOM resources allocated by the U.S. Government (e.g., federal, civil SATCOM resources), international partners, or allied partners for DoD use.

c. Military Satellite Communications (MILSATCOM). MILSATCOM includes those systems (space, control, and terminal ground segments) owned and operated by the DoD. It also includes Enterprise gateways (including DoD gateways) and Service gateways. MILSATCOM consists of three bands:

(1) Narrowband. Narrowband SATCOM is defined as current, planned, and future DoD-owned, leased, and hosted SATCOM assets operating in the ultrahigh frequency spectrum using legacy and Wideband Code Division Multiple Access (WCDMA) waveforms. Non-processed resources are used over transponded systems on ultra high frequency (UHF) Follow-on (UFO), Fleet Satellites, and Mobile User Objective System (MUOS) legacy. Resources are allocated via single access (dedicated), Demand Assigned Multiple Access (DAMA) time slots, and Integrated Waveform (IW) processed channels. Future narrowband requirements will also be satisfied over the MUOS WCDMA waveform. Narrowband provides reliable, secure, fixed-site and mobile data and voice communications less subject to adverse weather conditions, dense foliage, terrain masking, distance limitations, and interoperability problems.

(2) Wideband. Wideband SATCOM systems provide substantial worldwide capacity for high-quality voice, imagery, video, and data transport, operating in the C-, X-, Ku-, and Ka-bands. Resources in the X- and Ka-bands

are accessed over the Defense Satellite Communications System and Wideband Global SATCOM (WGS) systems. Wideband offers protection capabilities, Electromagnetic Interference (EMI) detection, characterization, and mitigation; configurable beams, and adjustable power levels for high quality voice, imagery, and data circuits. Wideband also supports the Global Broadcast Service (GBS). Wideband can be configured to operate in Frequency Division Multiple access (FDMA) or one of several Time Division Multiple access (TDMA) schemas. Future wideband capabilities will include the protected tactical waveform (PTW) capability, which will further enhance wideband protection. Wideband SATCOM systems provide the primary transmission path for much of DoD's highest-priority communications.

(3) Protected Band. Protected SATCOM systems have the capability to negate or mitigate the purposeful or inadvertent degradation, disruption, denial, unauthorized access, or exploitation attempts of SATCOM. Extremely high frequency (EHF) Ka-, Q-, and V-bands are accessed over Milstar, UFO/EHF (UFO/E), UFO/EHF Enhanced (UFO/EE) advanced extremely high frequency (AEHF), Interim Polar System (IPS), and Enhanced Polar System (EPS). Protected SATCOM systems provide the greatest level of protection for MILSATCOM over dispersed geographic areas while providing flexible support and protection such as low probability of intercept, low probability of detection, low probability of exploitation, anti-jam (AJ), and anti-scintillation. Protected SATCOM provides flexible support for the nuclear command, control, and communications (NC3) mission set, as well as critical Command and Control (C2) links for tactical users.

d. Commercial Satellite Communications (COMSATCOM). COMSATCOM encompasses DoD-leased or DoD-owned bandwidth in commercial bands, DoD-owned or leased commercial SATCOM terminals and Gateways landing DoD missions, and SATCOM used by the DoD but provided by commercial entities. COMSATCOM is categorized as:

(1) Fixed Satellite Services (FSS). Commercially provided radio-communication service between earth stations at given positions, when one or more satellites are used: given position may be specified fixed point or any fixed point within specified areas. Dedicated SATCOM bandwidth and power in any commercially available frequency band (e.g., L-, S-, C-, X-, Ku-, Ka-, and UHF).

(2) Mobile Satellite Services (MSS). Consist of commercially provided radio communication (e.g., Enhanced Mobile Satellite Services (EMSS)) between various mobile or fixed earth stations. MSS connectivity may consist of several mobile devices capable of voice, data, and telephone networks.

3. Use of Department of Defense (DoD) Satellite Communications (SATCOM). The DoD primarily uses DoD SATCOM for establishing or augmenting telecommunications in areas lacking suitable terrestrial infrastructure, for users requiring beyond line-of-sight connectivity, and for users requiring connectivity at the halt and on the move.

a. DoD SATCOM provides a transport medium for fixed and mobile voice, data, video, and imagery. DoD SATCOM also provides range extension capabilities for legacy circuits and key services and applications such as the Secret Internet Protocol Router Network (SIPRNET), the Unclassified but Sensitive Internet Protocol Router Network (NIPRNET), the Defense Switched Network, the Defense Red Switch Network, the Joint Worldwide Intelligence Communications System, and video teleconferencing. DoD SATCOM is essential for the intelligence and diplomatic communities to provide U.S.-controlled transmission means for a subset of communications supporting sensitive operations or time-critical diplomatic traffic supporting national security objectives.

b. DoD SATCOM is critical for the full range of DoD and Government agencies operations in support of the National Military Strategy, from humanitarian relief to homeland defense to major theater wars and nuclear conflict. Military forces depend on space-based communications systems to access essential information services in the execution of land, sea, air, space, and cyberspace operations.

c. DoD SATCOM systems provide communications that facilitate C2, access for authorized users, survivable communications for presidential support, nuclear C2, coalition, and allied operations and exercises, and intelligence, surveillance, and reconnaissance (ISR) sensor collection data including imagery and full-motion video (FMV).

d. DoD SATCOM is also used by mobile, in-transit, and isolated forces. Other additional users include those requiring communications links with low probability of detection, low probability of intercept, low probability of exploitation, protection from scintillation and jamming, and users who require secure communications links and/or operational privacy provided by U.S. control.

e. Commercial Satellite Communications (COMSATCOM). DoD leased or procured COMSATCOM operating in commercial frequency bands, while subject to Federal Communications Commission regulations governing commercial spectrum operation, is considered part of DoD SATCOM and as such is afforded equivalent security protection in accordance with (IAW) reference a, Operational security, EMI protection, and resiliency features of COMSATCOM systems may not be equivalent to those of purpose-built

MILSATCOM systems, and COMSATCOM users are required to certify acceptance of any associated risk.

4. Department of Defense (DoD) Satellite Communications (SATCOM) Operational Policies. The following DoD SATCOM policies are intended to ensure that relevant processes and organizational structures facilitate proactive, timely, synchronized, and sustainable management of limited, high-value interoperable resources and provides critical support to authorized users.

a. Operational Policies

(1) Resources must be provided to the highest-priority users in a prompt and effective manner. Enclosure D delineates DoD SATCOM allocation and restoration priorities and precedence, which are designed to maximize effective and efficient use of DoD SATCOM resources. Contention among competing requirements within the same priority will be resolved at the lowest possible level.

(2) Policies and procedures must ensure spectrum access, access that often requires EMI mitigation and resolution, SATCOM service restoration, and encourage efficient use and control of the communications bandwidth.

(3) System planning must leverage technological improvements, serve as the basis for replenishment of on-orbit assets, and assist in synchronizing the development and fielding of terminals, and system control elements to maximize interoperability and operational benefits for authorized users.

(4) Systems should be acquired and fielded under validated requirements IAW reference b and comply with reference c, concerning regulatory testing and certification required for information technology and spectrum dependent systems, including interoperability, spectrum, electromagnetic compatibility, cybersecurity, and applicable commercial engineering and design standards.

(5) Authorized users should have the necessary DoD SATCOM connectivity, resource visibility, tasking procedures, and planning tools. They should also employ DoD SATCOM in a flexible and responsive manner.

(6) The DoD SATCOM portion of the critical communications systems described in reference d must be capable of ensuring availability of service by being survivable, providing electro-magnetic pulse protection, and being scintillation resistant.

(7) DoD SATCOM operations must detect, determine and mitigate jamming, intrusion, and other adversary actions in order to support space control. DoD SATCOM systems must further incorporate methods and

operational practices to optimize space control capabilities and to assist in determining adversary actions against on-orbit communications assets.

(8) Organizational structures must be responsive to operational policy and consistent with the management responsibilities outlined in Enclosure B.

b. Space Capability. The ultimate objective of DoD SATCOM operational policy is to provide authorized users with DoD SATCOM space capabilities when and where they are needed IAW operational priorities and international agreements. The DoD must continually assess DoD SATCOM system effectiveness in pursuit of this objective. Consequently, full compliance with applicable Cybersecurity Policy for Space Systems requirements is required per references e through g).

5. Operational Goals. The processes for submitting user connectivity requirements, granting authorized use, providing system-of-systems operational management, and performing high-level oversight are central to providing authorized users with timely DoD SATCOM resources. Each process is developed based upon key DoD SATCOM operational goals:

a. Systems should be sized, deployed, and agile enough to meet current and future DoD SATCOM user requirements.

b. Capabilities should be managed, monitored, controlled, and integrated with SATCOM terminal and control segment capabilities to provide a comprehensive, seamless communications infrastructure that responds to change, resists disruption, and ensures availability of mission-critical information through all operational conditions.

c. Systems should be developed to leverage existing and planned transmission paths. In order to achieve this goal, standard operational policies and procedures must be implemented at the system-of-systems level.

d. DoD SATCOM managers and authorized users must have Situational Awareness (SA) and a Common Operating Picture (COP) into DoD SATCOM and related network resources in order to plan, implement, monitor, and sustain effective and efficient communications support to the authorized user.

e. Managers and users of DoD SATCOM must have efficient, responsive, and user-friendly automated tools and methods that account for the complexities of multiple DoD SATCOM resources. These resources may be operating in many different frequency bands and under various network constraints or conditions while supporting diverse missions worldwide. The tools and methods must also provide insight into threats or degradations that would remove or negate those resources.

f. DoD SATCOM must implement advanced access techniques, advanced network management, machine-to-machine interconnection, and remote operational management features. Implementation with international partners must be considered during development.

g. SATCOM system planning and operation, like other transport paths, are susceptible to disruption. Therefore, architectural resilience factors including redundancy, diversity, protection features (such as AJ and cybersecurity techniques), and alternative communications media should be considered for mission-critical traffic, and plans should be coordinated among DoD SATCOM managers, planners, and users. Adaptive and deliberate planning and coordination will minimize the effect disruptions have on mission success during operations.

h. COMSATCOM resource planners must consider these operational goals to ensure that contract implementation and service quality meet defined requirements.

6. Operational Management. Operational management of DoD SATCOM refers to the oversight, authoritative direction, and control of resources to ensure accessibility and provides global DoD SATCOM resource situational awareness for authorized users. Fundamental elements of operational management include the following:

a. Performing DoD SATCOM allocation, International Partner exchanges, constellation reconfiguration, DoD SATCOM configuration management oversight, and integration management in support of operational requirements.

b. Providing visibility into DoD SATCOM resources (including mission partner SATCOM resources). This activity is necessary to determine the status and availability of resources for operational missions and is critical to effectively plan, monitor, manage, defend, and otherwise direct operations for all authorized users. National constraints may govern spectrum allocation or usage, frequency bands, orbital positions, and operations.

c. Ensuring DoD SATCOM delivery meets CCMD, Service, Agency, International Partner, and coalition operational requirements and strategic planning in order to support DoD SATCOM.

d. Ensuring adequate control of MILSATCOM. Including satellite control, control of resource allocation to authorized users, control of ground systems that directly affect access to MILSATCOM payloads and establishment of networks, positive control of terminals, and control of interfaces required to support DoD SATCOM.

ENCLOSURE B

DEPARTMENT OF DEFENSE (DoD) SATELLITE COMMUNICATIONS (SATCOM) MANAGEMENT RESPONSIBILITIES

1. Purpose. To define DoD SATCOM organizational responsibilities and functions, this enclosure does not replicate roles and responsibilities documented in reference h.

2. Responsibilities

a. Under Secretary of Defense for Acquisition and Sustainment (USD(A&S)). Deputy Assistant Secretary of Defense for Command, Control, Communications, Cyber, and Business Systems (DASD(C3CB)) is accountable for all acquisition oversight and related matters concerning C3, Cyber and DoD Business System programs.

b. Department of Defense Chief Information Officer (DoD CIO)

(1) IAW reference e, provides policies, oversight, guidance, architecture, and strategic approaches for all communications and information network programs and initiatives on an enterprise-wide basis across the DoD, ensuring compliance with military standards (MIL-STDs), and cybersecurity requirements as well as interoperability with national and alliance/Coalition systems.

(2) Ensures non-DoD SATCOM requirements follow the submission and review process described in this instruction.

(3) Ensures DoD SATCOM systems and resources support DoD information network (DoDIN) requirements and are compliant with approved technical standards agreements within the DoD and between the DoD and other Federal Agencies, International Partners, and appropriate non-federal and commercial entities

(4) Serves as the DoD-lead to ensure spectrum issues are coordinated with the Federal Communications Commission and the National Telecommunications and Information Administration (NTIA).

(5) Develops, reviews, and submits allied partner, foreign nation, and non-DoD agency requirements for access to DoD SATCOM resources to the JSP Administrator for inclusion in the SDB.

(6) Coordinates with CJCS, U.S. Cyber Command (USCYBERCOM), and USSTRATCOM on any activities affecting operational aspects of DoD SATCOM resource management, including resource allocation or service management.

(7) Develops policies and procedures that govern the National Security SATCOM Systems Synchronization Roadmap (NS4R).

(8) Develops policies and procedures for protecting, planning, acquiring, and managing COMSATCOM services as an element of the DoD SATCOM segment of the DoDIN.

(9) Serves as the functional sponsor and as a member of Overarching Integrated Product Teams associated with the DoD's SATCOM programs, to include terrestrial layer subsystems (e.g., terminal and control subsystems).

c. Chairman of the Joint Chiefs of Staff (CJCS)

(1) Adjudicates allocation conflicts involving DoD SATCOM users that cannot be resolved through USSTRATCOM's arbitration process.

(2) Provides contingency planning guidance to CCMDs and mission partners for the use of DoD SATCOM resources.

(3) Validates and approves Joint Requirements (e.g. key performance parameters and key system attributes) capabilities documents IAW reference b processes and reference c.

d. Director for Command, Control, Communications and Computers (C4)/Cyber Directorate (J-6), Joint Staff

(1) Monitors, coordinates, and formulates actions requiring CJCS approval for strategic, tactical, and contingency DoD SATCOM resources. Develops a coordinated JS position on DoD SATCOM issues having operational implications.

(2) Manages the DoD SATCOM requirements process, including the requirements for COMSATCOM assets needed for contingency and war. Reviews and assesses the results of the CCMDs' periodic review of DoD SATCOM access requirements and provides recommendations and corrective actions to the Commander, USSTRATCOM (CDRUSSTRATCOM), and the CJCS.

(3) Co-chairs JSP and establishes revalidation criteria.

(4) Chairs the Military Command, Control, Communications, and Computers Executive Board, (MC4EB) (reference i), providing high-level, coordination and oversight of the DoD SATCOM management, processes.

(5) Chairs the C4/Cyber Functional Capability Board (FCB) that validates and approves key performance parameters and capabilities documents for DoD SATCOM, terminal, and other communications systems IAW reference b.

(6) Develops CJCS final adjudication position for DoD SATCOM allocation disputes that cannot be resolved by USSTRATCOM. CJCS has final adjudication authority.

(7) Reviews USSTRATCOM recommendations for allocation of strategic SATCOM terminals between Military Departments and/or agencies, and coordinates JS action package with the recommendation. Submits endorsement of the establishment, consolidation, and transfer of enterprise gateways and associated strategic SATCOM terminals between MILDEPs and Defense Agencies, to the DoD CIO for approval.

(8) Reviews and approves the SATCOM certification and modem certification waiver process.

(9) Provides operational policy, guidance, and procedures for the planning, management, employment, and use of DoD SATCOM resources.

(10) Defines the process for submission, review, approval, prioritization, and documentation of DoD SATCOM requirements.

(11) Reviews and forwards recommendations to DoD CIO on any international agreement or other formal arrangement for exchange of DoD SATCOM assets and services by the DoD and Federal Agencies not covered by reference j.

(12) Provides guidance and ensures compliance with joint and International Partner SATCOM system and technical standards.

(13) Defines processes and procedures for the allocation of enterprise DoD SATCOM resources to authorized users consistent with approved user requirements (or SDB waivers).

(14) Develops and maintains CJCS joint SATCOM guidance for oversight, management, and requirements.

(15) Develops and maintains a Defense Spectrum Management Architecture as a key component of the DoDIN Architecture IAW reference k and l.

e. Director for Strategy, Plans, and Policy Directorate (J-5), Joint Staff

(1) Provides amplifying strategic, policy, and planning guidance to support DoD SATCOM planning.

(2) Is responsible for managing the process for developing, reviewing, and assessing plans outside of a crisis action environment. J-5 ensures CCMDs take into account DoD SATCOM requirements within the plans development process and that Combatant Commanders' (CCDRs) identified DoD SATCOM shortfalls inform plan assessment initiatives.

(3) Oversees the security cooperation planning process and provides amplifying guidance as required to support DoD SATCOM planning needs.

(4) Maintains visibility of and addresses CCMD DoD SATCOM requirements that impact Adaptive Planning and Execution (APEX) with support from JS J-6.

f. Commander, U.S. Strategic Command (CDRUSSTRATCOM)

(1) Delivers SATCOM capabilities IAW reference m, derived responsibilities. CDRUSSTRATCOM is responsible for, "*Planning and conducting space force operations...*" which includes:

(a) Is the single point of contact for military space operational matters, except as otherwise directed.

(b) Directs operations to provide and support global DoD SATCOM delivery.

(c) Oversees satellite resources planned and emergent maintenance outages as necessitated by software uploads, satellite payload or bus reconfigurations, channel control deployment, new capability deployment, satellite redeployments, countermeasures deployment, or other events that affect the ability to deliver DoD SATCOM services efficiently and effectively to authorized users.

(d) Develops, coordinates, approves, and executes DoD SATCOM operations policies and procedures; constellation deployment plans; SATCOM roadmaps; satellite positioning / repositioning; and acceptance / relinquishment plans. Assesses how these various plans impact communications support to current and future operations, Operations Orders (OPORDs), operations plans (OPLANs), concept plans (CONPLANs), and MOUs, and coordinates DoD SATCOM actions prior to execution when feasible.

(e) Produces DoD SATCOM apportionments supporting the APEX process outlined in reference n.

(f) Is responsible for DoD SATCOM resource allocation.

(g) Directs the maintenance of the health, status, and surveillance of the DoD SATCOM space segments, including tracking, station keeping, and ephemeris generation.

(h) Develops and implements electromagnetic interference (EMI) processes for the detection, characterization, identification (including geo-location), and reporting of DoD SATCOM interference and jamming issues.

(i) Develops interference and/or jamming resolution courses of action in conjunction with the JS, Department of State, and host nations as required. Publishes procedures for the resolution of non-jamming interference with the DoD and commercial providers.

(j) Develops and executes coordinated DoD SATCOM strategic, operational, and campaign-level plans.

(k) Coordinates with the JS, C/S/A, International Partners, civil authorities, and mission partners as required to prioritize requirements, shortfalls, and operational impacts, and disseminates this information as appropriate.

(l) Co-chairs the JSP with JS J-6. Participates in C4/Cyber FCB as requested.

(m) Directs or requests operational analyses and other performance-related studies for currently deployed and future systems as necessary in response to the Secretary of Defense (SecDef), the Deputy Secretary of Defense (DepSecDef), or CJCS tasking.

(n) IAW reference n, USSTRATCOM has operational control and approval authority over configuration changes to SATCOM on-orbit assets, control systems, and SATCOM terminal infrastructure assets, including DoD gateways, when such changes may impact DoD SATCOM operations.

(2) The following tasks are delegated to USSTRATCOM by CJCS:

(a) Publishes and maintains documentation that defines the operational capability and replenishment criteria for DoD SATCOM systems and provides the operational concept for system control, system policies, and procedures for effective and efficient DoD SATCOM resource management.

(b) Develops and maintains a DoD SATCOM system concept of operations (CONOPS) in parallel with the corresponding system Initial Capabilities Document (ICD), Capability Development Document (CDD) or Capability Production Document (CPD). Develops the CONOPS IAW reference o.

(c) Monitors DoD SATCOM resource allocation contentions between authorized users (including conflicts between competing CCMDs), facilitates their resolution, and arbitrates DoD SATCOM resource allocation conflicts. Forwards issues that cannot be resolved to the JS J-6 for adjudication and staffing consistent with CJCS.

(d) Conducts integrated, system-level planning and coordination for all DoD SATCOM systems in support of strategic and global operations.

(e) Represents the DoD SATCOM operational community, coordinating and orchestrating consolidated user positions with C/S/A, International Partners, civil authorities, mission partners, commercial entities, Allies, and foreign organizations.

(f) Designates and assigns responsibilities to USSTRATCOM-assigned Service components as SATCOM system experts (SSEs) and Consolidated SSEs (C-SSEs). For C-SSE designations outside of USSTRATCOM's component structure, the SecDef assigns C-SSEs.

(g) Defines the integrated SATCOM management infrastructure with JS. Negotiates and concludes agreements with C/S/A to establish the SATCOM operational management structure.

(h) Provides information on system use and status to the JS, C/S/A, International Partners, civil authorities, and mission partners as appropriate.

(i) Supports DISA in coordination of enterprise gateway configuration management actions by all DoD Components and IAW reference p.

(j) Performs responsibilities of DoD SATCOM operational information original classification authority and approves information release and dissemination IAW national disclosure policy and reference j.

(k) Provides an annual COMSATCOM operational analysis to CJCS and supports DoD CIO in review and analysis of operational usage, bandwidth, and expenditure data and reports provided by DISA.

(l) IAW reference q, in coordination with JS J-6, directs engineering supportability reviews, and coordinates with pertinent organizations to validate

SATCOM terminal mission requirements or recommend alternate SATCOM terminal solutions (i.e., type or location) for strategic SATCOM terminals.

(m) In coordination with the JS, manages Protected SATCOM system resource allocations and terminals for CJCS requirements in support of National Military Command System (NMCS), NC3, and continuity of government (COG) operations.

(n) Monitors, coordinates, and formulates actions requiring JS approval for strategic, tactical, and contingency DoD SATCOM resources having operational implications.

(o) Per CJCS direction, verifies operational requirements and provides recommendations for strategic SATCOM terminal allocation and maintains a prioritized list of extant strategic SATCOM terminals.

(p) Serves as the approval authority for SDB waiver requests as delegated by CJCS Deputy J-6.

(q) Monitors the health and operational status of DoD SATCOM systems and relevant connected networks.

(r) Provides approval for terminal and modem connections to operational SATCOM systems.

(s) Supports DoD CIO in defining DoD-wide standards for a terminal certification process that integrates terminal certification into the regulatory framework for interoperability assessment.

(t) Provides trip communications support, as appropriate, for the President and Vice President (in support of White House Communications Agency), the Secretary of State, the SecDef, the DepSecDef, CJCS, and the Vice CJCS (VCJCS).

(u) Manages Milstar Extremely High Frequency and AEHF MILSATCOM systems (Protected), including terminal operating procedures for NMCS NC3 operations, and Protected Tactical Waveform over DoD SATCOM. Serves as Lead Theater Information Manager for GBS.

g. Cyberspace Operations. Commander, USCYBERCOM (CDRUSCYBERCOM), is responsible for the planning and execution of global cyberspace operations, as directed. CDRUSCYBERCOM will do so, in coordination with or in support of other CCMDs, the Services, DoD Agencies, and, as directed, other U.S. Government agencies.

h. Director, Defense Information Systems Agency (DISA)

(1) Provides a comprehensive global information systems network per reference r.

(2) Defines system performance criteria IAW applicable MIL-STDs and requirements for DoD SATCOM systems that connect to the Defense Information Systems Network (DISN) and oversees the DISN commissioning process.

(3) Supports USSTRATCOM development of recommendations to CJCS for the consolidation and establishment of new enterprise gateways and transfer of enterprise gateways and associated strategic SATCOM terminals between MILDEPs and Defense Agencies.

(4) Responsible for Enterprise Gateways which includes, in coordination with the Services, all life cycle functions (funding, engineering, system configuration management, inventory management, and technical refreshment and sustainment efforts).

(5) Implement cybersecurity and cyberspace defense capabilities responsive to DoD requirements.

(6) Executes Gateway operations in support of Joint Force HQ DoDIN.

(7) Performs DoD SATCOM applicable tasks IAW reference s.

(8) Provides analysis and engineering to ensure DoD SATCOM systems are integrated as part of the overall DoDIN.

(9) Provides enterprise-wide DoD SATCOM system engineering support to the Under Secretary of Defense for Research and Engineering (USD(R&E)), DoD CIO, JS, and USSTRATCOM. Support includes representation to international and North Atlantic Treaty Organization forums as requested.

(10) Performs assessments of SDB submissions, engineering analyses, performance-related studies of currently deployed and future systems, and other studies of system performance as requested by USD(A&S), DoD CIO, JS, MC4EB, and USSTRATCOM.

(11) Administers the SDB of current and future DoD SATCOM requirements for the CJCS. Appoints a JSP Administrator for the SDB. Develops and maintains a training program for the SDB.

(12) Utilizes DoD CIO overarching DoD SATCOM architectural recommendations and develops them into specific "system of systems" concepts and recommendations.

(13) Collaborates with the USD(R&E), the USD(A&S), the DoD CIO, the Principal DoD Space Advisor (PDSA), DoD Components, USSTRATCOM, and program offices in the area of architectural roadmap and engineering during the design and development of DoD SATCOM systems to ensure interoperability and compliance with DoD SATCOM operational requirements.

(14) Assists USSTRATCOM with DoD SATCOM operational terminal performance approval (or waivers) for terminal and modem connections to operational SATCOM systems.

(15) Acquires COMSATCOM services, in coordination with the JS when the proposed vendor is a state of concern.

(16) Assists USSTRATCOM as a Combat Support Agency per reference t with preparation of a fiscal year summary report on COMSATCOM use and associated costs, along with total bandwidth leased and associated areas of operation.

(17) Assists the CCMDs in coordinating host-nation approvals for COMSATCOM services obtained through DISA contract vehicles.

(18) Serves as the C-SSE for COMSATCOM and DoD Gateways.

(19) Provides support for White House communications requirements supporting the National Security Staff, White House Military Office, and the White House Communications Agency (WHCA), including WHCA funding, personnel actions, administrative services, program management, and contracting support as required.

(20) Provides spectrum management support IAW reference k.

(21) Oversees Host Nation Agreement (HNA) process for DISA-leased COMSATCOM.

(22) Responsible for DoD SATCOM HNAs and Landing rights for all Enterprise Gateways.

(23) Responsible through the Joint Interoperability Test Command (JITC) for Joint Interoperability Certification of SATCOM systems IAW references c or u.

(24) Establishes a standard approach for evaluation of critical exchange points between enterprise services, infrastructures, and environments using measures of performance (MOPs) and measures of effectiveness (MOEs). Confirms interoperability from end-to-end in a multi-vendor, multi-networked, and multi-service environments.

(25) Direct JITC to:

(a) Evaluate and certify joint, multinational, and interagency SATCOM terminal interoperability.

(b) Serve as the Interoperability Certification Authority for all DoD SATCOM systems with joint, multinational, or interagency interoperability requirements as described in Appendix B of Enclosure D of this instruction.

(c) Establish in coordination with the DoD CIO, USD(A&S), DOT&E, DCMO, and other DoD Component heads procedures to verify, assess, and certify, through testing, joint multinational, and interagency interoperability throughout a system's lifecycle.

(d) Publish and maintain an Interoperability Process Guide (IPG) (reference c) outlining procedures required to support joint, multinational, and interagency interoperability certification and ICTO requests.

(e) Review and provide recommendations on requests for waivers to conformance requirements, operational performance requirements, or interoperability requirements.

(f) Participate in the Joint Capabilities Integration and Development System (JCIDS) (reference o) review to verify NR KPP is adequately defined to support interoperability requirements.

(g) In coordination with Program Managers (PMs) of SATCOM systems/components ACAT and non-ACAT acquisition programs with joint, multinational, or interagency interoperability requirements review Test and Evaluation Master Plans (TEMPs) and associated developmental and operation test plans for interoperability.

(h) Provide in support of developmental test and evaluation *DT&E) assessments and operation test readiness reviews for DoD SATCOM systems with joint, multinational, and interagency interoperability requirements IAW reference c:

1. Status of SATCOM interoperability and standards conformance issues.

2. Confirmation that all required developmental testing (DT) related to SATCOM systems have been completed and passed.

3. Details of any interoperability issues that must be resolved before the start of operational test and evaluation (OT&E).

j. Military Departments

(1) Receive USSTRATCOM approval for MILSATCOM on-orbit assets, control systems, MILSATCOM terminal infrastructure and DoD gateway configuration changes or operational sustainment actions that will or likely to impact DoD SATCOM resource allocation or service management. Coordinate COMSATCOM on-orbit assets, control systems, COMSATCOM terminal infrastructure, and commercial circuit configurations with USSTRATCOM, DISA, and other impacted organizations prior to execution when feasible and achievable. If unable to comply prior to operational execution, provide report to USSTRATCOM, DISA, and other impacted organizations within 2 weeks following initial execution.

(2) Through USSTRATCOM-assigned component, serve as the C-SSE or SSE for designated system(s), and perform these C-SSE or SSE duties IAW USSTRATCOM publications and orders.

(3) Support the MC4EB, JS, USSTRATCOM, the USD(A&S), the USD(R&E), the DoD CIO, the PDSA, and the DISA in the development and assessment of DoD SATCOM requirements, architectures, synchronization products (including the NS4R and DoD SATCOM roadmaps), systems standards, and other studies and working groups as requested and outlined in Enclosure E.

(4) Ensure new system starts (or system modifications) include an Information Support Plan (ISP), which accurately reflects DoD SATCOM requirements that have been included in the SDB.

(5) Appoint a voting representative to the JSP and participate in SDB Working Group meetings.

(6) Ensure all current and future systems (satellites, control segment, and terminals) are compliant with national, host nation, military, and appropriate commercial standards, published policies, and laws as applicable.

(7) Provide DoD SATCOM space, control, and terminal segment information for the NS4R including technical and programmatic support.

(8) Coordinate with DISA on all Service-related COMSATCOM lease arrangements and ensure entry into the SDB.

(9) Notify supported CCMD of any COMSATCOM terminal or service that will be used and lead in obtaining HNAs and landing rights for DoD SATCOM terminals and programs (except for Enterprise Gateways that are obtained by DISA).

(10) Provide DoD SATCOM acquisition and system engineering support to the USD(A&S), the USD(R&E), the DoD CIO, the JS, the PDSA, USSTRATCOM, and the DISA. Support includes SATCOM representation to international forums.

(11) Coordinate with USD(A&S), DoD CIO, JS, USSTRATCOM DISA, and services before exchanging or entering into any agreement to transfer strategic SATCOM terminals between Military Departments and/or Agencies.

(12) Responsible for obtaining HNAs and/or landing rights for new DoD satellites systems or terminals.

(13) Responsible for funding and execution of Operation and Maintenance (O&M) activities at assigned Enterprise Gateways.

(14) Manage and operationally control Service-level enterprise networks traversing DoD SATCOM.

(15) Will ensure all SATCOM system operators have adequate training on the systems they employ.

(16) Assists USSTRATCOM with DoD SATCOM operational terminal performance approval (or waivers) for terminal and modem connections to operational SATCOM systems.

(17) Prepare and submit to the Director, DISA, COMSATCOM usage and expenditure information IAW content guidance provided by the DoD CIO.

(18) Allocate COMSATCOM services acquired by the MILDEP that are not enterprise DoD SATCOM resources, and ensure timely reporting of situational awareness information for those resources consistent with CJCS guidance.

(19) Ensure SATCOM systems are certified for Standards Conformance, Operational Performance prior to connectivity and certified for interoperability under reference c or u as applicable once connection approval has been granted.

(20) Implement cybersecurity and cyberspace defense capabilities responsive to DoD requirements.

k. Combatant Commands (CCMDs) and Heads of Defense Agencies

(1) Maintain updated reviews of DoD SATCOM requirements in each validated OPORD, OPLAN, CONPLAN, functional plan (FUNCPLAN), or operational architecture IAW the Joint Strategic Capabilities Plan (JSCP) and reference v.

(a) Ensure that shortfalls are identified from apportioned DoD SATCOM capacity and JSCP guidelines, DoD SATCOM requirements are consistent with current plans, and DoD SATCOM requirements have a validated SDB number.

(b) Develop, review, and submit changes to SDB requirements in support of current and future operations. Revalidate SDB requirements as directed by JS J-6.

(c) Incorporate DoD SATCOM threat assessments and mitigations into all plans.

(2) Provide a prioritized DoD SATCOM requirements list to USSTRATCOM, with an information copy to JS J-6, annually.

(a) Establish and validate access priorities for subordinate units IAW appropriate OPORD, OPLAN, CONPLAN, or mission requirement.

(b) Conduct planning based on present allocations and coordinate with USSTRATCOM for apportionments.

(3) Provide operational control of allocated DoD SATCOM resources IAW USSTRATCOM publications, guidelines, and orders.

(4) Resolve DoD SATCOM resource conflicts at the lowest level prior to initiating the USSTRATCOM arbitration process. USSTRATCOM will forward unresolved issues to the CJCS for adjudication (reference w).

(5) Coordinate with DISA on all COMSATCOM lease arrangements and ensure entry into the SDB.

(6) Coordinate actions to obtain, defend, and renew HNAs and landing rights for DoD SATCOM systems, terminals, and frequency requests employed by the DoD and other government agencies within their area of responsibility (AOR), in conjunction with USSTRATCOM, DISA and/or other departments/agencies as required IAW Appendix A Enclosure E.

(7) Provide applicable operational information for the NS4R analysis and synchronization assessment of DoD SATCOM space, terminal, and control segments, detailing the Service assets required to conduct joint missions.

(8) Coordinate with USSTRATCOM prior to exchange or entering into any agreement to exchange DoD SATCOM-related resources or infrastructure.

(9) Serve as Theater Information Manager for GBS.

(10) Allocate COMSATCOM services acquired by the CCMD or Head of Defense Agency that are not enterprise DoD SATCOM resources, and ensure timely reporting of situational awareness information for those resources consistent with CJCS guidance.

(11) Prepare and submit to the Director, DISA, COMSATCOM usage and expenditure information IAW content guidance provided by the DoD CIO.

(12) Implement cybersecurity and cyberspace defense capabilities responsive to DoD requirements.

l. Joint Terminals Engineering Office (JTEO). Develops and maintains the NS4R under guidance from DoD CIO. Assists in coordination of terminal capabilities in support of control, interoperability, situational awareness, efficiency, and protection.

m. Coordinating Groups. Several organizations provide oversight on SATCOM systems. These include, but are not limited to, the following:

(1) Joint Requirements Oversight Council (JROC), Joint Capabilities Board, and C4/Cyber FCB. Organized under JCIDS (reference o), these boards and councils review SATCOM functional capability requirements as defined in CONOPS and capability documents, and recommend approval and validation to the SecDef.

(2) Military Command, Control, Communications, and Computers Executive Board (MC4EB). The MC4EB is a gathering of senior JS/Service/ Agency communications leaders to review issues that require joint decisions. The MC4EB shall consider communications matters including those associated with National Security Systems, referred to it by the SecDef, the CJCS, the DoD CIO, and other officials.

(3) Command Control Communications Computers and Cyber Leadership Board (C5LB). The C5LB serves as the senior forum for advising the DoD CIO on IT capabilities, including NSS, and as the DoD's principal governance forum for effective implementation of information technology policy guidance and adherence to prescribed standards for: C2 enabling capabilities,

communications (terrestrial, aerial and satellite-based), spectrum/wireless issues, and other functional areas relevant to SATCOM.

(INTENTIONALLY BLANK)

ENCLOSURE C

DEPARTMENT OF DEFENSE (DoD) SATELLITE COMMUNICATIONS (SATCOM) REQUIREMENTS PROCESS

1. Purpose. To define the processes associated with collecting, assessing, validating, and recording DoD SATCOM requirements.

2. Applicability. The user communications connectivity requirements described in this document are for authorized user information transfer via DoD SATCOM. All U.S. current and future DoD SATCOM requirements, regardless of their satisfaction on DoD-owned, international partner, non-DoD, or commercial satellites, must be recorded in the SDB. These requirements support the effective planning and operational use of current DoD SATCOM assets, as well as the architectural development of future DoD SATCOM capabilities, programming and budgeting decisions, and acquisition program decisions.

3. Authority. The CJCS is responsible for the requirements approval process. Management of the DoD SATCOM user connectivity requirement approval process is delegated to the JS J-6 directorate.

4. User Connectivity Requirements. The SDB is a JROC centralized source of current and future DoD SATCOM requirements for DoD and non-DoD government agencies. DISA maintains the database for the JS. The DoD SATCOM user community is responsible for submitting its requirements for communications services to the JSP via the SDB portal on SIPRNET, currently known as the SDB management tool (SDB-MT). The panel conducts the requirements review and approval process on behalf of the JS. The SDB consists of raw requirements and cannot be used by itself without applying the associated requirements to an approved force structure with an approved scenario (see Appendix A, Enclosure C).

a. The SDB segregates SATCOM requirements based on their implementation timeframes. “Current requirements” are those requirements with an implementation date from the present to within 2 years from the present. “Future requirements” are those requirements with implementation dates beyond 2 years in the future. The current requirement entries of the SDB thus represent a comprehensive catalog of current and near-term requirements to facilitate the management and operational assessment of existing or soon to be available communications systems. The future requirements entries represent a catalog of long-term requirements to aid in architectural planning and system developments intended to address far-term communications service needs.

b. Current requirements will be stated in terms of specific user connectivity requirements that are needed to meet operational missions and may have specific end dates that may continue far into the future. The requirements will specify a particular on-orbit capability or frequency spectrum based on operational limitations or availability of deployable equipment. The organizations generally responsible for generating current requirements include the C/S/A, JS, and selected non-DoD government agencies. Organizations identify, internally validate, and submit these near-term requirements to the JS requirements process described in the Appendix to this Enclosure. C/S/A requesting the allocation of SATCOM resources must refer to SDB requirements approved by the JSP.

c. Future requirements provide a consolidated listing of projected DoD SATCOM requirements based on developing concepts and technological advancements in warfighting systems.

d. Future requirements may be new or may replace current requirements based on attribute changes as previously described.

e. Future requirements are submitted, validated, and approved IAW reference b and o.

5. Purpose of Current Requirements. Current user requirements are used to:

a. Analyze DoD's SATCOM readiness to support Warfighters' mission orders and associated plan requirements. This is accomplished by executing a DoD SATCOM capabilities assessment of CCMDs' operational requirements. Analysis represents a coordinated and collective assessment of DoD SATCOM resources and their capability to meet current requirements. USSTRATCOM is responsible for coordinating this assessment and will report the results during the fourth quarter annually to JS J-6 for further dissemination.

b. Provide reference information to support prioritization of current requests for access, allocation, and restoration.

6. Purpose of Future Requirements. Future requirements are documented in the SDB and are used to aid in the development of future system capabilities in the formal Defense Acquisition System (DAS) outlined in the Defense Acquisition Guide (DAG).

7. Satellite Communications (SATCOM) Database (SDB). All organizations initiating formal requirements documentation leading to a new DoD SATCOM system acquisition must ensure its associated connectivity requirements are documented in the SDB prior to completion of the CDD.

8. National Security Satellite Communications (SATCOM) Systems Synchronization Roadmap (NS4R). NS4R is an authoritative DoD SATCOM integrated framework tool. It illustrates acquisition and deployment synchronization of space, control, and terminal user SATCOM segments. DoD CIO develops NS4R guidance. JTEO develops and maintains the NS4R.

(INTENTIONALLY BLANK)

APPENDIX A TO ENCLOSURE C

THE SATELLITE COMMUNICATIONS (SATCOM) DATABASE

1. Applicability. The SDB is a comprehensive database containing current and future DoD SATCOM user requirements. The process described in this appendix applies to all authorized users submitting DoD SATCOM requirements for validation, approval, and inclusion into the SDB.

2. Format. SDB requirements for user connectivity will be submitted via the SDB-MT managed by the Joint Command, Control, Communications, Computers, and Intelligence (C4I) Decision Support Center (JCDSC).

3. Satellite Communications (SATCOM) Database (SDB) Purpose. The SDB supports operational management of DoD SATCOM as well as future estimates supporting the planning, acquisition, and development of future DoD SATCOM systems.

a. Provides input into the development of alternative solutions and trade studies (mix-of-media analysis).

b. Assists in architecture development and provides input into capabilities analysis to trade alternative solutions and investment strategies.

4. Requirements Justification

a. Each requirement will be evaluated based on operational necessity and support of reference x.

b. Associated performance characteristics and attributes of each requirement must be identified, have a clear mission and operational concept, and provide mission impact if not satisfied. Each requirement must support the Guidance for Employment of the Force, OPLANs, CONPLANs, FUNCPLANs, OPORDs, directives and/or Service-level research, development, test, and evaluation (RDT&E).

c. Approved SDB requirements do not guarantee access to DoD SATCOM resources.

5. Requirements Advocacy. DoD CIO, JS, and CCMDs, Services, and Agencies are advocates for DoD SATCOM requirements in the SDB. As an advocate, organizations collect, consolidate, assess, validate, prioritize, and record all requirements of elements operating or expected to operate within their AOR or function.

a. DoD CIO is the advocate for non-DoD agency and allied requirements.

b. U.S. Northern Command is the advocate for non-DoD requirements related to homeland security, homeland defense, and Defense Support of Civil Authorities (DSCA).

c. USSTRATCOM is the advocate for special users within the National Communications System and NC3 System.

d. Defense Agencies are the advocates in support of their agency missions and functions.

e. CCMDs are the advocates for their assigned forces.

f. Services are the advocates for system development or testing and training in support of Service acquisition programs and for Service-unique missions.

g. Basis for Foreign Nations' Access. Foreign nations may be granted access to DoD SATCOM resources based on: (a) participation in DoD operations, (b) international agreement, or (c) other formal arrangement (e.g. Foreign Military Sales (FMS) agreement). Absent these, foreign nations may be granted access to DoD SATCOM resources at priority 7C. Each of these four categories is presented in Table 1, along with identification of assigned validation responsibility and need for an approved current SDB requirement (or an active waiver).

Basis for Foreign Nations' Access	Type	SDB Requirement/Waiver	
		Applicable?	Validation
Participation in DoD Operations	Formal or ad-hoc agreement covering joint operations	Yes	Joint Staff
		Yes	CCMD
		Yes	Service
		Yes	DoD Agency
International Agreement	Equivalent value exchange (EVE) MOU	No	N/A
	Non-EVE MOU		
Other Formal Arrangement	Foreign military sales (FMS) agreement	Yes	DoD CIO
	Lease		
Priority 7C Access	Ally (not participating in DoD operation; no international agreement/arrangement)	Yes	DoD CIO

Table 1: Basis for Foreign Nations' Access to DoD SATCOM Resources

(1) Category Descriptions

(a) Participation in Department of Defense (DoD) Operations. A foreign nation may be granted access to DoD SATCOM resources for participation in DoD operations. The supported DoD organization is responsible for submitting the SDB requirement (or SDB waiver, as applicable) and citing appropriate justification documentation.

(b) International Agreement. For purposes of SATCOM agreements, there are generally two categories of international agreement to effect the sharing of SATCOM resources: EVE, Memorandum of Understanding (MOU), and non-EVE MOUs. Upon approval of the international agreement, DoD CIO effectively validates the foreign nations' access to DoD SATCOM as provided under that agreement, thus no secondary validation is necessary.

1. Equivalent Value Exchange Memorandum of Understanding (EVE MOU). An EVE MOU is an international agreement that provides for the equitable exchange of SATCOM resources between participants, typically on a "best-effort" basis. Under such an agreement, the value of exchanges between parties must be equivalent over the life of the MOU (balanced every 12 months). Exchange of dissimilar services is permitted; fee-for-service arrangements are excluded. Additional documentation may be included along with the MOU to provide fidelity or "how-to" provisions, and may include communications arrangements, implementation arrangements, and/or operational arrangements. EVE MOUs are required to be 'in force' no longer than 5 years (with options for renewal).

2. Equivalent Value Exchange Memorandum of Understanding (EVE MOU). Non-EVE MOUs involve cooperative projects (sometimes referred to as "joint production" or "acquisition" agreements) whose participants share the costs of research, development, testing, evaluation, and/or production – or contribute an equitable share of the cost in funds, defense articles, or defense services – and receive in return an equitable share of the results. Resource usage/fencing over the life of the agreement is managed via designated working groups and overseen by Executive-level representatives from each participant. Non-EVE MOUs generally include provisions that quantify each partner's "assured level of access" to SATCOM resources over the life of the agreement. These specified amounts of resources are defined within respective MOUs as a Baseline Resource Allocation (BRA) and are not normally available for U.S. allocation. Resources allocated under a BRA are therefore outside the definition of "DoD SATCOM" resources.

(2) Other Formal Arrangement. The category of "other formal arrangement" encompasses documented agreements between the U.S. and foreign nations for access to DoD SATCOM resources that do not fit the

definition of an international agreement. Such access may be provided for under terms of an FMS agreement, lease, or other instrument; DoD CIO is the designated validation authority for SDB requirements (or SDB waiver requests, if applicable).

(3) Priority 7C Access. In the absence of other justification for access (i.e., participation in DoD operations, international agreement, or other formal arrangement between parties), DoD SATCOM resources may be allocated for foreign nations' use under a priority 7C access (that is, "Non-U.S. Support as Approved by the Authorized Organization"). DoD CIO is the designated advocate for foreign nations' access under priority 7C.

6. Process. Requirements must be validated by each submitting organization's internal process and referenced in the ISP process prior to submission.

a. USSTRATCOM tasks the appropriate C-SSE to perform assessments of submitted requirements.

b. The voting members of the JSP review the submitted requirements within 60 days of submission by the requesting organization.

c. After JSP review and decision, notification to submitter is made within the 60-day timeframe when possible.

d. SDB waivers may be requested through USSTRATCOM to address urgent or short-duration needs.

e. Annual review and updates will be provided IAW established process and a report then submitted by the SDB administrator.

ENCLOSURE D

APPORTIONMENT, ALLOCATION, OPERATIONAL PERFORMANCE TERMINAL CERTIFICATION AND WAIVERS

1. Purpose. To define the apportionment, allocation, arbitration, operational performance terminal certification, and CJCS adjudication processes to support SATCOM delivery.

2. Terminology. This paragraph addresses apportionment and allocation of enterprise DoD SATCOM resources as defined in the glossary. DoD SATCOM resources can be managed differently within the various bands (i.e., Narrowband, Wideband, Protected, and Commercial) but, as technologies continue to evolve from circuit-based systems to newer technologies, how these resources are delivered may become more homogeneous.

a. Apportionment

(1) Resources planned or projected to be available to a CCDR for contingency and crisis planning.

(2) The apportionment process is described in reference w and is similar for all DoD SATCOM bands.

b. Allocation

(1) The provision of DoD SATCOM resources to support authorized use.

(2) The allocation process has slight nuances for each DoD SATCOM band as described below and in reference w.

(3) When DoD SATCOM extends the DISN, the DoD SATCOM portion of the access is provided through the standard allocation process, and access to DISN service is provided through the DISA provisioning process (reference p).

(4) All requests for allocation of DoD SATCOM require a Satellite Access Request (SAR) or USSTRATCOM-approved substitute that affords strategic SATCOM awareness.

(5) When systems provide an automated allocation capability, USSTRATCOM may establish policy utilizing these allocation capabilities for a specific DoD SATCOM band or bands.

(6) Arbitration

(a) The USSTRATCOM process that reviews denied, partially denied, or preempted DoD SATCOM resources to determine if a different action should be taken. Arbitration can only be initiated if the supporting Regional SATCOM Support Center (RSSC) has denied or partially denied an allocation request or preempted allocated DoD SATCOM resources.

(b) The arbitration process is the same for all DoD SATCOM bands and is described in reference w.

(7) Adjudication

(a) The CJCS-level appeal process that reviews denied, partially denied, or preempted DoD SATCOM resources to determine if a different action should be taken following arbitration and is the same for all DoD SATCOM bands.

(b) The CJCS is the final decision authority.

c. Terminal Performance Certification and Waivers

(1) The USSTRATCOM process which authorizes SATCOM terminals (to include controllers) to access and operate on DoD SATCOM is part of the DoD-wide terminal certification process. USSTRATCOM is responsible for terminal operational performance certification compliance prior to use over MILSATCOM satellites. Operational Performance Terminal certification facilitates payload planning, ensures that use of the terminal will not interfere with any other user, and complies with International Agreements concerning SATCOM Operations.

(2) As delegated by USSTRATCOM, MILSATCOM C-SSEs serve as terminal and modem certification authorities in narrowband, wideband, and protected bands and issue terminal and modem certifications (or waivers) for specific terminals, modems, or family of terminals.

(3) Narrowband and wideband allow for terminal operational performance certification waivers IAW MILSATCOM C-SSEs. Protected band will be certified IAW CJCS Manual (CJCSM) 6254.01G (S), 16 January 2015 and cannot be waivered.

(4) The DoD does not have COMSATCOM terminal and modem certifications (or waivers), however, satellite vendors require terminals to meet certain performance standards.

(5) Narrowband Waivers. The increased demand for training and operational requirements coupled with the decreasing availability of UHF channels on-orbit has prompted DoD leadership to encourage incorporation of DAMA and IW capabilities on narrowband resources. To improve situational awareness, users requiring UHF MILSATCOM access who are unable to comply with the DAMA or IW requirement are required to provide a waiver request (See Appendix B to Enclosure D; Waiver Process) identifying limiting factors to the JS (J-6) via the appropriate Service, with a copy to the supported CCMD and USSTRATCOM.

(6) JITC as the NB conformance tester shall provide NB conformance results to USTRATCOM for adjudication to determine criticality. USSTRATCOM will evaluate each waiver request, with operational assessment assistance from the CCDRs, DAMA/IW controller developers, and DISA and provide evaluations to JS J-6. JS J-6 will coordinate waivers with CCDRs, Service Chiefs, and DISA. JS J-6 will be the final approving authority for all NB Conformance or Operational Performance waivers.

(7) Wideband Waivers. Communication Electronic Research Development and Engineering Center (CERDEC) as the conformance tester shall provide WB conformance results to USTRATCOM for adjudication to determine criticality.

(8) All SATCOM systems that have joint, multinational or interagency interoperability requirements shall be tested by JITC for Joint Interoperability. Waiver request to the JITC certification process will be staffed IAW JITC's Interoperability process Guide (IPG).

3. Narrowband

a. Allocation

(1) Dedicated Channels. USSTRATCOM may allocate narrowband resources as dedicated channels (5/25 kHz), depending on mission and resource availability; however, assignment to DAMA, IW and eventually WCDMA accesses are the most efficient use of limited narrowband resources.

(2) Time Division Multiple Access (TDMA) Orderwire Transmission Security. For all narrowband TDMA systems, the channel control information (orderwire) is unclassified national security-related information of value to an adversary. Significant risk of telecommunications exploitation of the uplink and downlink channel control signals exists if the orderwire is exploited. Narrowband satellite orderwire transmissions shall utilize an approved Type I algorithm and are required on all TDMA systems in all operating modes to preclude intrusion or exploitation by an adversary. Encryption shall be implemented as defined in MIL-STD-188-181 through 186).

(3) Demand Assigned Multiple Access (DAMA). Narrowband DAMA has two waveforms with different communications services and operating schemes, 5 kHz and 25 kHz DAMA, which are defined in MIL-STD-188-182 Series and MIL-STD-188-183 Series. All authorized users shall, when equipment and operational requirements allow, request IW or DAMA resources regardless of priority.

(4) Integrated Waveform (IW). IW provides better voice quality and link management than does DAMA. All authorized users shall when equipment and operational requirements allow, request IW or DAMA resources, regardless of priority. Standards for IW are defined in the MIL-STD-188-181/182/183 Series.

(5) Wideband Code Division Multiple Access (WCDMA). Available on MUOS satellites only. WCDMA will greatly enhance narrowband capacity in terms of available networks and accesses. WCDMA-capable terminals will be provisioned with unique terminal profile(s). These terminal profiles will be supportable worldwide. WCDMA standards are defined in the MIL-STD-188-187 Series.

4. Wideband Allocation. Resources are centrally planned to ensure optimum configuration of the constellation and support to the authorized user. This provides for the efficient use of spectrum particularly for high bandwidth gateway requirements. WGS also supports linking users across multiple antenna beams simultaneously, reducing the number of gateways required for larger networks.

5. Protected Allocation

a. Directed Network resources are partitioned from the Low Data Rate (LDR) set of resources, with all remaining LDR/Medium Data Rate (MDR) / Extended Data Rate (XDR) resources managed by the RSSCs. Further information can be found in CJCSM 6254.01G (S), 16 January 2015.

b. Milstar and AEHF satellites are able to preempt resources based on service or beam precedence levels. The payload reallocates resources based on a pre-defined algorithm to reduce impact to resource allocations.

c. Priorities within the protected system can be set for numerous reasons and conditions including; assignment of priority required for a terminal when attempting to join a service; the priority to request antenna-pointing reports; and the priority required to request antenna beam control and pointing. Each of these priorities are established by their respective communications controller

or antenna controller. They are maintained by the payload resource controller to ensure proper access when requested.

d. The Milstar and AEHF systems have the ability to define more operational services (precedence) than possible within the system resources. There are four levels of precedence: P0 (highest) through P3 (lowest). This Precedence Based Access scheme ensures higher precedence users can preempt lower precedence users to gain access to the system.

e. Milstar MDR and AEHF payload supports the ability to identify privileged terminals, which can further prioritize missions. When a terminal has privilege, that terminal has certain monitoring and control capabilities. Privilege may also be coupled with priority levels to determine the hierarchy of fenced/non-fenced resources.

6. Commercial Allocation

a. COMSATCOM resources play a vital role in satisfying DoD requirements for SATCOM support. Procurement of these resources must remain visible to SATCOM management in terms of availability. Organizations utilizing commercial SATCOM resources that are not enterprise DoD SATCOM resources, must provide a SAR or the equivalent data for Situational Awareness/ingestion consistent with CJCS guidance. The organization that procured COMSATCOM bandwidth will have priority for the dedicated use. However, in times of crisis, USSTRATCOM can coordinate with the C/S/A that procured COMSATCOM assets and, with the concurrence of that C/S/A, reprioritize that COMSATCOM bandwidth temporarily in support of critical operational missions until such time as additional COMSATCOM is available to support that mission. Remuneration to the procuring C/S/A will be addressed by USSTRATCOM and the JS during the Program/Budget Review (PBR) process. DISA will maintain a compilation of all COMSATCOM systems supporting the DoD, with access to the information protected by appropriate security classification levels and restricted to those individuals with a need to know. For instance, USSTRATCOM, the JS and C/S/A must have knowledge of those COMSATCOM resources in each geographic CCMDs' area of operations and/or AOR, regardless of type of service. To assist in this effort, Military Departments will notify the supported CCDR of any COMSATCOM terminal or services that will be used in the CCDR's AOR and assist DISA and CCMD staff in obtaining host nation approval/landing rights.

b. FSS augments MILSATCOM resources to provide resources where traditional DoD SATCOM may not be available or not available in required capacities. All COMSATCOM FSS are annotated in the SDB and categorized as Layer 1, Layer 2, or Layer 3. This layering process supports requirements planning and provides a means to leverage all FSS requirements to obtain the best rates. The three layers are:

(1) Layer 1: Well-defined, long-term requirements.

(2) Layer 2: Flexible capacity requirements. These requirements are directly related to DoD strategic planning and tend to be geographic theater oriented.

(3) Layer 3: Surge requirements. Related to capacity needed to support a crisis.

c. MSS augments MILSATCOM resources to provide resources where traditional DoD SATCOM may not be available or not available in required capacities.

d. COMSATCOM attributes and floors (responsiveness, portability, flexibility, optimization, capacities, coverage, Network Operations (NetOps), and protection) necessary to satisfy requirements are described below:

(1) Responsiveness - Floor: service available ≤ 30 days from award (does not necessarily include host-nation agreement, long-lead terrestrial connectivity, frequency authorization, terminal licensing, and, if needed, landing rights); selectable: time-critical requirements—7 days, 4 hours.

(2) Portability - Floor: global portability, subject to availability and negotiation; selectable: specific terms negotiated up front.

(3) Flexibility/Optimization - Floor: re-grooming space segment and earth terminal/teleport resources for spectral, operational, and price efficiencies selectable upon user requests; selectable: specific terms and conditions for unique situations to be negotiated up front.

(4) Capacities - Floor: ability to acquire services as needed; selectable: ability to scale managed service subscription capacity as needed within predefined limits.

(5) Coverage - Floor: C-, Ku-, Ka-, and X-band worldwide, with a minimum between latitude of 70^{o} N to 70^{o} S, subject to availability and geometry; selectable: user-defined coverage, negotiated up front.

(6) Network Operations (NetOps) - Floor: Near real-time monitoring, fault/incident reporting, and information access to ensure effective and efficient operations; performance and availability consistent with commercial best practices; selectable: user-defined reporting negotiated up front.

(7) Protection - Floor: Operations clearance, operations security clearances, telemetry, tracking and control encryption on command link, and

electro-magnetic interference/radio frequency interference geo-location; selectable: user-defined reporting negotiated up front.

(8) Net Ready (Interoperability) - Floor: services provided consistent with commercial/industry standards and/or best practices; selectable: access to/interoperability with DoD teleport/gateways and cross-domain enterprise services.

e. Training Standards and Requirements

(1) A qualified commercial SATCOM terminal operator is required for initial satellite access and de-access. Training can be accomplished via formal Service provided training or commercial entity. Qualifications must include the following as a minimum.

(2) Knowledge and significance of "Positive Control" and "Peak and Pol" for satellite access/de-access and operations.

(3) An understanding of how to use pointing angles (azimuth and elevation) to determine where the antenna should be placed for an unobstructed and clear view to the satellite.

(4) Basic concepts and troubleshooting (e.g. weather effects, how to check equipment, the importance of interference prevention…)

f. Waiver Process (Procurement). DISA acquires all COMSATCOM services (unless the DoD CIO has granted a waiver to the requesting organization).

g. Waiver Process (State of Concern)

(1) Consistent with national security requirements, a waiver is required to prevent leasing or procurement of COMSATCOM services over satellites owned or operated by states subject to comprehensive economic sanctions or selective sanctions linked to space-related technology (hereinafter, "state of concern"). The waiver process will identify risks to DoD communication systems that may exist if the DoD is required to leverage a COMSATCOM service that has known ties to a state of concern. Prior to the execution of any contractual obligation, the following notifications and approvals will be made:

(2) DISA will notify JS J-6 when a state of concern owned or operated COMSATCOM has been selected for award as a DoD lease or vendor. DISA will provide a detailed justification for the selection, potential alternatives, and Informed Consent Memorandum from the affected CCMD, Service, or Agency with minimum of 0-6 endorsement.

(3) JS J-6, in conjunction with USSTRATCOM and the affected CCMD, Service, or Agency, will validate the operational risk assessment of the proposed lease and document the results.

(4) JS J-6 will forward decision and DISA-provided documentation to DoD CIO and USD (P)/DASD Space Policy.

(5) JS J-6 will notify DISA of decision.

(6) DISA will award contract or seek alternate vendor.

(7) USD (P)/DASD Space Policy will make Congressional notifications, as required.

7. Prioritization and Precedence

a. Priorities (and eventually, an addition of precedence-levels will) enable the effective and efficient allocation, management, and employment of finite DoD SATCOM resources.

b. Some systems may provide automated prioritization and allocation techniques. These systems will conform to the intent of the overall prioritization scheme. USSTRATCOM may establish policy to allow these systems to automatically reduce or preempt lower priority users during periods of resource congestion.

c. The priorities listed in appendix A of enclosure D are used for all DoD SATCOM apportionment, allocation, arbitration, and adjudication decisions and assist in restoral from anomalous events but do not guarantee access.

d. DoD SATCOM resources will be provided based on priority definitions. C/S/A, and International Partners will rank order like-prioritized missions to assist in recovery from anomalous events. International Partners' access is also based upon appropriate priority designations; this includes DoD SATCOM access IAW an international agreement (i.e., EVE MOU or Non-EVE MOU). Foreign nations' support outside an established MOU or U.S.-led operation or exercise will be established at 7C priority and are allocated on a case-by-case basis when/if operationally feasible. USSTRATCOM or the JS may, depending on mission and current operation(s), preempt or deny a request or allocation due to higher-level U.S. government requirement.

e. MUOS WCDMA group communications will be conducted on a preplanned basis using the above priority scheme. Additional system allocation discriminators such as a combat designator and CCMD ranking will also be interleaved into the priority for automated execution by the system in the future.

f. MUOS WCDMA point-to-point communications (i.e. single user to single user) and point-to-net will be allocated on an ad hoc basis. Point-to-point and point-to-net resource availability is established based solely on a respective terminal's precedence assigned during initial terminal provisioning. This precedent assignment uses the DoD standard levels of routine, priority, immediate, flash, and flash override. Terminal precedence will be interleaved within the system for automated application to allow the highest precedent users access during times of congestion.

g. All MUOS WCDMA allocations, regardless of type, will be dynamically managed in real-time. If resource congestion occurs, an automated preemption protocol determines which communications are temporarily preempted. Authorized users are automatically restored after congestion eases.

(INTENTIONALLY BLANK)

APPENDIX A TO ENCLOSURE D

DEPARTMENT OF DEFENSE (DoD) SATELLITE COMMUNICATIONS (SATCOM) PRIORITY AND PRECEDENCE

The priorities listed are used to determine access to on orbit satellites systems and restoral in response to an optimization effort or anomaly event. The SDB number, together with the appropriate priority, is used to request access but still does not guarantee access. However, it is important that the correct priority is marked in the SDB. It is also important when choosing priorities above 2D that a user representing that level is annotated in the SDB. For example, if a priority 2C is marked, then one of the users identified in the SDB must be in the Joint Task Force (JTF) or Combined Task Force (CTF). The same rules apply for priorities 2B and above. All COMSATCOM resources that are procured, including Service programs of record, will be assigned a CJCS priority and follow the same processes or suitable substitute as other MILSATCOM request for access. During peacetime, the C/S/A that procured commercial bandwidth for their dedicated use will have priority for COMSATCOM procured for their programs. However, in times of crisis, USSTRATCOM can coordinate with the C/S/A that procured COMSATCOM assets and, with the concurrence of that C/S/A, reprioritize that COMSATCOM bandwidth temporarily in support of critical operational missions until such time as additional COMSATCOM is available to support that mission. Remuneration to the procuring C/S/A will be addressed by USSTRATCOM and the JS during the Program Budget/Review process. The priority selected for submission of future requirements by a C/S/A may not be justified by the references submitted. For instance, a Service submitting a Future Command and Control Network SDB that as a current requirement warrants 2D and has as the reference an OPLAN or OPORD to support that priority may not have that reference as future SDB submission. When the future SDB is transferred or "template" by the Service to the appropriate CCMD, reference t will be updated to support the priority selected. Therefore, the future SDB submission will show the operational priority without reference to an OPLAN or OPORD but will identify a requirements document such as an approved ICD, CDD, MNS, or architecture supporting that network as the reference (t).

Priority 1. Strategic Order (Essential to National Survival)

1A System Control/Orderwire

1B Executive Support
1B1 Presidential Support
1B2 SecDef Support
1B3 Secretary of State/Envoy and Emissary Support/Diplomatic Negotiations

1C Strategic and Threat Warning/Intelligence

1D National and Strategic Nuclear Force Direction Requirements

1E SecDef Directed CCMD Emergency Operations Authority (Other than Executive Support)

Priority 2. Tasked Plan Execution (OPLAN, OPORD, CONPLAN, FUNCPLAN)

2A CJCS Support
Relates exclusively to the support provided to the CJCS and the VCJCS in the execution of their duties as senior military advisors to the SecDef.

2B CCDR Operations
Relates exclusively to the efforts required of the CCMD in peace and war to facilitate the execution of their functional or geographic mission. Includes combat service support.

2C JTF or CTF Operations Direct Task Force Communications
Does not include internal communications of task force components.

2D Component Operations (Theater Forces)
Communications internal to a component, including components that are task force participants.

2E Tactical Warning and Intelligence
Related to the sensors, personnel, and associated support that collect and disseminate time-sensitive intelligence to U.S. combatants.

Priority 3. Essential Operational Support (Operations not associated with an OPLAN, OPORD, CONPLAN, FUNCPLAN)

3A Humanitarian Support/DSCA
Response to peacetime crises, disasters, and National Special Security Events.

3B CCDR Operations
Operations not directly related to executing a tasked plan but essential for operational support.

3C JTF CTF Operations
JTF and CTF communications not directly related to executing a tasked plan but essential for operational support. Does not include internal component communications.

3D Component Operations
Internal component communications, including task force participants, not directly related to executing a tasked plan but essential for operational support.

3E Intelligence and Weather
Intelligence, information gathering, threat identification, and weather collection activities that are not directly associated with a higher-priority activity.

3F Diplomatic Post Support
Routine communications support to U.S. diplomatic facilities and personnel overseas.

3G Space Vehicle Support
Relates to launch and recovery support to space vehicles.

3H EMI Activity Resolution
EMI will be assigned the priority of the mission affected or 3H, whichever is higher.

3I Logistics
Supports the routine transit and processing of DoD materiel.

Priority 4. Training

4A CJCS-Directed Exercise

4B Pre-Deployment Exercise/Training (45 days out)
Reserved for forces to exercise and train priority 1, 2, or 3 requirements within 45 days of an operational deployment.

4C CCMD Sponsored
Specific training tasks associated with supported and supporting commands; imminent follow on deployment or operations in support of homeland security/defense.

4D Major Command: Air Force, Major Command—Army, Echelon 2
Sponsored training performed in the name of a Service's major command.

4E Joint Forces Training (Multiple Categories)
Forces engaged in sanctioned joint training.

4F Unit Sponsored
Unit-level training.

Priority 5. VIP Support

5A Service Secretaries

5B Service Chiefs

5C CCDR Travel

5D Other Travel

Priority 6. RDT&E and General

6A EMI Activity Testing

6B DoD-Sponsored Testing

6C DoD-Sponsored Demonstrations

6D DoD Administrative Support

6E DoD Quality of Life Initiatives

Priority 7. Miscellaneous

7A DoD Support to Law Enforcement (Non-JTF Support)

7B Civil Non-Federal Agency Support

7C Non-U.S. Support as Approved by the Authorized Organization

7D Other

PRECEDENCE

Flash

Reserved for combat operations.

Immediate

Reserved for life, limb, or eyesight impacts and critical operations.

Priority

Reserved for operations involving space support, space control, diplomatic support, and logistics.

Routine

All modes of operations/training not listed above.

Flash Override

Not a precedence level but rather, an authority and means to override all other traffic. Reserved for National Command Authority.

(INTENTIONALLY BLANK)

APPENDIX B TO ENCLOSURE D

WAIVER PROCESS

1. Purpose. This enclosure defines the waiver process for DoD SATCOM terminals accessing systems that do not meet the interoperability standards or MIL-STD prescribed certification requirements or unable to support operations without the implementation of mitigation (e.g. tactics, training, and procedure) activities.

2. Waivers

a. Terminals shall be tested to ensure compliance with the required MIL-STDs IAW system standards conformance test procedures. Conformance testing by itself 'Does Not' indicate a terminal is certified or authorized for operational use. Any hardware or software changes to a terminal that has been previously tested and certified by a certification authority (CA) must be retested and recertified by the CA to ensure the terminal continues to meet the requisite system and operational compliance. To avoid ambiguities and inconsistencies between the MIL-STDs and conformance test plans, the certification test plan and procedures will be developed by the SATCOM Technical Working Group (TWG), which develops the MIL-STDs and reports to the Satellite Interoperability and Standards Committee (SISC). The SATCOM TWG is open to terminal program managers and industry participation.

b. Waivers are required when terminals fail to completely meet all applicable requirements to obtain a certification as required in Enclosure D. Waivers are valid only for the specific hardware configuration and software version of the terminal presented for certification. CA will formally report deficiencies (assessments) to the waiver requestor and JS J-6. Upon review of the CA standard conformance test report or assessment, USSTRATCOM will classify terminal assessment deficiencies as critical or non-critical. Assessments shall be marked as critical when they result in an unacceptable degradation of interoperability with mission critical systems, effective user communications, performance of waveform functions, band system efficiency, or overall operational effectiveness. Conformance test disputes will be resolved by CA via the SATCOM TWG and the SISC. Any changes to a terminal's hardware or software configuration requires that terminal to be recertified by CA and another waiver to be issued if it does not meet all MIL-STD requirements.

c. The program manager, sponsoring CCMD, or international partner will submit a waiver request in memorandum format, via a sponsoring Service or Agency as applicable, to JS J-6. Copies of the waiver request will be furnished

to USSTRATCOM and the CA. Services and Agencies have primary responsibility for submitting and maintaining waiver status to support present or future systems and networks not technically compliant with defense standardization, policies, and procedures in JCIDS Manual (reference o). CCMDs have responsibility for those systems that are not fielded by a Service or Agency, but are mission specific for their area of responsibility. International partners have responsibility for those systems that will use US SATCOM resources. The waiver request should be submitted at least 60 days in advance and must list:

(1) Point of contact information.

(2) Terminal nomenclature and configuration information.

(3) Type of network. Identify the communications topology of the user network/system and type of the communication requirements.

(4) Function of the network (voice or data). If used for data, identify the data volume and delivery requirements.

(5) Provide the assigned SDB number or documentation requesting the network/SDB number.

(6) Describe the specific shortcomings of the terminal in terms of the portions of the MIL-STDs that the terminal does not meet. List the numbers of unsatisfied requirements as defined in the appropriate MIL-STD test plan (e.g., MIL-STD-188-181 Series requirement 35, 64, and 123).

(7) Describe the known/anticipated technical and/or operational impact to the overall system.

(8) Provide alternative terminal options (e.g., tactics, techniques and procedures) to meet the requirement or mitigate interference.

(9) Describe plans (e.g. milestones (MS)) to bring the terminal into full compliance.

(10) Describe the fiscal, schedule, and operational impacts if the waiver is not granted.

d. As required, JS J-6 will task USSTRATCOM to evaluate each waiver request, with operational assessment assistance from the CCDRs, waveform developers, and CA.

e. Critical waivers will be valid on a case-by-case basis. Noncritical waivers may be valid for the life of the terminal, at the discretion of the waiver authority (JS J-6).

f. Approved technical waivers will be reflected in the SDB and, if not in compliance, must be resubmitted to JS J-6 for revalidation at least 60 days prior to the expiration date of the waiver.

g. Approved technical waivers do not authorize or guarantee satellite or network access. The applicable CCDR or agency has the authority to grant access over their allocated resources.

h. Any waiver will be cancelled or revoked if it becomes apparent that the use of the terminal(s) creates a detrimental impact on other user systems (e.g. EMI). Technical waivers are not required for systems with approved certification waivers.

(INTENTIONALLY BLANK)

ENCLOSURE E

DEPARTMENT OF DEFENSE (DoD) SATELLITE COMMUNICATIONS (SATCOM) OVERSIGHT AND REQUIREMENTS ASSESSMENTS

1. Overview. DoD SATCOM management involves requirements, policy, architecture development, and operational processes such as allocation and EMI mitigation. Many DoD SATCOM matters and issues involve coordination among numerous authorized users and other governmental departments and agencies as applicable. IAW the JROC JCIDS process, the C4/Cyber FCB is responsible for the organization, analysis, and prioritization of joint warfighting capability needs within the assigned network centric functional area. The MC4EB is the forum that provides high-level, integrated coordination and oversight of these DoD SATCOM processes for the C4/Cyber FCB. The MC4EB provides advice and recommendations on DoD SATCOM matters to all existing formal processes and forums such as the JROC process, the C4/Cyber FCB, Defense Acquisition Board, the SATCOM Senior Engineering Board (SSEG), and Defense Resources Board (DRB), as appropriate.

2. Military Command, Control, Communications, and Computers Executive Board (MC4EB) Purpose. IAW reference y, the MC4EB is to support the JROC JCIDS process and the C4/Cyber FCB.

a. The JS J-6 chairs the MC4EB, which meets monthly. As new satellite capabilities are being considered for DoD use, CCMDs, Services, and Agencies will forward recommendations, as appropriate, for system acquisition and fielding responsibilities.

b. Topics will be considered by the MC4EB in time to affect the formal processes, such as Program Objective Memorandum (POM) development, DRB considerations, JROC decisions, or acquisition MS development. Nominations for agenda topics should be forwarded not later than 2 months prior to scheduled meetings.

3. Satellite Communications (SATCOM) Requirements and Capabilities Assessments. The DoD SATCOM Requirements and Capabilities Assessment is a standard process of evaluating each satellite constellation for health, operational utility, and constellation replenishment requirements. Specifically, this assessment provides:

a. Health Assessment. USSTRATCOM will provide the JS J-6 an annual health assessment of each constellation based on system performance parameters.

b. Operational Assessment. USSTRATCOM will provide an operational assessment of DoD SATCOM for each CCMD. This evaluation will indicate current DoD SATCOM resource ability to meet major OPLAN in each band. In addition, the assessment will evaluate the primary communications payload of each constellation, indicating the system's communications capability to meet the requirements associated with the major OPLAN and including a current threat analysis. For each appraisal where mission performance deficiencies exist, USSTRATCOM will provide recommendations on required actions to support CCMD requirements if the major OPLAN is initiated. The operational assessments will incorporate USSTRATCOM readiness assessments required by reference f and reference z.

c. Replenishment Assessment. To allow the DoD SATCOM community to provide better recommendations concerning a constellation replenishment strategy, USSTRATCOM will develop and provide an operational constellation replenishment strategy and risk mitigation plan, an operational constellation replenishment strategy, and a risk mitigation plan to the MC4EB and C5LB annually during the fourth quarter. DISA and USSTRATCOM will provide a joint strategy and recommendation to meet SDB current and future requirements in time to support the Service POM preparations.

d. National Security Satellite Communications (SATCOM) Systems Synchronization Roadmap (NS4R). NS4R is an authoritative DoD SATCOM integrated framework tool that illustrates acquisition and deployment synchronization of space, control, and ground segments. DoD CIO develops NS4R guidance and the JTEO develops and maintains the NS4R.

(1) JTEO supports development of actionable DoD SATCOM "decision points" and courses of action for senior DoD decision makers; the offered load for DoD SATCOM studies; Program/Budget Review (PBR) issue papers; MILSATCOM roadmaps; and additional activities, as required.

(2) JS, in coordination with the DoD CIO, tasks the Services and Agencies to provide NS4R updates for current and future DoD SATCOM programs of record. A comprehensive update occurs following release of Service POMs to OSD, a second update occurs by exception after the President's Budget to Congress. The second update will target changes to the Services POMs as a result of the OSD program review process. Additional updates may occur as required to support other events.

e. Department of Defense Instruction (DoDI) 4650.01. Per reference k, components will comply with U.S. and host nation spectrum regulations, and obtain applicable authorizations before operating spectrum-dependent (S-D) systems. Additionally, components shall determine if there will be sufficient spectrum to support operation of the system during its lifecycle. Detailed roles

and responsibilities are included in the supporting Appendix A to this enclosure.

(INTENTIONALLY BLANK)

APPENDIX A TO ENCLOSURE E

HOST NATION CERTIFICATION AND AUTHORIZATION TO OPERATE

1. Applicability. Access to the electromagnetic spectrum (EMS) is vital to DoD operations as military operations rely heavily on equipment using the limited resources of the EMS. By international agreement, through the International Telecommunication Union, each sovereign nation owns its EMS and may allocate portions of that spectrum for specific uses according to national priorities. Accordingly, it is DoD policy to obtain permission to operate within a foreign nation's (host nation's (HN's)) borders prior to operation of any S-D equipment in that country. Within the DoD, the process and responsibilities involved in obtaining an authorization to operate (ATO) in the EMS involves different documents and organizations. An ATO is also referred to as a valid frequency assignment. This appendix clarifies certain roles and responsibilities concerning spectrum access for operation of S-D MILSATCOM equipment in the United States and its possessions and in HNs, but it is not all-inclusive and does not replace existing guidance and directives.

2. General Guidelines. The issuance of a satellite access authorization (SAA) does not constitute an authority to operate S-D MILSATCOM equipment. Before operating S-D systems, DoD Components shall request HN certification of spectrum support for S-D systems using procedures established in CCDR agreement with HNs. HN certification is acknowledgment that the equipment is intended to use the spectrum according to HN rules and regulations and, thus, has received HN authority to bring the S-D MILSATCOM equipment into the HN's borders. Upon certification of spectrum support, DoD Components shall request HN ATO the S-D system using procedures established in CCDR agreement with HNs with the exception of COMSATCOM. For COMSTATCOM frequency assignments must be procured through the commercial contract on behalf of the government and with the HN. Receipt of a valid frequency assignment from the HN provides the authority to radiate within the HN's borders. Users failing to obtain an ATO will generally be denied use of those S-D MILSATCOM systems until such authority is obtained. In some countries, unauthorized use may result in equipment being confiscated by HN authorities and/or HN fines.

3. Roles and Responsibilities

a. Program Manager (PM) for Space and Ground Spectrum-Dependent (S-D) Systems

(1) Submits, through the supporting Military Service, the equipment certification requests (DD Form 1494, "Application for Equipment Frequency

Allocation") to the MC4EB at each required stage of certification of spectrum support and, when applicable, requests HN certification of spectrum support.

(2) Prior to acquisition MS, DoD Components' S-D system developers shall provide their Spectrum Supportability Risk Assessment (SSRA) to their CIOs or another office designated by their Component head. In addition, they shall update their SSRAs prior to requesting ATO (for other than testing) in the United States and its possessions or in HNs.

(3) Verifies the HN has approved the equipment certification request prior to deploying S-D SATCOM equipment within that HN's borders. If a terminal has not been certified, coordinates with the appropriate CCMD(s) on how to obtain the proper certifications.

b. Military Command, Control, Communications, and Computers Executive Board (MC4EB)

(1) Responsible to provide EMS supportability guidance on all S-D equipment including DoD SATCOM systems.

(a) The MC4EB Equipment Spectrum Guidance Permanent Working Group (ESG PWG) under the Frequency Panel reviews EMS support requirements and processes requests for certification of spectrum support.

(b) For use outside the United States and its possessions, the ESG PWG initiates coordination through the applicable CCMD frequency management office(s) for pre-coordination with the required spectrum management authorities of HNs where S-D MILSATCOM equipment will be deployed.

(2) The ESG PWG combines HN and NTIA comments into MC4EB Guidance regarding the submitted DD Form 1494 and forwards it through the supporting Military Service to the applicable organizations.

c. Director for Command, Control, Communications and Computers (C4)/Cyber Directorate (J-6), Joint Staff

(1) IAW the JCIDS Manual (reference o), performs Information Technology and National Security Systems Interoperability and Supportability (I&S) Certifications, NR-KPP Certifications, and System Validations (which include validation of spectrum supportability).

(a) Submits I&S Certifications to the Knowledge Management/ Decision Support tool for all CDDs and CPDs IAW the JCIDS Manual (reference o).

(b) Provides an NR-KPP Certification to the DoD CIO for ACAT I programs and programs designated as OSD Special Interest IAW the JCIDS Manual (Reference o) or in which the DoD CIO has indicated a special interest.

(2) Provides I&S Certification for Non-ACAT and fielded systems to the sponsoring DoD Component.

d. Combatant Commands (CCMDs)

(1) Spectrum management actions within a CCMD are normally handled by a Joint Frequency Management Office if one has been established or by the CCMD spectrum management office.

(2) For the MC4EB, coordinates with the respective HNs for certification of spectrum support S-D systems intended to be deployed and operated outside the United States and its possessions and relays HN guidance to the MC4EB ESG PWG for dissemination to the supporting Military Service and program manager.

(3) Validates the HN has approved the certification of spectrum support request prior to allowing S-D SATCOM equipment to be deployed within their area of responsibility (AOR). If a terminal has not received this certification, coordinates with the PM and negotiates with the HN(s) to obtain the proper certifications prior to allowing the S-D MILSATCOM equipment into their AOR.

(4) Upon receipt of a frequency request, coordinates military spectrum use (i.e., a frequency assignment) with the spectrum authority of the HN or Coalition forces involved, notifies the operational requestor, and enters the operational parameters authorized by the HN(s) into the appropriate database.

(5) After an SAA has been issued, validates an ATO has been obtained prior to allowing use of any S-D SATCOM equipment within its AOR.

(6) For tactical missions, the originating requestor's CCMD will coordinate with all affected CCMDs to ensure an ATO has been obtained prior to allowing operations. If a request is denied due to the lack of ATO, the user will resubmit the proposal using cleared frequencies.

(7) For strategic users, the Service Frequency Management Office responsible for the S-D system requiring spectrum access is responsible for verifying an ATO had been obtained before DoD SATCOM operations begin. If a request is denied due to the lack of ATO, the user will resubmit the proposal using cleared frequencies.

(INTENTIONALLY BLANK)

ENCLOSURE F

REFERENCES

a. Committee on National Security Systems Policy CNSSP No. 12, 28 November 2012, "National Information Assurance Policy for Space Systems Used to Support National Security Missions"

b. CJCSI 5123.01 Series, "Charter of the Joint Requirements Oversight Council (JROC) and Implementation of the Joint Capabilities Integration and Development System (JCIDS)"

c. DoDI 8330.01, 21 May 2014, "Interoperability of Information Technology (IT), Including National Security Systems (NSS)," CH 1 18 December 2017

d. CJCSI 6811.01 Series, "Nuclear Command, Control System Technical Performance Criteria (U)"

e. DoDD 5144.02, 21 Nov 2014, "DoD Chief Information Officer (DoD CIO) (U)," CH 1 22 April 2015

f. CJCSI 3401.01 Series, "Joint Combat Capability Assessment"

g. DoDI 8500.01, 14 March 2014, "Cybersecurity"

h. DoDI 8420.02, 15 September 2016, "DoD Satellite Communications (SATCOM)"

i. CJCSI 5116.05 Series, "Military Command, Control, Communications, and Computers Executive Board"

j. CJCSI 6740.01 Series, "Military Telecommunications Agreements and Arrangements Between the United States and Regional Defense Organizations or Friendly Foreign Nations"

k. DoDI 4650.01, 9 January 2009, "Policy and Procedures for Management and Use of the Electromagnetic Spectrum," CH 1 17 October 2017

l. CJCSI 3320.01 Series, "Joint Electromagnetic Spectrum Operations (JEMSO)"

m. Unified Command Plan (UCP), 3 Nov 2017

n. JP 5-0, 16 June 2017, "Joint Planning"

o. JCIDS Manual, "Joint Capabilities Integration and Development System (JCIDS)," 12 February 2015, <https://intellipedia.intelink.sgov.gov/wiki/Joint_Capabilities_Integration_and_Development_System#The_latest_versions_of_the_JCIDS_Guidance._.28Updated_21_December_2015.29 > (SIPRNET – accessed: 9 January 2018)

p. USSTRATCOM SI 714-06, 2 October 2012, "Satellite Communications (SATCOM) Facility Configuration Management (CM) Policies and Procedures

q. CJCSI 3110.10 Series, "(U) Communications Systems Supplement to the Joint Strategic Capabilities Plan (JSCP)"

r. DoDD 5105.19, 25 July 2006, "Defense Information Systems Agency (DISA)"

s. DoDD S-3710.01, 27 May 2015, "National Leadership Command Capability (NLCC)"

t. DoDD 3000.06, 27 June 2013, "Combat Support Agencies (CSAs)," CH 1 8 July 2016

u. DoDI 8100.04, 09 December 2010, "DoD Unified Capabilities (UC)"

v. CJCSM 3122.01 Series, " Joint Operation Planning and Execution System (JOPES) Volume I, Planning Policies and Procedures"

w. USSTRATCOM SI 714-04, 14 October 2014, "Satellite Communications (SATCOM)"

x. National Security Strategy, February 2015

y. DoDD 5100.35, 10 March 1998, "Military Communications-Electronics Board (MCEB)"

z. DoDD 7730.65, May 11, 2015, "Department of Defense Readiness Reporting System (DRRS), " CH 1 31 May 2018

SUPPLEMENTAL REFERENCES

1. JCIDS 2300.01 Series, "International Agreements"

2. CJCSI 2700.01 Series, "Rationalization, Standardization, and Interoperability (RSI) Activities"

3. CJCSI 3320.02E-1 Series, "Classified Supplement to the Joint Spectrum Interference Resolution (JSIR) Procedure (U)"

4. CJCSI 6211.02 Series, "Defense Information Systems Network (DISN) Responsibilities"

5. Directive-Type Memorandum 09-025, 9 December 2011, "Space Systems Acquisition Policy (SSAP)"

6. DISA Circular 310-130-4, 5 May 2006, "Defense Users Guide to the Telecommunications Service Priority (TSP) System"

7. DJS memorandum, 13 May 2013, "Waiver Procedure for DoD Commercial Satellite Communications (COMSATCOM) Leases"

8. DoDD 3020.26, 14 February 2014, "DoD Continuity Policy"

9. DoDD 3020.40, 29 November 2016, "Mission Assurance (MA)," CH 1 11 September 2018

10. DoDD 5101.70, 21 May 2004, "DoD Executive Agent for Information Technology Standards"

11. DoDD 5134.01, 9 December 2005, incorporating change 1, 1 April 2008, "Under Secretary of Defense for Acquisition, Technology, and Logistics (USD (AT&L)," CH 1 1 April 2008

12. DoDD 5100.01, 21 December 2010, "Functions of the Department of Defense and Its Major Components"

13. DoDD 5101.02E, 25 January 2013, "DoD Executive Agent for Space"

14. DoDI 8510.01, 12 March 2014, "Risk Management Framework (RMF) for DoD Information Technology (IT)," CH 2 28 July 2017

15. DoDI O-3710.02, 20 October 2014, "Secretary of Defense Communications (SDC)"

16. Initial Capabilities Document for Joint Space Communications Layer, 28 September 2010, <https://jrockmdssearch.js.smil.mil/share/page/site/kmds/documentlibrary?path=%2F200006899-US%20Strategic%20Command> (SIPRNET – accessed: 10 January 2018)

17. "DoD Dictionary of Military and Associated Terms," November 2018

18. JP 3-14, 10 April 2018, "Space Operations"

19. JP 6-0, 10 June 2015, "Joint Communications System"

20. Joint Space Communications Layer (JSCL) Initial Capabilities Document (ICD), 28 September 2010, <https://jrockmdssearch.js.smil.mil/share/page/site/kmds/documentlibrary?path=%2F200006899-US%20Strategic%20Command> (SIPRNET – accessed: 10 January 2018)

21. JS/J-6 memorandum, 21 February 2006, "The Net-Centric Assessment of Commercial Satellite Capabilities"

22. MOU between the JS and the USSTRATCOM for Transfer of Functions and Associated Resources, 27 September 2011

23. Presidential Policy Directive 4, 28 June 2010, "National Space Policy of the United States of America"

24. USSTRATCOM SI 505-4, 21 April 2006, "Satellite Disposal Procedures"

25. H.R. Public Law 112-81 "National Defense Authorization Act for Fiscal Year 2012, 31 December 2011, Section 922 "Insider Threat Detection"

26. Committee on National Security Systems, CNSS Instruction No. 4009, 26 April 2010, "National Information Assurance (IA) Glossary"

GLOSSARY

PART I -- ABBREVIATIONS AND ACRONYMS

AEHF	advanced extremely high frequency
AJ	anti-jam
AOR	area of responsibility
APEX	adaptive planning and execution
ATO	authorization to operate
C-SSE	Consolidated SATCOM System Expert
C2	command and control
C3	command, control, and communications
C4	command, control, communications, and computers
C4I	command, control, communications, computers, and intelligence
C/S/A	Combatant Commands, Services, agencies
CCMD	Combatant Command
CCDR	Combatant Commander
CDD	Capability Development Document
CDRUSSTRATCOM	Commander, U.S. Strategic Command
CIO	Chief Information Officer
CJCS	Chairman of the Joint Chiefs of Staff
CJCSI	Chairman of the Joint Chiefs of Staff Instruction
CJCSM	Chairman of the Joint Chiefs of Staff Manual
COMSATCOM	commercial satellite communications
CONOPS	concept of operations
CONPLAN	concept plan
CPD	Capability Production Document
CTF	Combined Task Force
DASD	Deputy Assistant Secretary of Defense
DAMA	Demand Assigned Multiple Access
DepSecDef	Deputy Secretary of Defense
DISA	Defense Information Systems Agency
DISN	Defense Information Systems Network
DoD	Department of Defense
DoD CIO	Department of Defense Chief Information Officer
DoDD	Department of Defense Directive
DoDI	Department of Defense Instruction
DoDIN	DoD information network
DRB	Defense Resources Board
DSCA	Defense Support of Civil Authorities

EA	executive agent
EHF	extremely high frequency
EMS	electromagnetic spectrum
ESG PWG	Equipment Spectrum Guidance Permanent Working Group
EVE	equivalent value exchange
FCB	Functional Capabilities Board
FMS	foreign military sales
FSS	fixed satellite services
FUNCPLAN	functional plan
GBS	Global Broadcast Service
HNA	Host Nation Agreement
I&S	Interoperability and Supportability
IAW	in accordance with
ICD	Initial Capabilities Document
ISP	information support plan
IW	Integrated Waveform
J-5	Strategy, Plans, and Policy Directorate, Joint Staff
J-6	Command, Control, Communications and Computers (C4)/Cyber Directorate, Joint Staff
JCDSC	Joint C4I Decision Support Center
JCIDS	Joint Capabilities Integration and Development System
JITC	Joint Interoperability Test Command
JP	Joint Publication
JROC	Joint Requirements Oversight Council
JS	Joint Staff
JSCP	Joint Strategic Capabilities Plan
JSP	Joint SATCOM Panel
JTEO	Joint Terminals Engineering Office
JTF	Joint Task Force
MC4EB	Military Command, Control, Communications, and Computers Executive Board
MILSATCOM	military satellite communications
MIL-STD	military standard
MOU	memorandum of understanding
MS	milestones
MSS	mobile satellite services
MUOS	Mobile User Objective System
NC3	Nuclear Command, Control, and Communications

NetOps	network operations
NIPRNET	Unclassified but Sensitive Internet Protocol Router Network
NMCS	National Military Command System
NS4R	National Security SATCOM Systems Synchronization Roadmap
NTIA	National Telecommunications and Information Administration
OPLAN	operations plan
OPORD	operations order
OSD	Office of the Secretary of Defense
POM	Program Objective Memorandum
PDSA	Principal DoD Space Advisor
PM	Program Manager
RDT&E	research, development, test, and evaluation
RSSC	Regional SATCOM Support Center
SAA	satellite access authorization
SAR	satellite access request
SATCOM	satellite communications
SDB	SATCOM Database
SDB-MT	SATCOM Database management tool
SecDef	Secretary of Defense
SI	Strategic Instruction
SIPRNET	Secret Internet Protocol Router Network
SISC	Satellite Interoperability and Standards Committee
SSE	SATCOM System Expert
SSRA	Spectrum Supportability Risk Assessment
S-D	spectrum-dependent
TDMA	Time Division Multiple Access
TWG	Technical Working Group
UFO	UHF Follow-On
UHF	Ultra High Frequency
USD(A&S)	Under Secretary of Defense for Acquisition and Sustainment
USD(R&E)	Under Secretary of Defense for Research and Engineering
USCYBERCOM	U.S. Cyber Command
USSTRATCOM	U.S. Strategic Command
VCJCS	Vice Chairman of the Joint Chiefs of Staff

WCDMA	Wideband Code Division Multiple Access
WGS	Wideband Global SATCOM

PART II -- DEFINITIONS

NOTE: The following terminology is chiefly specialized for SATCOM. It has not been standardized for general, DoD-wide use and inclusion in the "Department of Defense Dictionary of Military and Associated Terms" (JP 1-02) unless indicated by the parenthetic phrase "(JP 1-02)" after the definition. In some cases, JP 1-02 may have a general, DoD-wide definition for a term used here with a specialized definition for this instruction.

access. The right to enter a DoD SATCOM network and make use of communications payload resources.

adjudication. Adjudication refers to the CJCS-level appeal process that reviews denied, partially denied, or preempted DoD SATCOM resources to determine if a different action should be taken following USSTRATCOM arbitration process. Adjudication can only be initiated if USSTRATCOM arbitration did not resolve the rejected allocation request. The adjudicating official will be the final decision authority on whether or not SATCOM will be provided.

advocate. A designated organization that represents the interests of a specific group of DoD SATCOM users. The advocate does not speak directly for the user but represents the user's interests at appropriate forums. Typical advocacy forums include, but are not limited to, requirements development, architecture development, CONOPS development, specialized training, and operational assessments.

allocation. Authorizes use of DoD SATCOM resources for validated requirements.

apportionment. Resources planned or projected to be available to a CCDR for APEX planning purposes.

arbitration. The process, performed by USSTRATCOM, that reviews a denied, partially denied, or preempted DoD SATCOM request to determine if a different action should be taken to provide service. Arbitration can only be initiated if the RSSC has rejected an allocation request for SATCOM.

authorized user. Approved individual or organization granted or eligible to be granted access to DoD SATCOM resources. Authorization for use may be obtained via the SDB process (which includes the SDB waiver process) or international agreement. Inherent in Authorized Use is responsibility for positive control and adherence to established policies, instructions, TTPs, and information protection.

coalition. An ad-hoc arrangement between two or more nations for common action.

Combatant Command. A unified or specified command with a broad continuing mission under a single commander established and so designated by the President, through the SecDef, and with the advice and assistance of the CJCS. CCMDs typically have geographic or functional responsibilities. (JP 1-02, JP 5-0)

COMSATCOM. SATCOM resources provided by commercial entities encompassing DoD-leased bandwidth, DoD-owned or -leased commercial-band terminals and gateways landing DoD missions, and SATCOM used by the DoD but provided by commercial entities using commercial terminals.

communications on the move. High-rate data communications to small, mobile terminals (approximately 1-foot antennas).

configuration management. The administration by a cognizant program manager or designated operations and maintenance lead of orderly and effective procedures, processes, assessments, and changes of hardware or software configuration baselines for SATCOM resources. Configuration management includes the planning, design, synchronization, integration, and implementation of configuration changes to SATCOM resources including facilities, infrastructure, and equipment layout, to achieve SATCOM and terrestrial network operational integrity and interoperability for authorized users. Configuration management excludes operational settings required specifically to execute operational tasks related to resources allocation and service management.

Consolidated SATCOM System Expert (C-SSE). C-SSEs are designated by CDRUSSTRATCOM via mission orders for Narrowband, Wideband, Protected, Commercial, and DoD Gateways to provide an integrated DoD SATCOM management framework supporting JFCC SPACE and USSTRATCOM. C-SSE efforts are to de-conflict, assess, analyze, and integrate DoD SATCOM information, status, configurations, synchronization, sustainment issues, deployment issues, and anomalies. All C-SSEs coordinate and integrate cross-system inputs with support from associated SSEs except for Commercial and DoD Gateway, which execute without designated SSEs. The DoD Gateway C-SSE is unique as it must de-conflict, assess, analyze, integrate, and synchronize applicable issues in coordination with affected system-specific C-SSE(s).

contention. Unresolved SATCOM resource competition between two or more authorized users.

contingency. A situation requiring military operations in response to natural disasters, terrorists, subversives, or as otherwise directed by appropriate authority to protect US interests. (JP 5-0)

crisis. An incident or situation involving a threat to the United States, its citizens, military forces, or vital interests that develops rapidly and creates a condition of such diplomatic, economic, or military importance that commitment of military forces and resources is contemplated to achieve national objectives. (JP 3-0)

cybersecurity. Prevention of damage to, protection of, and restoration of computers, electronic communications systems, electronic communications services, wire communication, and electronic communication, including information contained therein, to ensure its availability, integrity, authentication, confidentiality, and nonrepudiation. (DoDI 8500.01)

cybersecurity. The ability to protect or defend the use of cyberspace from cyber-attacks. (H.R. Public Law 112-81, Section 922)

cyberspace. A global domain within the information environment consisting of the interdependent network of information systems infrastructures including the Internet, telecommunications networks, computer systems, and embedded processors and controllers. (H.R. Public Law 112-81, Section 922)

cyberspace defense. Actions normally created within DoD cyberspace for securing, operating, and defending the DoDINs. Specific actions include protect, detect, characterize, counter, and mitigate. (DoDI 8500.01)

DISN. A composite of DoD-owned and -leased telecommunications subsystems, networks, and capabilities comprising facilities, personnel, and materiel under the management, control, and operational direction of DISA. The DISN provides the long haul, point-to-point, and switched network telecommunications needed to satisfy the requirements of the DoD and certain other U.S. Government departments and agencies. DISN services interconnect the CJCS and the CCDRs with general-purpose networks. DISN assets are part of the Defense Communications System and are the DoD's national security emergency preparedness communications assets within the U.S. Government-wide national communications system.

DoD Gateways. A subset of the Enterprise Gateways are designated as DoD Gateways, due to their unique roles in meeting joint operational mission requirements around the globe. DoD Gateways are joint assets under the operational oversight and management of the Joint Chiefs of Staff and USSTRATCOM, respectively. Currently, there are 13 designated DoD Gateways: Naval Computer and Telecommunications Area Master Station, Pacific, Wahiawa, Hawaii; Camp Roberts, California; Fort Detrick, Maryland;

Northwest Teleport, Chesapeake, Virginia; RAF Croughton, Great Britain; Ramstein AFB, Germany; Landstuhl, AB Germany; Naval Station Communications Facility, Lago Patria, Italy; Naval Computer and Telecommunications Station Bahrain; Al Udeid Air Base, Qatar; Camp Arifjan, Kuwait; Geraldton, Australia; and Fort Buckner, Okinawa, Japan.

DoD SATCOM. DoD SATCOM comprises DoD-owned and -operated SATCOM resources, DoD-owned SATCOM resources operated by non-DoD entities, SATCOM resources acquired by the DoD from commercial providers, and SATCOM resources allocated by the U.S. Government (e.g., federal, civil SATCOM resources), international partners, or allied partners for DoD use. This definition is independent of any particular state of SATCOM resource allocation, be it to DoD Components or non-DoD entities. SATCOM resources set aside for international partners' use under the terms of a non-EVE MOU, however, are excluded from this definition of DoD SATCOM.

DoDIN. The set of information capabilities and associated processes for collecting, processing, storing, disseminating, and managing information on-demand to Warfighters, policymakers, and support personnel, whether interconnected or stand-alone, including, owned and leased communications and computing systems and services, software (including applications), data, security services, other associated services, and NSS.

Enterprise DoD SATCOM Resources. DoD SATCOM resources acquired for joint use by DoD Components, to include resources acquired by Military Services under the authorities of sections 3062, 5062, 5063, and 8062 of Title 10, U.S. Code, and designated by the acquiring Military Service for joint use. Enterprise DoD SATCOM resources are allocated through CJCS-defined processes and procedures. Enterprise DoD SATCOM resources exclude, at the acquiring DoD Component's discretion, COMSATCOM services acquired: (1) via special acquisition authority, (2) under C/S/A POR, (3) to support research and development initiatives, and (4) for Rapid Fielding of Capabilities to mitigate current challenges and enhance support to C/S/A.

Enterprise Gateway. A joint SATCOM transmission and receive capability installed within the boundary of the real property of a MILDEP or hosted user facility, equipped with SATCOM terminals, SATCOM modems, networking devices, baseband and encryption equipment, DISN services and transport devices that support the long-haul extension of the DISN, and special user transport and managed services to other strategic and tactical terminals. Not all enterprise gateways will have the entire complement of the aforementioned equipment.

gateway. A large, fixed terminal or suite of terminals and supporting hardware and software supporting a connection between a satellite and network services.

international partner. A nation that has a current, signed international agreement with the U.S. Government authorizing them to jointly produce, receive, provide, or exchange SATCOM resources in a particular DoD SATCOM band with the United States.

international agreement. Any agreement (including oral agreements) concluded with one or more foreign governments (including their agencies, instrumentalities, or political subdivisions) or with an international organization that (1) is signed or agreed to by personnel of any DoD Component, or by representatives of the Department of State or any other Department or Agency of the U.S. Government; (2) signifies the intention of its parties to be bound in international law; and (3) is denominated as an international agreement or as a MOU, memorandum of agreement, memorandum of arrangements, exchange of notes, exchange of letters, technical arrangement, protocol, note verbal, aide memoire, agreed minute, contract, arrangement, statement of intent, letter of intent, statement of understanding or any other name connoting a similar legal consequence.

Joint. Connotes activities, operations, organizations, etc., in which elements of two or more Military Departments or Agencies participate.

military satellite communications (MILSATCOM). The SATCOM resources owned and operated by the DoD, primarily in the government frequency bands. MILSATCOM includes those systems (space, control, and ground segments) owned and operated by the DoD. MILSATCOM also includes enterprise gateways (to include DoD gateways) and Service gateways. SATCOM also includes satellite systems owned by mission partners used or provided by the DoD.

mission partner. U.S. non-DoD entities and allied partners who have entered into a friendly association with the United States to achieve broadly stated or mission-specific objectives.

multicast. Multicast is a subset of broadcast that extends the broadcast concept of one to many by allowing the sender of one transmission to many users in a defined group, but not necessarily to all users in that group.

narrowband SATCOM. Narrowband SATCOM is defined as current, planned, and future SATCOM resources operating in the ultrahigh frequency, L-, and S-bands. Provides reliable, secure, fixed-site and mobile data and voice communications not subject to adverse weather conditions, dense foliage, terrain masking, distance limitations, and interoperability problems.

network centric (NC). The realization of a robust, secure, globally connected network environment in which information is shared in a timely manner and seamlessly among users, applications, and platforms.

operational management. The oversight, management, and control of resources to ensure accessibility and provide global SATCOM resource situational awareness for authorized users.

positive control. The continuous ability to oversee SATCOM access and coordinate necessary changes in the frequency/channel, power level, or network via users assuring terminal(s) use alternative communication means (e.g. radio, telephone, orderwire, etc.), to coordinate adjusting power levels, frequency, and user terminal modem settings with RSSC or WSOC guidance to prevent interference with adjacent satellite channels and users. All SATCOM access must be under positive control at all times. Access will be denied/terminated to links that lack positive control. As the technology built into systems allow, positive control includes automated methods.

protected SATCOM. Protected SATCOM resources have the capability to negate or mitigate the purposeful or inadvertent degradation, disruption, denial, unauthorized access, or exploitation attempts. Protected SATCOM resources operate at 20.2-21.2 gigahertz (GHz) (downlink), 43.5-45.5 GHz (uplink), and 60-61 GHz (crosslink). Provides the required levels of protection by using various protection methods both on space- and ground-segment components, (e.g., low probability of detection, low probability of intercept, low probability of exploitation, anti-jam, anti-scintillation, nuclear hardening). Protected communications may utilize a subset of these techniques depending on the threat to be overcome, meaning that all protected communications are not survivable communications (ability to operate in and through a nuclear environment).

resource allocation. The capabilities, processes, and tools that authorize operational use of DoD SATCOM resources consistent with approved user requirements.

roadmap. A strategic document that provides a replenishment and deployment strategy for specific SATCOM-bands (protected, narrowband, wideband, and commercial). Roadmaps consider current on-orbit capacity, projected capabilities and capacity and overlays them against approved Warfighter requirements residing in the SDB. This information is used to determine necessary deployment/repositioning for SATCOM-band optimization, the proper mix of media, and the right sizing of future systems to meet Warfighter requirements.

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

SATCOM. The use of satellites to provide beyond line of sight communications and networking services (including relay and amplification of data, messaging, video, and voice signals) to and from various points on or around the Earth.

SATCOM resources. IT resources, including NSS, that collectively form and enable the SATCOM segment of the DoDINs. SATCOM resources are deployed in all physical warfighting domains (land, sea, air, and space) and perform communications functions through the cyberspace domain. SATCOM resources include communications satellite payloads; SATCOM gateways and terminals; communications satellite payload and terminal control systems; and all communications-related systems, capabilities, services, networks, applications, personnel, and funds. When applied to the space segment, the term "SATCOM resources" applies to components that provide communications capabilities (i.e., SATCOM payload) and excludes other spacecraft equipment and systems.

SATCOM System Expert (SSE). The component or designated organization responsible for providing technical and operational expertise for their assigned SATCOM system(s).

service management. The capabilities, processes, and tools that manage the operational use of allocated DoD SATCOM resources consistent with an access authorization. Service management includes monitoring, reporting, and control of the systems and equipment providing those services, including space segment and terminal segment SATCOM resources.

state of concern. States subject to comprehensive economic sanctions or selective sanctions linked to space-related technology.

strategic SATCOM terminals. Large, fixed, ground terminals not shipboard or in direct support of ground mobile forces. This includes all large, fixed, ground terminals located at enterprise gateways. For the purpose of prioritizing strategic terminals, this definition also considers mission in the case of transportable terminals used as a contingency in lieu of large, fixed, ground terminals.

tactical SATCOM terminal. Transportable or mobile ground, airborne, or shipboard terminals in direct support of deployed forces.

terminal certification. Terminal certifications are comprised of three parts: Conformance, operational performance, and interoperability. Conformance and operational performance are an evaluation requirement established by the operational community, in coordination with DoD Components responsible for terminal acquisition and fielding, to augment as necessary the results of interoperability assessment and testing. The process provides the basis for a determination by the operational community and connection approval

authorities that DoD SATCOM resources, primarily terminals and modems and associated antennas, radomes, and other radio frequency and intermediate frequency components, will operate with the intended operational SATCOM system IAW applicable military standards. Interoperability certification is conducted by JITC IAW DoDI 8330.01 for NR KPP evaluation of systems or DoDI 8100.04 for Unified Capabilities products.

validation. Official confirmation by a C/S/A that a SATCOM requirement meets a mission need and warrants approval consideration by the JS. This definition is specific to the SATCOM requirements process described in this instruction and not necessarily identical to its usage in other requirements or acquisition documentation.

wideband SATCOM. Wideband SATCOM resources provide substantial worldwide capacity for high-quality voice, imagery, video, and data transport, operating in the C-, X-, Ku-, and Ka-bands. Wideband SATCOM systems provide the primary transmission path for much of DoD's highest-priority communications.

INTENTIONALLY BLANK