CJCSI 6250.01G
26 July 2022

DEPARTMENT OF DEFENSE SATELLITE COMMUNICATIONS

JOINT STAFF
WASHINGTON, D.C. 20318

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CHAIRMAN OF THE JOINT CHIEFS OF STAFF INSTRUCTION

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DEPARTMENT OF DEFENSE SATELLITE COMMUNICATIONS

References:
See Enclosure F

1. Purpose. Current and future Department of Defense (DoD) Satellite Communications (SATCOM) underpin the secure, resilient, and agile data and communications transport required for global Joint Force command and control (C2) across all domains. This instruction provides high-level operational policy, direction, and procedures for the planning, management, employment, and use of operational DoD SATCOM resources. 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 SATCOM (MILSATCOM) and commercial SATCOM (COMSATCOM) requirements of the DoD and its mission partners. The SDB is the SATCOM User Requirements Repository of current and future user requirements for the Chairman of the Joint Chiefs of Staff (CJCS) (as defined in reference f). Current SDB capabilities and process will transfer to the follow-on program, SATCOM Operational Management Situational Awareness Tool (SOMSAT).

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 for conformance, operational performance, and joint interoperability.

2. Superseded/Cancellation

a. CJCS Instruction (CJCSI) 6250.01F, "Department of Defense Satellite Communications," 26 February 2019 is hereby superseded.

b. CJCS Notice 6250, "Interim Guidance to CJCSI 6250.01," 9 August 2019 is hereby cancelled.

3. Applicability. This instruction applies to authorized users of DoD SATCOM that plan, use, manage, control, provide, exchange, and sustain operational DoD SATCOM resources. These resources include DoD-owned satellites, control segments, user terminals, enterprise SATCOM gateways, and mission-specific SATCOM gateways (commonly referred to as MILSATCOM); hosted communications payloads; contracted and acquired COMSATCOM resources, including ground infrastructure; and joint (refer to glossary) and international partner systems the DoD uses. 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 Executive Order 12333 directs.

4. Scope. This instruction provides policy for integrated DoD SATCOM management to ensure effective and efficient communications support to Combatant Commands (CCMDs), Services, and Agencies (CSA); International

Partners (IP); 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 terminals and modems.

5. Policy. See Enclosure A.

6. Definitions. See Glossary.

7. Responsibilities. See Enclosure B.

8. Summary of Changes. This revision of CJCSI 6250.01:

a. Clarifies DoD SATCOM roles and responsibilities of the Office of the Secretary of Defense (OSD), the Joint Staff (JS), U.S. Space Command (USSPACECOM), U.S. Strategic Command (USSTRATCOM), U.S. Cyber Command (USCYBERCOM), U.S. Space Force (USSF), DoD Components, and the Defense Information Systems Agency (DISA).

b. Updated with changes due to standup of USSPACECOM, including update of associated instruction numbers.

c. Aligns current DoD-level DoD SATCOM policy.

d. Provides the waiver process for continued non-Integrated Waveform (IW) legacy Ultra-High Frequency (UHF) SATCOM network usage.

e. Clarifies the differentiation between Protected Tactical and Protected Strategic SATCOM.

9. Releasability. UNRESTRICTED. This directive is approved for public release; distribution is unlimited on non-classified internet protocol router network (NIPRNET). DoD Components (to include the CCMDs) and other Federal agencies may obtain copies of this instruction via the CJCS Directives Electronic Library at: <http:/www.jcs.mil/library>. JS activities may also obtain access via the SECRET Internet Protocol Router Network (SIPRNET) Directives Electronic Library website: https//intelshare.intelink.sgov.gov/sites/jointstaff/SJS/IMD/Directives/default.aspx.

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

For the Chairman of the Joint Chiefs of Staff:

JAMES J. MINGUS, LTG, USA
Director, Joint Staff

Enclosures:

A – DoD SATCOM Operational Policy
B – DoD SATCOM Management Responsibilities
C – DoD SATCOM Requirements Process
D – Apportionment, Allocation, Terminal Performance Certification, and Waivers
E – DoD SATCOM Oversight and Requirements and Assessments
F – References
GL – Glossary

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ENCLOSURE A

DOD SATCOM OPERATIONAL POLICY

1. Purpose. This enclosure describes authorized use of DoD SATCOM resources and provides operational policies and operational objectives for DoD SATCOM.

2. Definitions and Categories

a. SATCOM. The use of satellites to provide beyond line of sight (BLOS) 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. 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), IPs, or allied partners for DoD use.

c. MILSATCOM. MILSATCOM includes those systems (satellites, control segments, ground segments, user terminals, Enterprise SATCOM Gateways, and mission-specific SATCOM gateways) owned and operated by the DoD. MILSATCOM may be decomposed into three system types:

(1) Narrowband. Narrowband SATCOM is defined as current, planned, and future DoD-owned, -leased, and -hosted SATCOM assets operating in the UHF spectrum. Resources are accessed using Wideband Code Division Multiple Access (WCDMA) and legacy waveforms. WCDMA is the primary payload supporting users over Mobile User Objective System (MUOS). Legacy payloads can be configured to provide resources via single access dedicated 5kHz and 25kHz channels, or multi-access time shared channels via Time Division Multiple Access (TDMA). TDMA is utilized for both Demand Assigned Multiple Access (DAMA) and IW processed channels. Transponded services on UHF Follow-on (UFO), Fleet Satellites, and MUOS satellites are remnant services for interoperability. Legacy Narrowband resources are not programmed to be replenished. Future Narrowband SATCOM systems shall be satisfied using the WCDMA waveform. Narrowband provides reliable, secure, fixed-site and mobile data and voice communications less subject to adverse weather conditions, dense foliage, terrain masking, and distance limitations. Narrowband SATCOM offers electromagnetic interference (EMI) mitigation capabilities, to include automated monitoring of all UHF SATCOM downlinks,

signal characterization, autonomous UHF uplink geolocation. Additionally, MUOS WCDMA provides filtering, notching and physical mitigations with 16 fixed beams per footprint.

(2) Wideband. Wideband SATCOM systems provide the primary transmission path for much of DoD's communications, including high-quality voice, imagery, video, and data transport. Wideband MILSATCOM operates in the X- and Ka-bands. Resources in the X-band are accessed over the Defense Satellite Communications System, Wideband Global SATCOM (WGS), and through IP systems. Resources in military Ka-band are accessed over WGS and through IP systems. Wideband offers protection capabilities, such as EMI detection, characterization, and mitigation; configurable beams; and adjustable power levels for high quality voice, imagery, and data circuits. Wideband SATCOM operates in Frequency Division Multiple Access or one of several TDMA schemes. The future Protected Anti-Jam (AJ) Tactical SATCOM (PATS) system will have additional enhanced capability to negate or mitigate the purposeful or inadvertent degradation, disruption, denial, unauthorized access, or exploitation attempts of SATCOM up through pre-nuclear and post-nuclear environments. Using the Protected Tactical Waveform (PTW), these systems dynamically adapt to provide high throughput in heavily contested environments, including EMI and in adverse weather environments, and provide near-real-time resource allocation for higher priority users if resources are constrained. Additionally, PATS will provide global BLOS, AJ, low probability of intercept (LPI) communications for tactical warfighters in both benign and contested environments. The PATS infrastructure will operate across a variety of frequency bands, including resources allocated by Wideband, Commercial, and International systems as well as the Protected Tactical SATCOM (PTS) constellation consisting of on-orbit PTW processing free-flying and hosted payloads at Military-Ka band and X-band.

(3) Protected Strategic. Protected Strategic SATCOM systems have additional capability to negate or mitigate the purposeful or inadvertent degradation, disruption, denial, unauthorized access, or exploitation of SATCOM through all operating environments. 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, Enhanced Polar System (EPS), and the future EPS Recapitalization. Protected Strategic SATCOM systems provide the greatest level of protection for MILSATCOM over dispersed geographic areas while providing flexible support and protection such as LPI, low probability of detection (LPD), low probability of exploitation (LPE), AJ, and anti-scintillation. This is accomplished primarily using military standard (MIL-STD) waveforms. Protected Strategic SATCOM provides flexible support for worldwide strategic communications mission sets, as well as links

for tactical users. The Evolved Strategic SATCOM (ESS) program will replace the current systems with continued support to strategic communications. Current tactical users not supporting strategic missions are expected to transition to PATS. However, these users with no strategic missions may be allocated ESS System resources that are excess to strategic user requirements during their transition to PATS or other SATCOM systems.

d. COMSATCOM. COMSATCOM encompasses all commercial SATCOM systems, services, and capabilities DoD procures or leases. This may include SATCOM bandwidth in any commercially available frequency band (e.g. L-, S-, C-, X-, Ku-, Ka-, and UHF). Those COMSATCOM resources procured for DoD Enterprise SATCOM (see Enterprise DoD SATCOM resources in glossary) are managed as part of an integrated DoD SATCOM enterprise. Enterprise DoD SATCOM resources exclude, at the acquiring DoD Component's discretions, COMSATCOM services acquired via special acquisition authority, under CSA/ POR, to support research and development initiatives, and for Rapid Fielding of Capabilities to mitigate current challenges and enhance support to CSA

3. Use of DoD SATCOM. DoD SATCOM resources constitute the SATCOM segment of the DoD Information Networks (DoDIN) and, within the cyberspace domain, must be operated and protected as part of the DoD information enterprise. SATCOM establishes or augments telecommunications in areas lacking suitable terrestrial infrastructure, for users requiring BLOS connectivity, and for users requiring connectivity at the halt and on the move. DoD SATCOM is critical for the full range of DoD and government agency operations supporting the *National Military Strategy*, from humanitarian relief and 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. DoD communications planners incorporate SATCOM into a priority list of one or multiple communication types called a primary alternate contingency emergency (PACE) plan. DoD SATCOM provides the following capabilities and services:

a. Transport medium for fixed and mobile voice, data, video, and imagery.

b. Range extension capabilities for legacy circuits and key services and applications such as the SIPRNET, the NIPRNET, the Defense Switched Network, the Defense Red Switch Network, the Joint Worldwide Intelligence Communications System, and video teleconferencing.

c. U.S.-controlled transmission means essential for the intelligence and diplomatic communities for a subset of communications supporting sensitive

operations or time-critical diplomatic traffic supporting national security objectives.

d. Facilitate command, control, and communications (C3); access for authorized users; survivable communications for presidential support; nuclear C3; coalition and allied operations and exercises; and intelligence, surveillance, and reconnaissance sensor collection data, including imagery and full-motion video.

e. DoD SATCOM is used by mobile, in-transit, and isolated forces.

f. Communications links with LPD, LPI, LPE, protection from scintillation and jamming, and users who require secure communications links and/or operational privacy provided by U.S.-controlled communications.

g. Support to the development of resilient continuity communications related to PACE plans and command, control, communications, and computers (C4) estimates that involve the use of space-enabled capabilities.

4. DoD SATCOM Operational Policies. The following DoD SATCOM policies are 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) USSPACECOM and their components must provide SATCOM resources to the highest-priority users in a prompt and effective manner. Enclosure D delineates DoD SATCOM allocation, user prioritization, mission priorities, and precedence levels 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 organizational level.

(2) If required for arbitration, JS can deviate from Enclosure D priority scheme and apply prioritization (such as PACE plans and Joint Strategic Capabilities Plan (JSCP)) to established priority plans and other operational necessities, based upon system, resource, and legal limitations.

(3) Policies, procedures, and CCSA-generated products must support EMI mitigation and resolution, SATCOM service restoration, and efficient use and control of the communications bandwidth (i.e., 1-N, Commercial Monitoring List, and Global Restoral Priority List lists).

(4) Continuously incorporate technology improvements into all facets of the end-to-end SATCOM system to maximize interoperability and operational capabilities, and decrease system vulnerabilities in accordance with (IAW) statutory requirements and industry best practices.

(5) Services and Components must acquire and field SATCOM capabilities (materiel and services) under validated requirements IAW reference a and comply with reference b.

(6) DoD SATCOM should be employed in a flexible and responsive manner with full visibility of utilization of resources and leveraging available planning tools.

(7) The DoD SATCOM portion of the critical communications systems described in reference c must be capable of ensuring availability of service by being survivable, providing electromagnetic pulse protection, and operating through scintillation environments.

(8) DoD SATCOM operations must monitor, detect, characterize 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.

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

(10) COMSATCOM leveraged by the DoD is considered part of DoD SATCOM; however, DoD-leased or -procured COMSATCOM operating in non-federal frequency bands remains subject to national governmental COMSATCOM regulations; i.e., Federal Communications Commission (FCC) regulations for U.S. and applicable to the COMSATCOM provider. As such, commercial satellite systems supporting the DoD should comply with cybersecurity requirements IAW reference d. Operational security, communications and transmission security (TRANSEC), EMI protection, and resiliency features of COMSATCOM systems may not be equivalent to those of purpose-built MILSATCOM systems. COMSATCOM users are required to accept risks of mission failure when contracting for services that do not meet these requirements. All COMSATCOM use is subject to contractual terms of use with the COMSATCOM provider.

(11) All SATCOM links and satellite crosslinks shall employ TRANSEC appropriate for the mission and the projected threat environment over the life of the system in accordance with references d and aa.

b. Space Capability. The ultimate objective of DoD SATCOM operational policy is to define how USSPACECOM, supported by the Services, provides DoD SATCOM space capabilities to authorized users IAW operational priorities and international agreements. DoD must continually assess DoD SATCOM system effectiveness in pursuit of this objective. Consequently, full compliance with applicable cybersecurity policy for space systems is required per references d and e. Additionally, space systems should include capabilities to mitigate EMI and other possible threats to the system to increase the ability of the system to continue to operate in contested environments. DoD should continuously evaluate the overall SATCOM enterprise to ensure that various SATCOM resiliency measures in place are sufficient to provide required communications against threats identified by the *Defense Planning Guidance* (DPG).

5. Operational Objectives. The DoD SATCOM operational policy provides USSPACECOM, with the support of the Services, the ability to satisfy current SATCOM demand and plan future demand through all phases of warfighting and in contested environments. Each process is developed based upon key DoD SATCOM operational and developmental objectives:

a. Services and Components must size and deploy agile SATCOM systems to meet current and future DoD SATCOM user requirements.

b. Services and Components must manage, monitor, control, and integrate SATCOM space capabilities 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. Services and Components must develop SATCOM space systems that leverage existing and planned transmission paths with the capability of backward compatibility when operationally relevant and not cost prohibitive. In order to achieve this goal, USSPACECOM must implement standard operational policies and procedures at the system-of-systems level.

d. Services and Components must provide managers and users of DoD SATCOM with 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 concurrently 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. The resulting consolidation of available information will provide a shared awareness and a common operating picture of DoD SATCOM and related network resources in order to plan, implement, monitor, and sustain effective and efficient communications support.

e. Services and Components must implement advanced access techniques, network management, machine-to-machine interconnection, and remote operational management features. Interoperability with IPs and allies shall be considered during system development.

f. SATCOM systems are susceptible to disruption. Services and Components must consider architectural resilience factors, including redundancy, diversity, protection features (such as AJ and cybersecurity techniques), and PACE planning for mission-critical traffic. Including these factors into campaign and contingency planning (coordinated with SATCOM managers and users) will minimize the effect disruptions have on mission success during operations.

g. COMSATCOM resource planners must consider operational objectives to ensure that contract implementation and service quality meet defined requirements. COMSATCOM contracts should enable flexibility and reprioritization to allow DoD SATCOM to realize resiliency through diversification and proliferation. If resource planners need to modify service requirements, they must coordinate with the CSA that let the original contract.

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

a. Managing the allocation and access for all DoD SATCOM resources for U.S. DoD users, IPs, and allies. This includes, but is not limited to, constellation reconfiguration and integration management in support of operational requirements. USSPACECOM exercises operational oversight over COMSATCOM as defined in Part II of the Glossary.

b. Providing visibility into DoD SATCOM resources (including mission partner and commercial 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 CSA, IP, and coalition operational requirements and strategic planning.

d. Ensuring adequate control of MILSATCOM. This includes 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

DOD SATCOM MANAGEMENT RESPONSIBILITIES

1. Purpose. This enclosure further defines and elaborates on those organizational SATCOM roles and responsibilities stated in reference f.

2. Responsibilities

a. Under Secretary of Defense for Research and Engineering. Co-chairs the Command, Control, and Communications Leadership Board (C3LB) IAW the C3LB charter.

b. Under Secretary of Defense for Acquisition and Sustainment

(1) Deputy Assistant Secretary of Defense for Strategic, Space and Intelligence Portfolio Management is accountable for all acquisition oversight and related matters concerning the space data transport capabilities.

(2) Co-chairs the C3LB IAW the C3LB charter.

c. Department of Defense Chief Information Officer

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

(2) Ensures DoD SATCOM systems and resources support DoDIN requirements and are compliant with approved technical standards agreements within DoD and between DoD and other Federal Agencies, IPs, and appropriate non-federal and commercial entities.

(3) Serves as the DoD-lead to ensure spectrum issues are coordinated with the FCC and the National Telecommunications and Information Administration (NTIA).

(4) Reviews and submits allied, partner, and non-DoD agency requirements for access to DoD SATCOM resources to the JSP Administrator for inclusion in the SDB. Appoints a representative to the JSP and participates in SDB Working Group meetings.

(5) Coordinates with CJCS, USCYBERCOM, and USSPACECOM on any activities affecting operational aspects of DoD SATCOM resource management, including resource allocation and service management.

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

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

(8) In coordination with (ICW) the Under Secretary of Defense for Acquisition and Sustainment (USD(A&S)), Cost Assessment and Program Evaluation, and CJCS, serves as the sponsor for DoD SATCOM functional capabilities and as a member of Overarching Integrated Product Teams associated with DoD SATCOM programs.

(9) Performs budgetary review of SATCOM-related programs.

(10) Co-chairs the SATCOM Systems Engineering Group (SSEG) as the lead for SATCOM policy and enterprise modernization.

(11) Co-chairs the C3LB IAW the C3LB charter.

(12) Develops and maintains DoD SATCOM reference architectures.

d. Chairman of the Joint Chiefs of Staff

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

(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 references a and b.

(4) Provides JSCP Guidelines as it pertains to SATCOM to USSPACECOM and its components.

e. Director for Command, Control, Communications, and Computers /Cyber and Chief Information Officer, JS J-6

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

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

(4) Manages the DoD SATCOM requirements process, including coordination with the JS and USSPACECOM for COMSATCOM asset requirements 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, USSPACECOM (CDRUSSPACECOM) and CJCS.

(5) Coordinates with USSPACECOM and USSTRATCOM in the management of the Protected Strategic SATCOM resource allocation.

(6) In coordination with JS J-3, develops CJCS final adjudication position for DoD SATCOM allocation disputes that USSPACECOM cannot resolve. CJCS has final adjudication authority.

(7) Defines the process for submission, review, approval, prioritization, and documentation of DoD SATCOM requirements IAW Enclosure C.

(8) Defines processes and procedures for the allocation of enterprise DoD SATCOM resources IAW Enclosure.

(9) Co-chairs the JSP with USSPACECOM and establishes SDB requirements' validation and re-validation criteria.

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

(11) Chairs the Combined Communications-Electronics Board to coordinate any five-nation joint military communications-electronics matters that are referred to it by a member nation.

(12) Co-chairs the C3LB IAW the C3LB charter per reference j.

(13) 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 a.

(14) Serves as appeal authority for terminal and/or modem certification denials processed by USSPACECOM.

(15) Reviews USSPACECOM recommendations for allocation or deallocation 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 SATCOM gateways and/or associated strategic SATCOM terminals between DoD Components to the DoD Chief Information Officer (CIO) for approval.

(16) 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 k.

(17) Provides guidance and ensures joint and IP compliance with SATCOM system and technical standards in support of interoperability.

(18) Assists with the development of a Defense Spectrum Management Architecture, which is a key component of the DoDIN Architecture IAW references l and m.

(19) Co-chairs the SSEG as the lead for DoD SATCOM requirements processes.

(20) Approval authority for IW operational waivers related to coalition interoperability, terminal waiver processing and incompatibility issues; has final decision authority for all waiver request conflicts.

f. Director for Strategy, Plans, and Policy, JS J-5.

(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.

g. Commander, U.S. Space Command. Per reference n, CDRUSSPACECOM is responsible for planning and execution of global space operations activities and missions as the President or SecDef directs, and for serving as the global SATCOM operations manager.

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

(2) Develops, coordinates, approves, and executes DoD SATCOM operations policies and procedures, constellation deployment plans, space-segment DoD SATCOM roadmaps, satellite positioning/repositioning, and acceptance/relinquishment plans. Assesses how these various plans impact communications support to current and future operations, operation orders (OPORDs), operation plans (OPLANs), concept plans (CONPLANs), and memorandums of understanding (MOUs), and coordinates DoD SATCOM actions prior to execution when feasible.

(3) Produces DoD SATCOM apportionments supporting the APEX process outlined in reference o.

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

(5) Is responsible for DoD SATCOM resource allocation.

(6) ICW the JS J-6 and USSTRATCOM, manages Protected Strategic SATCOM system resource allocations and terminals for CJCS requirements in support of operations.

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

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

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

(10) Provides approval authority for, and operational control 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, IAW reference p.

(11) Oversees actions related to planned and unplanned outages for satellite maintenance 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.

(12) Develops and implements procedures for the monitoring, detection, characterization, identification (including geolocation), and reporting of DoD SATCOM EMI.

(13) Develops EMI resolution courses of action in conjunction with the JS, Department of State, and host nations (HNs) as required for SATCOM. Publishes procedures for the resolution of EMI with the DoD and commercial providers.

(14) Provides information on system use and status to the JS, CSAs, IPs, civil authorities, and mission partners as appropriate.

(15) Coordinates with the JS, CSAs, IPs, civil authorities, and mission partners as required to prioritize requirements, shortfalls, and operational impacts, and disseminates this information as appropriate.

(16) Represents the DoD SATCOM operational community, coordinating and orchestrating consolidated user positions with CSAs, IPs, civil authorities, mission partners, commercial entities, allies, and foreign organizations.

(17) Co-chairs the JSP with JS J-6.

(18) Participates in C4/Cyber FCB as requested.

(19) Serves as the approval authority for SDB waiver requests as JS J-6 delegates.

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

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

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

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

(24) IAW reference p, ICW 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.

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

(26) 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.

(27) 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 q.

(28) 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 guidance.

(29) Designates and assigns responsibilities to USSPACECOM assigned Service components as SATCOM System Experts (SSEs). Consolidated SSEs (C-SSEs) are designated through operational orders. For C-SSE designations outside of USSPACECOM's component structure, the SecDef assigns C-SSEs.

(30) Defines the integrated SATCOM management infrastructure with JS. Negotiates and concludes agreements with CSA to establish the SATCOM operational management structure.

(31) Supports DISA in coordination of Enterprise SATCOM Gateway configuration management actions with all DoD Components and IAW reference h.

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

(33) Serves as Lead Theater Information Manager (TIM) for Global Broadcast Service (GBS). Coordinates with CCMD and service TIMs and other organizations to ensure support to operational users.

(34) Co-chairs the SSEG as the operational lead.

(35) Collaborates with the Under Secretary of Defense for Research and Engineering (USD(R&E)), USD(A&S), DoD CIO, DoD Components, and program offices regarding architectures and engineering during the design and development of DoD SATCOM systems to ensure interoperability and compliance with DoD SATCOM operational requirements.

(36) Identifies Certification Authority (CA) (currently the C-SSEs) for Terminal Performance Certifications.

h. Commander, U.S. Strategic Command

(1) Provides validation authority and command planner support for special users and National Leadership Command Capability elements.

(2) Establishes and maintains operating procedures described in reference bb ICW USSPACECOM and USSF.

(3) Coordinates with JS J-6 and USSPACECOM in the management of the Protected Strategic SATCOM resource allocation.

(4) Develop tactics, techniques, and procedures (TTPs) for integrating SATCOM electromagnetic spectrum (EMS) information into Joint Electromagnetic Spectrum Operations (JEMSO) and Electromagnetic Battle Management.

i. Commander, U.S. Cyber Command. Per reference n, CDRUSCYBERCOM is responsible for planning and executing global cyberspace operations, activities, and missions as the President or SecDef directs, and, in particular, for directing DoDIN security, operations, and defense.

j. Defense Information Systems Agency

(1) Provides a comprehensive global information systems network per reference r, and performs DoD SATCOM applicable tasks IAW reference r.

(2) In support of USCYBERCOM, conducts defensive cyberspace operations to secure, operate, and defend connections made through the SATCOM Gateways into the Defense Information Systems Network (DISN) and broader DoDIN per guidance from the Joint Force Headquarters DoDIN.

(3) Defines system performance criteria, IAW applicable MIL-STDs, and requirements for DoD SATCOM systems that connect to the DISN and oversees the DISN commissioning process.

(4) Supports USSPACECOM with development of recommendations to CJCS for the consolidation and/or establishment of new Enterprise SATCOM Gateway terminals, and the transfer of Enterprise SATCOM Gateway terminals between Services and Defense Agencies.

(5) Responsible for Enterprise SATCOM ground infrastructure modernization and sustainment, which, ICW USSPACECOM and the Services, includes all life cycle functions from requirements identification to disposal

(i.e., funding, engineering, system configuration management, inventory management, and technical refresh) and other associated sustainment efforts. DISA will work with the Services to synchronize funding for all other gateway activities, including mission-unique and Service-unique requirements.

(6) Responsible for Enterprise SATCOM Gateway request fulfillment, allocation, and sustainment.

(7) Provides analysis and engineering of DoD SATCOM systems as elements of the DoDIN.

(8) Provides enterprise-wide DoD SATCOM system engineering support to USD(R&E), DoD CIO, JS, and USSPACECOM. Support includes representation to international and North Atlantic Treaty Organization forums as requested.

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

(10) 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.

(11) Utilizes DoD CIO overarching DoD SATCOM architectural recommendations and develops them into specific “system of systems” concepts and recommendations.

(12) Assists USSPACECOM with DoD SATCOM terminal performance certification process.

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

(14) Provides spectrum management support IAW reference l.

(15) Responsible for coordinating with appropriate agencies to acquire HN Approvals (HNAs) for all Enterprise SATCOM terminals at Enterprise SATCOM Gateways.

(16) Maintains the Joint SATCOM Management Enterprise and develop the follow-on SATCOM ordering, management, and SOMSAT products used for the order entry and provisioning of SATCOM resources.

(17) Co-chairs the SSEG as the lead for technical issues and systems engineering in the delivery of SATCOM gateway, teleport, and ordering/ provisioning capabilities and their seamless integration within the DoDIN.

(18) Responsible through the Joint Interoperability Test Command (JITC) for Joint Interoperability Certification of SATCOM systems IAW reference b and reference s.

(19) As directed by DISA, JITC:

(a) Evaluates and certifies joint, multinational, and interagency SATCOM terminal interoperability test plans for compliance with technical standards, IAW reference b.

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

(c) ICW the DoD CIO, USD(A&S), Director of Operational Test & Evaluation, and other DoD Component heads, establishes procedures to verify, assess, and certify, through testing, joint multinational, and interagency interoperability throughout a system's lifecycle.

(d) Publishes and maintains an Interoperability Process Guide (IPG) (reference b) outlining procedures required to support joint, multinational, and interagency interoperability certification and Interim Certificate to Operate requests.

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

(f) Participates in the Joint Capabilities Integration and Development System (JCIDS) (reference q) review to verify Net Ready-Key Performance Parameters (NR-KPP) are defined to support interoperability requirements.

(g) In support of developmental testing and evaluation (DT&E), provides assessments and operation test readiness reviews for DoD SATCOM

systems with joint, multinational, and interagency interoperability requirements IAW reference b.

1. Provides the status of SATCOM interoperability and standards conformance issues in support of DT&E.

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

3. Includes details of any interoperability issues that must be resolved before the start of operational test and evaluation.

(h) Serves as test agent for legacy UHF SATCOM MIL-STD conformance.

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

k. Services

(1) USSF-specific responsibilities

(a) Acquires a mixture of MILSATCOM and COMSATCOM capabilities sufficient to meet projected DoD demand and requirements, as documented in the SDB, and when confronted with threats identified in the DPG. The acquisition of MILSATCOM systems will be IAW reference t, including associated adaptive acquisition pathways, and reference u.

(b) Executes USSPACECOM-approved configuration changes to SATCOM on-orbit assets and control systems, and provides regular flight operations for MILSATCOM space assets.

(c) Serves as the single point of contact for acquisition of COMSATCOM services to meet the needs of DoD components, consistent with approved user requirements and funding provided by the requesting DoD component. Coordinates with the JS when the proposed vendor is associated with a state-of-concern (see definition of state-of-concern in glossary).

(d) Collects data, develops annual COMSATCOM usage and expenditure reports, and prepares estimates of future COMSATCOM demand IAW content guidance provided by the DoD CIO.

(e) Assists the CSA in coordinating HNAs for COMSATCOM services obtained through USSF contract vehicles.

(f) Supports JS and USSPACECOM efforts to establish effective integration and management of COMSATCOM, MILSATCOM, and internationally partnered resources to provide operational flexibility in support of the highest priority missions.

(g) Maintains SA of COMSATCOM, MILSATCOM, and internationally partnered resources to support critical C2 networks through contested environments.

(h) Reviews Test and Evaluation Master Plans and associated developmental and operation test plans for interoperability ICW Program Managers (PMs) of SATCOM systems/components acquisition categories (ACAT) and non-ACAT acquisition programs with joint, multinational, or interagency interoperability requirements.

(i) Obtains landing rights for all new MILSATCOM satellite systems.

(j) Assists USSPACECOM with system, equipment, and terminal connection, or waiver to connect, to MILSATCOM resources (Narrowband, Wideband, and Protected Strategic).

(k) Responsible for the Joint Terminals Engineering Office (JTEO). JTEO develops and maintains the NS4R under guidance from DoD CIO. Additionally, JTEO assists in coordination of terminal capabilities in support of control, interoperability, SA, efficiency, and protection.

(l) When an organization submits a request to Commercial SATCOM Office (CSCO) to acquire service on commercial satellites that, upon review, are determined to potentially result in the restriction of use of an adjacent or near adjacent MILSATCOM satellite, the COMSATCOM C-SSE must coordinate with MILSATCOM C-SSE whose satellites might be impacted to determine if the organization's request could be satisfied on MILSATCOM. If support on MILSATCOM is not feasible, the COMSATCOM C-SSE will coordinate with CSCO to analyze operational and contractual solutions and measures that may resolve the limiting factors. If a MILSATCOM capacity reduction is anticipated,

the COMSATCOM C-SSE must notify USSPACECOM or delegate of the organization. The COMSATCOM C-SSE will coordinate with CSCO as required.

(m) Ensures all current and future satellite and control systems are compliant with national, HN, military, and appropriate commercial standards, published policies, and laws as applicable.

(n) Coordinates with commercial providers to ensure COMSATCOM services are delivered IAW terms and conditions of related contract(s).

(2) Responsibilities for all Services

(a) Receive USSPACECOM approval for MILSATCOM on-orbit assets, control systems, MILSATCOM terminal infrastructure and DoD gateway configuration changes or operational sustainment actions that will (or are likely to) impact DoD SATCOM resource allocation or service management. If unable to comply, prior to operational execution, provide report to USSPACECOM and other impacted organizations within 24 hours following initial execution.

(b) Coordinate with commercial providers to ensure COMSATCOM services are delivered IAW terms and conditions of related contract(s).

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

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

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

(f) Coordinate with USD(A&S), DoD CIO, JS, USSPACECOM, DISA, and other Services before exchanging or entering into any agreement to transfer strategic SATCOM terminals between Services and/or Agencies.

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

(h) Ensure all current and future terminal systems are compliant with national, HN, military, and appropriate commercial standards, published policies, and laws, as applicable.

(i) Ensure SATCOM systems are certified for standards IAW reference v, operational performance prior to connectivity and certified for interoperability under reference b and reference n (as applicable) once connection approval has been granted.

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

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

(l) Responsible for funding and execution of operations and maintenance activities at assigned Enterprise SATCOM Gateways.

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

(n) Ensure all SATCOM system operators have adequate training on the systems they employ.

(o) Ensure DoD SATCOM terminals and modems receive performance certification prior to use on operational SATCOM resources.

(p) Provide system tools to support management and user access of SATCOM resources.

(q) Coordinate with CSCO to deliver COMSATCOM contracts that ensure COMSATCOM services provided are consistent with commercial/ industry standards and/or best practices on all COMSATCOM contract arrangements, and ensure entry into the SDB.

(r) Notify supported CCMD of any COMSATCOM terminal or service that will be used and coordinate with CSCO for HNAs, frequency clearances, and terminal licenses for DoD SATCOM terminals when needed (except for Enterprise SATCOM Gateway terminals that are obtained by DISA).

(s) Responsible, with coordination from CSCO, CCMD and Defense Agencies, to obtain HNAs, frequency clearances, and terminal licenses for MILSATCOM terminals (except for Enterprise SATCOM Gateway terminals that are obtained by DISA) as required IAW Appendix A to Enclosure E.

(t) Prepare and submit COMSATCOM usage and expenditure information to CSCO IAW content guidance provided by the DoD CIO.

(u) In support of USSPACECOM's global DoD SATCOM responsibilities, Services acquiring COMSATCOM services submit a Satellite Access Request (SAR) or Satellite Access Authorization (SAA)-like information (see definition in glossary) and transmission plan information to the servicing Regional SATCOM Support Center (RSSC) prior to execution. If unable to comply prior to operational execution, and as operational necessity allows, provide information to servicing RSSC within 24 hours following initial execution, but no longer than 1 week following initial execution and when changes occur in the initially provided information. The servicing RSSC will inform USSPACECOM, USSF, and other impacted organizations of acquired COMSATCOM services in their region.

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

1. Combatant Commands and Heads of Defense Agencies

(1) Maintain updated reviews of DoD SATCOM requirements in each validated OPORD, OPLAN, CONPLAN, Functional Campaign Plan (FCP), or operational architecture IAW the JSCP and reference w.

(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 JS J-6 directs.

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

(2) Maintain a prioritized 1-N list for all allocated DoD SATCOM resources separated by system type (i.e., Wideband, Narrowband, Protected

Strategic/Tactical and Commercial). Provide all lists to USSPACECOM, with an information copy to JS J-6, according to the organization's priority scheme and PACE communication plans at least annually or when a significant change occurs to CCMD priorities.

(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 USSPACECOM for apportionments.

(c) Develop exercise communications scenarios that support their OPLANs.

(3) Provide operational control of allocated DoD SATCOM resources IAW Appendix A to Enclosure D, USSPACECOM publications, guidelines, and orders.

(4) Attempt to resolve DoD SATCOM resource conflicts at the lowest organizational level prior to initiating the USSPACECOM arbitration process. USSPACECOM will forward all unresolved issues to the CJCS for adjudication (reference h).

(5) Coordinate with CSCO on all COMSATCOM contract arrangements and ensures entry into the SDB.

(6) Coordinate with USSPACECOM, Services, DISA, and other agencies to ensure HNAs, frequency clearances, terminal licensing, and landing rights for DoD SATCOM, terminals, and frequency requests employed by the DoD and other government agencies within their area of responsibility (AOR) are obtained, defended, or renewed as required IAW Appendix A to 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 USSPACECOM prior to exchange or entering into any agreement to exchange DoD SATCOM-related resources or infrastructure.

(9) Serve as GBS TIM for their respective CCMD.

(10) In support of USSPACECOM's global DoD SATCOM responsibilities, CCMDs or Heads of Defense Agencies acquiring COMSATCOM

services shall submit a SAR or SAA-like information and transmission plan information to servicing RSSC prior to execution. If unable to comply prior to operational execution, and as operational necessity allows, provide SAA-like information to servicing RSSC within 24 hours following initial execution, but no longer than 1 week following initial execution and when changes occur in the initial information provided. The servicing RSSC will inform USSPACECOM, USSF, and other impacted organizations of acquired COMSATCOM services in their region.

(11) Prepare and submit COMSATCOM usage and expenditure information to CSCO and Commercial C-SSE. CSCO will utilize this data to develop the annual COMSATCOM usage report and for contract enforcement IAW content guidance provided by the DoD CIO. Commercial C-SSE will utilize this data for situational awareness and user optimization.

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

(13) Integrate SATCOM EMS information into CCMD/Joint Task Force (JTF) JEMSO IAW reference m.

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

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

(2) Military Command, Control, Communications, and Computers Executive Board. 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 (NSS), referred to it by the SecDef, CJCS, DoD CIO, and other officials.

(3) Command, Control, and Communications Leadership Board. The C3LB serves as the senior forum to advise the appropriate DoD decision authorities. The purpose of the C3LB is to accelerate and synchronize the fielding of modernized networking solutions across the joint force with the objective of establishing priorities and strategies that enable implementation across the DoD C3 and EMS enterprises while identifying associated risks and

opportunities. The C3LB is to provide effective oversight for: C3 transport (terrestrial, aerial, maritime, and satellite-based); EMS enterprise; commercial mobile devices and cellular technologies; and enterprise C3 services.

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ENCLOSURE C

DoD SATCOM REQUIREMENTS PROCESS

1. Purpose. 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, IP, 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. 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.

4. User Connectivity Requirements. The SDB is a JROC-directed, 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 communication service requirements via the SIPRNET SDB Management Tool (SDB-MT). SOMSAT will replace SDB-MT as a key part of DoD CIO SATCOM Enterprise Management and Control capability. The JSP 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 a specific force structure from an approved defense planning scenario (see Appendix A to this enclosure).

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 two years from the present. “Future requirements” are those requirements with implementation dates beyond two years in the future. The current requirement entries of the SDB 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. All future SDB requirements for Narrowband access should be IAW respective Service transition plan to WCDMA services.

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 CSAs, 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 A to this enclosure. CSAs requesting the allocation of SATCOM resources must refer to the JSP-approved SDB requirements.

c. Future requirements provide a consolidated listing of projected DoD SATCOM requirements based on developing concepts and technological advancements in warfighting systems. The future requirements may be new or may replace current requirements based on attribute changes as previously described. Future requirements are submitted, validated, and approved IAW references a and q.

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

a. Analyze DoD's SATCOM readiness to support the warfighters' mission orders and associated plan requirements. This is accomplished by executing a DoD SATCOM capabilities assessment of the CCMDs' operational requirements. Analysis represents a coordinated and collective assessment of DoD SATCOM resources and their capability to meet current requirements. USSPACECOM is responsible for coordinating this assessment and will report the results annually during the fourth quarter of the fiscal year 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. All managers responsible for current or programmed proposed systems that rely on SATCOM resources for the transmission of information (e.g., weapons or sensor systems) must ensure their requirements are documented in the SDB record. Failure to update the SDB prior to new equipment training or equipment fielding will impact authorized access to MILSATCOM for those systems. In addition, all managers responsible for current or programmed proposed systems that rely on SATCOM

resources for the transmission of information (e.g., weapons or sensor systems) must ensure their requirements are documented in the SDB.

7. SDB. All organizations initiating formal requirements documentation leading to a new DoD space-based capability acquisition must ensure associated connectivity requirements and terminals are certified for MILSATCOM bands prior to completion of the CDD and are documented in the SDB prior to completion of the CDD.

8. National Security SATCOM Systems Synchronization Roadmap. 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.

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APPENDIX A TO ENCLOSURE C

THE 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 user requirements for validation, approval, and inclusion into the SDB.

2. Format. SDB requirements for user connectivity are submitted via the Joint C4I Decision Support Center-managed SDB-MT.

3. 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, FCPs, 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 and CSA 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 access outside of an MOU.

b. U.S. Northern Command and U.S. Indo-Pacific Command are the advocates 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.

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.

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

a. USSPACECOM 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 USSPACECOM 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, TERMINAL PERFORMANCE CERTIFICATION, AND WAIVERS

1. Purpose. Define the apportionment, allocation, arbitration, terminal performance 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 across Narrowband, Wideband, Protected Strategic/Tactical, Commercial, and IPs' resources, 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) IAW reference h, resources planned or projected to be available to a CCMD for contingency and crisis planning in support of the Joint Operations Planning Process to meet OPLAN requirements.

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

b. Allocation

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

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

(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 h).

(4) All requests for allocation of MILSATCOM require a SAR and SAA. For organizations which do not submit a SAR for COMSATCOM, a COMSATCOM Service Request, a Transmission Plan, and a SAR or SAA-like information (see definition in glossary) must be submitted to servicing RSSC prior to execution. If unable to comply prior to operational execution, and as operational necessity allows, provide SAA-like information to servicing RSSC within 24 hours following initial execution, but no longer than 1 week following

initial execution and when changes occur in the initial information provided. The servicing RSSC will inform USSPACECOM, USSF, and other impacted organizations of acquired COMSATCOM services.

(5) When systems provide automated resource allocation capability, USSPACECOM may establish policy utilizing these allocation capabilities for a specific DoD SATCOM category or categories.

(6) Authorized users who are requesting resources for a coalition network are required to assess whether a coalition partner (CP) can provide the resource as part of their nation's contribution to alleviate U.S. DoD resource-constrained frequency bands.

c. Arbitration

(1) The USSPACECOM 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 RSSC has denied or partially denied an allocation request or preempted allocated DoD SATCOM resources.

(2) The arbitration process is the same for all DoD SATCOM categories and is described in reference h.

d. Adjudication

(1) 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. The process is the same for all DoD SATCOM bands.

(2) For conflicts not resolved during arbitration, the USSPACECOM J-3 will notify JS J-3 and J-6 ICW affected commands. CDRUSSPACECOM engages the CJCS in parallel. The JS J-6 Warfighter Communications division will be the lead staff element within JS to coordinate the adjudication to final resolution.

(3) The JS J-3/J-6 adjudication process flow escalates until a resolution is reached or CJCS makes a decision, per figure 1.

(4) The CJCS is the final decision authority.

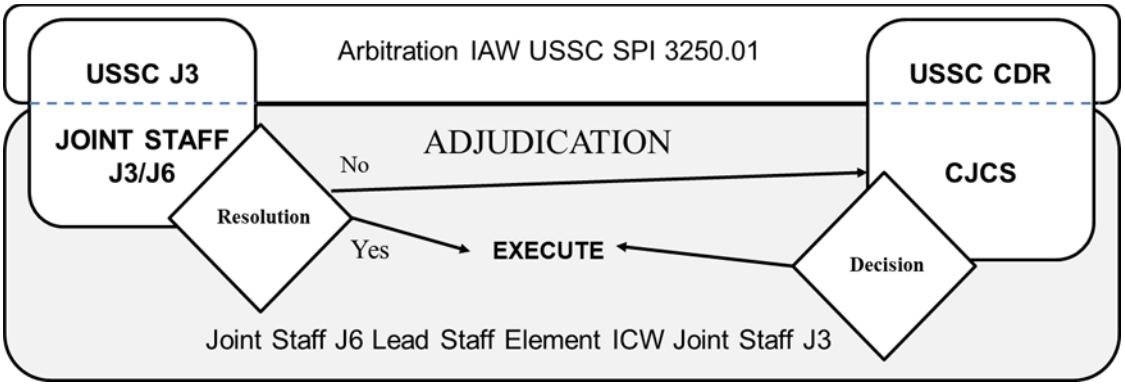

Figure 1: JS SATCOM Adjudication Process

3. Narrowband Allocation Description and Policy

a. Dedicated Channels. USSPACECOM may allocate Narrowband resources as dedicated channels (5/25 kHz), provided the requestor has the appropriate waiver, depending on mission and resource availability; however, assignment to DAMA, IW, and WCDMA accesses are the most efficient use of limited Narrowband resources.

b. Time Division Multiple Access. For all Narrowband systems, channel controls, terminals, and peripherals using TDMA, the channel control information (Orderwire: defined in glossary) is national security-related information of value to an adversary. Narrowband satellite orderwire transmissions shall utilize an approved Type I algorithm to preclude intrusion or exploitation by an adversary. Encryption shall be implemented as defined in references cc through hh.

c. Demand Assigned Multiple Access. USSPACECOM may allocate Narrowband resources as DAMA, provided the requestor has the appropriate waiver; Narrowband DAMA has two waveforms with different communications services and operating schemes, 5 kHz and 25 kHz DAMA, which are defined in references dd and ee.

d. Integrated Waveform. IW provides improved voice quality, link closure, channel configuration flexibility and throughput and more than doubles the number of circuits supporting the existing DAMA legacy constellation. All requests for legacy SATCOM must be for IW services unless a valid IW waiver has been obtained in accordance with Appendix C to this enclosure. Standards for IW are defined in references cc, dd, and ee.

e. Wideband Code Division Multiple Access. Available on MUOS satellites only. WCDMA greatly enhances Narrowband capacity in terms of available networks and accesses. WCDMA capable terminals are provisioned with unique terminal profile(s). These terminal profiles are supportable worldwide. WCDMA standards are defined in reference ii.

4. Wideband Allocation. Resources are centrally planned and managed 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 Tactical Allocation. PATS resources will be centrally planned through the Protected Tactical Enterprise Service to enable shared spectrum via frequency hopping. These resources are requested through the SAR process and will be either provided by PTS or from Wideband, COMSATCOM, or IP providers.

6. Protected Strategic Allocation

a. Strategic resources are partitioned from the satellite set of resources, with all remaining resources allocated to tactical users and managed by the RSSC managers. Further information can be found in reference bb.

b. Protected strategic satellite payloads 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 Strategic 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 Protected Strategic satellite payloads have the ability to define more operational services (precedence) along with the mission priority. This precedence-based access scheme ensures higher precedence users can preempt lower precedence users to gain access to the system. There are four levels of precedence: P0 (highest) through P3 (lowest).

e. Protected Strategic satellite payloads support 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 resources.

7. Commercial Allocation Description and Policy

a. DoD COMSATCOM provides additional SATCOM resources where traditional MILSATCOM may not be available or not available in required capacities, or when innovative COMSATCOM solutions offer performance features and other operational advantages that MILSATCOM cannot provide.

(1) All DoD organizations shall procure COMSATCOM through CSCO in accordance with current law, regulations, and policy. Waiver requests must be submitted to the DoD CIO per paragraph 7.e. of this enclosure. The CSCO will ensure that an integrated COMSATCOM distribution capability is provided in compliance with established acquisition, technical, security, and operational requirements.

(2) For enterprise COMSATCOM bandwidth, all DoD organizations will provide an approved SAR and Commercial SATCOM Service Request to all cells at the appropriate RSSC. Users requesting use of any Joint enterprise COMSATCOM services will compete for limited resources of the centralized pool of COMSATCOM bandwidth based on mission priorities cited in the approved SAR and established IAW Appendix A to this enclosure. All SARs submitted to the RSSCs will have an approved associated SDB requirement or a USSPACECOM-approved waiver.

b. All COMSATCOM users record COMSATCOM services (Wideband and Narrowband) in the SDB and categorize fixed satellite services as Layer 1, Layer 2, or Layer 3. This layering process supports requirements planning and provides a means to leverage all COMSATCOM requirements to obtain the best contract cost 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. USSF will maintain a database of all COMSATCOM services and capabilities (contracted with commercial providers or furnished by IPs) through manual and automated means to support continuous COMSATCOM SA/ Common Operating Picture (COP) for DoD, CSAs, and USSPACECOM. COMSATCOM SA/COP data is secured at the appropriate classification level and accessed on a need-to-know basis IAW the user's mission, roles, and responsibilities. For instance, USSPACECOM, the JS, and CSAs must have knowledge of those COMSATCOM resources in each CCMD with geographic AORs, regardless of type of service. To assist in this effort, Services will notify the supported CCDR of any COMSATCOM terminal or services that will be used in the CCDR's AOR and assist CCMD staff, USSF, and DISA in obtaining HNA/landing rights, frequency clearance, and terminal licensing as required.

d. The USSF shall ensure each COMSATCOM contract includes specific COMSATCOM floors, and other requirements as appropriate for operational needs of the organization initiating the contracting action and USSPACECOM. The COMSATCOM floors are described with selectable attributes below:

(1) Responsiveness - Floor. Rapid acquisition of COMSATCOM services and capabilities to meet operational timelines. Service available in equal to or less than 30 days from award (does not necessarily include HN agreement, long-lead terrestrial connectivity, frequency clearance, terminal licensing, and, if needed, landing rights). Selectable: time-critical requirements—4 hours to 7 days.

(2) Portability - Floor. Global portability. Ability to port contracted services and capabilities from one geographical location to another geographical location within a service provider's network, subject to availability and negotiation. Selectable: specific terms negotiated up front.

(3) Flexibility/Optimization – Floor. Continuous collaboration between DoD and COMSATCOM service providers to facilitate maximum operational flexibility and to allow re-grooming/optimization of 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 within a service provider's network.

(5) Coverage - Floor. Access to commercial services and capabilities, in all internationally approved commercial EMS allocations (L-, S-, C-, Ku-, Ka-,

UHF-, and X-band) and operationally effective orbital segments. Selectable: user-defined coverage, negotiated up front.

(6) Network Operations - Floor. Continuous manual and automated COMSATCOM SA/COP and 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. Compliance with operational and cybersecurity law, policies and best practices to include; operations clearance, operations security clearances, telemetry, tracking and control encryption on command link, and EMI/radio frequency interference geolocation. Selectable: user-defined reporting negotiated up front.

(8) Net Ready (Interoperability) - Floor. Compliance with industry standards and commercial best practices for interoperability across DoD teleports, gateways, and cross-domain enterprise services. Selectable: access to/interoperability with DoD teleport/gateways and cross-domain enterprise services.

(9) Transferability – Floor. Provides DoD SATCOM managers the DoD mission, regardless of original DoD purchaser. Selectable: user identifies SATCOM Enterprise manager with ability to request transmission plans and authorize access to additional users.

e. Waiver Process (Procurement). In accordance with existing statutes, regulations, and policies, DoD Components procure COMSATCOM services through the CSCO. This is consistent with DoD policy as provided in reference f and intended to ensure that all acquisition, security, and technical requirements for COMSATCOM resources are being met.

(1) Procurement of COMSATCOM services through an organization other than the CSCO requires an approved waiver.

(2) Given that COMSATCOM procurement authorities are rooted both in statute and DoD policy, waiver requests face high threshold for approval (i.e., projected cost savings is insufficient justification).

(3) DoD Components are reminded that requesting a COMSATCOM services procurement waiver is essentially a request to waive both existing law and DoD policy. There is a correspondingly high threshold for approval (i.e., projected cost savings is insufficient justification).

(4) Waiver requests must be submitted to the DoD CIO. A waiver request must include a description of the required COMSATCOM services, SDB number, detailed justification for procuring the services outside of the CSCO, and proposed alternative. DoD CIO or his delegates will review waiver requests ICW the CSCO and approve or disapprove.

f. Waiver Process (State-of-Concern)

(1) Consistent with national security requirements, a dual DoD CIO and Under Secretary of Defense for Policy (USD(P)) waiver is required prior to leasing or procurement of COMSATCOM services associated with states subject to comprehensive economic sanctions or selective sanctions linked to space-related technology (hereinafter, "state-of-concern"). Waivers are required for all COMSATCOM services over satellites owned or operated by states-of-concern, or their nationals, as well as for any COMSATCOM services provided by entities owned or operated by states-of-concern or their nationals. See glossary for additional information on states 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:

(a) USSF will notify JS J-6 when any COMSATCOM service provider owned or operated by a state-of concern or its nationals has been selected for award of a DoD COMSATCOM contract. USSF will provide a detailed justification for the selection, potential alternatives, and Informed Consent Memorandum from the affected CSA with minimum of O-6 endorsement.

(b) JS J-6, in conjunction with USSPACECOM and the affected CSA, will validate the operational risk assessment of the proposed contract and document the results to include a recommendation for approval or denial of the waiver.

(c) JS J-6 will forward their recommendation and USSF-provided documentation to DoD CIO and USD(P) for decision.

(d) JS J-6 will notify USSF of decision.

(e) USSF will award contract or seek alternate solution/vendor, as appropriate.

(f) USD(P) will make congressional notifications, as required.

8. Performance Certification and Waivers

a. USSPACECOM is responsible for performance certification compliance prior to use over MILSATCOM satellites. Terminal and modem certification ensures that use of the terminal will not interfere with any other user and complies with international agreements concerning SATCOM operations. Performance certification steps include MIL-STD conformance, NSA certification, interoperability (if required), and cyber security Authorization to Operate (ATO) or Authority to Connect (ATC). Service terminal and/or modem sponsors must achieve all required certifications prior to requesting "operating capability" from USSPACECOM.

b. The performance certification process for Narrowband, Wideband, and Protected Tactical terminals and modems takes into account cases where terminals and modems do not meet all MIL-STD conformance and operational performance requirements. In these cases, Services or the sponsoring agency must provide details such as operational endorsements, approved operational TTPs, and program plans to fix the deficiencies, as well as anticipated system or mission degradation for the proper assessment by USSPACECOM and the certifying authority (see Appendix B to this enclosure). Protected Strategic terminals are certified IAW Systems Guidance and cannot be waived.

c. DoD use of COMSATCOM terminals and modems must be in compliance with COMSATCOM communications terminal licensing policies and satellite provider's performance standards and cannot be waived.

d. Terminal Performance Certification. For MIL-STD conformance testing, JITC tests Narrowband legacy MIL-STDs, Naval Information Warfare Center – Pacific tests MUOS MIL-STDs, and the Independent Test and Certification Branch, SATCOM Division, U.S. Army Combat Capabilities Development Command, C4/Cyber ISR Center tests Wideband MIL-STDs. All three offices shall provide MIL-STD conformance test results to USSPACECOM for adjudication to determine criticality. For any MIL-STD non-compliance, waiver requests—following the waiver process in Appendix B to this enclosure—must be submitted to USSPACECOM/J-36 for evaluation and conducting operational assessments, with assistance as necessary from the CCMDs, DAMA/IW controller developers, and DISA. Finally, USSPACECOM/J-36 will issue terminal certifications (full certification based on full conformance, conditional certification based on operational assessments of any non-conformance)/deny certifications. JS J-6 will provide adjudication for any disagreements in the waiver process.

e. SATCOM systems that have joint, multinational, or interagency interoperability requirements will be certified by JITC approved testing for Joint Interoperability. Waiver request to the JITC certification process will be staffed IAW JITC's IPG.

f. Terminal and modem vendors, in coordination with their Service sponsors, should engage as early as possible (including prior to testing) with the CA to identify and resolve certification risks early in the process prior to certification.

g. Narrowband IW Waivers. The increased demand for training and operational requirements, coupled with the decreasing availability of UHF channels on-orbit, has prompted DoD leadership to initially mandate incorporation of DAMA capability. However, the mandate is now to use IW capabilities on legacy Narrowband resources. To improve SA, users requiring UHF MILSATCOM access who are unable to comply with the requirement are required to provide a waiver request (see Appendix C to this enclosure) identifying limiting factors to the JS J-6 via the appropriate Service, with a copy to the supported CCMD and USSPACECOM.

9. Basis for Foreign Nation Access. Foreign nations may be granted access to DoD MILSATCOM resources based on participation in DoD operations, international agreement, or 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). The SDB validation for DoD operations should be conducted at the lowest level based on the level of agreement covering the joint operation.

Basis for Foreign Nation Access	Type	SDB Requirement/Waiver	
		Applicable?	Validation
Participation in DoD Operations	Formal or ad-hoc agreement covering joint operations	Yes	JS
		Yes	CCMD
		Yes	Service
		Yes	DoD Agency
International Agreement	Equivalent value exchange (EVE) MOU	No	N/A
	Non-EVE MOU		
Other Formal Arrangement	FMS agreement	Yes	DoD CIO
	Contract		
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

a. Category Descriptions

(1) Participation in DoD Operations. A foreign nation may be granted access to DoD SATCOM resources for participation in DoD operations. The supported DoD component is responsible for submitting the SDB requirement, or SDB waiver request, and citing appropriate justification documentation.

(2) International Agreement. For purposes of SATCOM agreements, there are generally two categories of international agreement to affect the sharing of SATCOM resources: equivalent value exchange (EVE) MOUs 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.

(a) 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).

(b) Non-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."

b. Other Formal Arrangement. The category of "other formal arrangement" encompasses documented agreements between the United States 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, contract, or other instrument; DoD CIO is the designated validation authority for SDB requirements (or SDB waiver requests, if applicable).

c. 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").

10. Training Standards and Requirements. A qualified SATCOM terminal operator is required for initial satellite access, de-access, and troubleshooting. Training can be accomplished via formal Service provided training or commercial entity for commercial satellite access. Qualifications must include the following, as a minimum:

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

b. 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.

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

11. Prioritization and Precedence

a. Priorities and precedence levels 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 and precedence schemes. USSPACECOM may establish policy to allow these systems to automatically reduce or preempt lower priority users during periods of resource congestion.

c. USSPACECOM and JS J-6 use the priorities and precedence levels listed in Appendix A to this enclosure for all DoD SATCOM apportionment, allocation, arbitration, and adjudication decisions and assist in restoral from anomalous events but do not guarantee access.

d. USSPACECOM will provide DoD SATCOM resources based on priority definitions. CSAs and IPs will maintain a 1-N list to assist in recovery from anomalous events. IPs' 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. USSPACECOM 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. The JS may approve additional system allocation discriminators (such as a combat designator and CCMD rankings, PACE plan, and JSCP, DPG) to establish priority plans and other operational necessities, based upon system and/or resource limitations and as USSPACECOM requests.

f. CSA and IPs or programs that bring additional capacity to the global DoD SATCOM enterprise may be assured like capacity (like capacity may be identified but not limited to bandwidth MHz and coverage areas) across the global enterprise. This balances integration of what are currently fragmented procurements and the need for commands and programs to plan and program for mission success. USSPACECOM ICW JS J-6 and CSAs will establish the integration processes to achieve a balanced integration of SATCOM resources.

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APPENDIX A TO ENCLOSURE D

DoD SATCOM PRIORITY AND PRECEDENCE

1. The JS J-6 defined the priorities used to determine access to on-orbit satellite systems and restoral in response to an optimization effort or anomaly event. The SDB number, together with the appropriate priority, are used to request access, but do not guarantee access. Component representatives requesting SATCOM services must ensure that every request reflects the correct priority level 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 JTF or Combined Task Force (CTF). The same rules apply for priorities 2B and above. All DoD-procured COMSATCOM resources, including Service programs of record, are DoD resources and will be assigned a CJCS priority and follow the same or suitable substitute processes as MILSATCOM requests for access. Any substitute process must be approved by JS J-6. During peacetime, the CSA that procured commercial bandwidth for their dedicated use will have priority for using that procured bandwidth for their programs. However, in times of crisis, USSPACECOM can coordinate with the CSA that procured COMSATCOM assets and, with the concurrence of that CSA, reprioritize that COMSATCOM bandwidth temporarily in support of critical operational missions until such time as additional COMSATCOM is available to support that mission. USSPACECOM and JS will address the procuring remuneration during the Program/Budget Review (PBR) process.

2. The priority selected for submission of future requirements by a CSA may not be justified by the references submitted. For instance, a Service with a current 2D requirement, based on a current OPLAN/OPORD, may not use that OPLAN/OPORD to support a future SDB submission. When the future SDB is transferred or a template is developed by a Service for a CCMD, the reference portion of the SDB template 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, Mission Need Statement, or architecture supporting that network as the reference.

3. An approved request, coupled with a priority level does not guarantee assured access to SATCOM resources. The JS has the authority to divert SATCOM resources and deviate from the below priority scheme (as appropriate) and apply prioritization (such as PACE plans, JSCP, and DPG) to an established priority plan and other operational necessities, based upon system and/or resource limitations. As part of the access submission process, CSA

are strongly encouraged to develop PACE plans in support of mission requirements to provide predictability and redundancy for communications in congested or contested environments.

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, FCP)

2A CJCS Support
Relates exclusively to the support provided to the CJCS and the Vice Chairman of the Joint Chiefs of Staff (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, FCP)

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

3B CCMD 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, operations in support of homeland security/defense, or live fire events for missile defense development.

4D Major Command: Service
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-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 the Authorized Organization approves

7D Other

PRECEDENCE

1. Flash – Reserved for combat operations.

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

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

4. Routine – All modes of operations/training not listed above.

5. Flash Override – Not a precedence level but rather, an authority and means to override all other traffic. Reserved for the President or SecDef.

APPENDIX B TO ENCLOSURE D

PERFORMANCE CERTIFICATION AND APPEALS PROCESS

1. Purpose. This appendix describes the performance certification process for DoD SATCOM terminals and modems. The legacy Narrowband SATCOM IW waiver process is included in Appendix C to this enclosure.

2. Conformance Testing

a. CSA IPs sponsoring SATCOM terminals and modems for certification shall test the equipment to ensure compliance with the required MIL-STDs, IAW system standards conformance test procedures. Conformance testing by itself **does not** indicate a terminal or modem is certified or authorized for operational use. Any hardware or software changes to equipment that has been previously tested and certified by a CA must be retested and recertified by the CA to ensure it continues to meet the requisite system and operational compliance.

b. 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 and modem PMs and industry participation.

c. Conformance test disputes will be resolved by CA via the SATCOM TWG and the SISC.

3. Terminal and/or Modem Performance Certification

a. Terminal and modem performance certification takes into consideration Conformance, Operational Performance, and Interoperability.

b. C-SSEs serve as the CA for Terminal and modem Performance Certifications as delegated by USSPACECOM.

c. CSA IPs sponsoring SATCOM terminals and modems for certification request Performance Certification from the applicable CA. The request process and evidence requirements vary from band to band, and are established by the CA.

d. When a Performance Certification request includes conformance or operational performance deficiencies, CAs assess operating conditions, anticipated system or mission degradation, proposed TTPs to limit impact, and other factors. CAs may, but are not obligated to, issue certifications when operational risk is determined to be acceptable. CAs should not issue certification if the short- or long-term operational risk of these deficiencies is unacceptable.

4. Terminal and/or Modem Performance Certification Appeals

a. If the PM of CSA/IP sponsoring a SATCOM terminal or modem for certification disagrees with the CA's certification determination, the sponsoring Service or Agency may submit an appeal request to JS J-6, copying the CA. Appeal requests are valid only for the specific hardware configuration and software version of the terminal or modem presented for certification.

b. Services and Agencies have primary responsibility for submitting and maintaining appeal status to support present or future systems and networks not technically compliant with defense standardization, policies, and procedures in reference q. CCMDs have responsibility for those systems that a Service or Agency has not fielded, but are mission specific for their AOR. IPs have responsibility for those systems that will use DoD SATCOM resources. The appeal request should be submitted at least 60 days in advance of mission need.

APPENDIX C TO ENCLOSURE D

LEGACY NARROWBAND SATCOM IW WAIVER PROCESS

1. Purpose. This appendix defines the waiver process supporting CJCS guidance (reference y) for maximizing the usage of IW networks for legacy UHF SATCOM. JS waivers must be obtained for the continued usage of legacy non-IW networks.

2. Waivers. Two types of waivers have been developed to support the CJCS guidance for maximizing usage of IW networks for legacy UHF SATCOM.

a. IW Terminal Waivers. Services and U.S. Special Operations Command submit IW terminal waivers for their respective legacy Narrowband terminals not capable of IW interoperability. IW terminal waiver requests must provide Plans of Action and Milestones, and associated funding information, documenting plan for IW interoperability or migration to WCDMA capability.

b. IW Operational Waivers. IW Operational waivers are required when all U.S. terminals are IW capable, but a dedicated or DAMA network is requested. Examples of this case include insufficient training for all participants; participation in a coalition network; RDT&E testing; or other interoperability issues. In addition, IW operational waivers are used to permit access during IW terminal waiver processing.

(1) IW operational waivers do not guarantee satellite access. SAAs are processed based upon resource availability, priority, and allocation policy.

(2) The compilation or aggregation of information may change the classification of operational waivers, which must be handled IAW DoD classification standards.

(3) Roles and Responsibilities. Table 2 lists reasons a waiver may be required. It also identifies approval authority and which organizations are responsible for submitting waivers.

Waiver Type	Reason	Submitter	Approval Authority
Operational	Insufficient IW Training	Services and Service Components as appropriate	CSA Validator
Operational	RDT&E Network	SAR Originator	CSA Validator
Operational	Coalition Interoperability	CCMD or Service Component	JS J6
Operational	To allow access during terminal waiver processing	CCMD	JS J6
Operational	Incompatibility Issues	CCMD	JS J6

Table 2: Waiver Requirement Reasoning

(a) The JS has final decision authority for all waiver request conflicts.

(b) USSPACECOM will evaluate waiver requests as JS tasks and provide technical recommendations.

(c) CCMDs will approve waivers requested due to training or RDT&E.

(d) Services will request operational waivers when users lack adequate IW training.

(e) Service components will coordinate with their parent Service to ensure that training plans for IW training deficiencies are in place.

(f) Training plans and schedules must be included in the operational waivers.

(g) CCMDs or Service components will also submit waivers for CP's with which they conduct U.S.-led operations when CP terminals are IW incapable and/or there are training deficiencies that preclude the use of IW.

(h) IPs will route waiver requests through the sponsoring CCMD or Service component as appropriate.

(4) Waiver Request Processing

(a) Using the template (Appendix D to this enclosure), submit waiver requests requiring JS approval to JS C4/Cyber Directorate/C4 Transport Division: <js.pentagon.j6.list.dd-c4-cyber-c4td-satcom-team@mail.smil.mil>; 703-695-9875.

(b) Approved operational waivers will be posted on the U.S. Army Space and Missile Defense Command operational waiver registry: <https://intelshare.intelink.sgov.gov/sites/space/JFCC%20SPACE/SATCOM/NB/SitePages/Home.aspx>.

(5) Operational Waiver Processing Times

(a) Routine. Thirty days from a completed waiver request; if associated terminal waivers are not approved, processing times may be extended. In order to consider processing the waiver request under 30 days, requests for expedited processing of routine waivers must be endorsed at the O-6 level and the waiver request will be considered on a case-by-case basis.

(b) CCMD-validated Crisis or Contingency. Waiver requests submitted in support of CCMD-validated crisis or contingency will be expedited.

1. Consider CSA processing times for SARs when requesting waivers. SARs will not be validated until required waivers are submitted and approved. SARs supporting operational mission requirements without an approved JS waiver will be considered on a case-by-case basis.

2. Operational waiver requests will be assessed on a case-by-case basis. The JS may approve recurring requests. Approval periods longer than 6 months will require a compelling rationale.

3. All approved operational waivers must be referenced in all SARs in TDMA Status Section field(s).

4. Operational waivers are subject to cancellation once the waived mission obtains capability to utilize IW resources.

5. 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).

APPENDIX D TO ENCLOSURE D

OPERATIONAL WAIVER TEMPLATE

MEMORANDUM FOR <DIRECTOR FOR COMMAND, CONTROL, COMMUNICATIONS AND COMPUTER SYSTEMS, JOINT STAFF OR COMBATANT COMMAND/SERVICE/AGENCY VALIDATOR (See Table 2)>

FROM: <SAR SUBMITTER (OR USER CCMD, PROGRAM OFFICE) OFFICE CODE>

SUBJECT: <Legacy Ultra-High Frequency – Integrated Waveform Operational Waiver>

[Provide the following information (Use "N/A" if not applicable)]

1. Point of contact information

2. Name/Type of network. Identify the communications topology of the user network/system and type of communications requirement.

3. Functions of the network (voice or data). If used for data, identify data rate requirements.

4. SDB number or USSPACECOM SDB waiver.

5. Waiver duration. Provide explanation if recurring.

6. CJCSI 6250.01 Appendix A to this enclosure Mission Priority.

7. Rationale for non-IW usage (e.g., Coalition Network Participation, Insufficient Training, Incompatibility Issues, Other).

Provide supporting documentation such as Training Plans, Coalition Network Interoperability (MOU/MOA/OPLANs/OPORDs) or description of interoperability issues or "Other" description. Provide migration path to IW or to resolve issues.

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ENCLOSURE E

DOD 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.

2. MC4EB. IAW reference i, the MC4EB serves as the principal military advisory forum for assessing the IT aspects of C4 matters. Additionally, it informs the JCIDS, Planning Programming Budgeting and Execution, and DAS processes through military advice, assessments, and recommendations regarding the implementation of IT solutions to capability needs. The JS J-6 chairs the MC4EB.

3. 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. USSPACECOM will provide the JS J-6 an annual health assessment of each constellation based on system performance parameters.

b. Operational Assessment. USSPACECOM will provide an operational assessment of DoD SATCOM for each CCMD. This evaluation will indicate current DoD SATCOM resource ability to meet major OPLANs. 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, USSPACECOM will provide recommendations on required actions to support CCMD requirements if the major OPLAN is initiated. The operational assessments will incorporate USSPACECOM readiness assessments required by reference v and reference z.

c. Replenishment Assessment. To allow the DoD SATCOM community to provide better recommendations concerning a constellation replenishment strategy, USSPACECOM will develop and provide an operational constellation

replenishment strategy and risk mitigation plan, to the MC4EB and C3LB annually during the fourth quarter. DISA and USSPACECOM 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 SATCOM Systems Synchronization Roadmap. 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; PBR issue papers; DoD SATCOM roadmaps; and additional activities, as required.

(2) JS, ICW the DoD CIO, tasks the Services and Agencies to provide NS4R updates for current and future DoD SATCOM programs of record. DoD SATCOM terminal segment acquisition and fielding information stored in the NS4R will be updated on a regular basis. A comprehensive update will be conducted annually, immediately following release of the PBR. Additional updates are conducted on a "by-exception" basis following release of Services' POMs to the SecDef, or as required to support other events.

e. DoDI 4650.01. Per reference l, components will comply with U.S. and HN 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.

APPENDIX A TO ENCLOSURE E

HOST NATION CERTIFICATION AND AUTHORIZATION TO OPERATE

1. Applicability. Access to the 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, DoD policy is to obtain permission to operate within a 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 ATO in the EMS involves different documents and organizations. This appendix clarifies certain roles and responsibilities concerning spectrum access for operation of S-D MILSATCOM equipment in the United States and its possessions (US&P) and outside US&P (OUS&P), but it is not all-inclusive and does not replace existing guidance and directives.

2. General Guidelines. The issuance of a SAA does not constitute an authority to operate S-D MILSATCOM equipment. Per DoD guidance, DoD Components shall ensure that S-D systems supporting SATCOM services are registered, certified, and spectrum-supported in the country of interest. Also, radio frequency (RF) allocated for MILSATCOM via the SAAs and transmission plans for COMSATCOM shall be de-conflicted by the spectrum community to ensure the RF is free of conflict. If required, the spectrum community will assist in obtaining HNA for MILSATCOM RF and/or COMSATCOM RF. Furthermore, DoD is not authorized to pay for spectrum unless it is commercially provided by the HN as part of a contract for SATCOM services.

3. Roles and Responsibilities

a. PM for Space and Ground S-D Systems

(1) Coordinates with engineers and generates "Application for Equipment Frequency Allocation," also known as DD 1494, for submission to the supporting Service Frequency Management Office (FMO). The Service FMOs coordinate with the MC4EB at each required stage of certification of spectrum support.

(2) Advises Service FMOs to generate Host Nation Coordination Requests (HNCR) for those S-D systems potentially deploying OUS&P. Service FMOs submits HNCRs via MC4EB to CCMDs.

(3) Prior to acquisition milestones DoD Components' S-D system developers shall provide their Spectrum Supportability Risk Assessment (SSRA) to their CIOs or another office their Component head designates. In addition, they shall update their SSRAs prior to requesting ATO (for other than testing) in the US&P or in HNs.

(4) Verifies spectrum supportability in the country of interest prior to deploying S-D SATCOM equipment OUS&P. Coordinates with the supported Component to obtain status updates from the appropriate CCMD(s).

b. Military Command, Control, Communications, and Computers Executive Board

(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) Generates HNCR to initiate coordination with the applicable CCMD Joint Frequency Management Office to obtain spectrum-supportability in the country of interest where S-D SATCOM equipment may be deployed. Submits HNCRs via Host Nation Spectrum Worldwide Database Online (HNSWDO).

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

c. Deputy Director for C4/Cyber, Joint Staff J-6

(1) IAW reference q, performs Information Technology and NSS 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 reference q.

(b) Provides an NR-KPP Certification to the DoD CIO for ACAT I programs and programs designated as OSD Special Interest IAW reference q, 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

(1) SATCOM managers may obtain assistance from their Joint FMO to coordinate HNA for MILSATCOM resources and coordinate with the USSF/ CSCO to obtain HNA for COMSATCOM.

(2) Upon receipt of HNCR from MC4EB, provides spectrum supportability comments using established procedures in the country of interest.

(3) Ensures spectrum supportability comment is obtained and posted via HNSWDO and coordinates with the Service FMO if HNCR is not available.

e. Components under Combatant Commands

(1) Upon receipt of an SAA or transmission plan, coordinate RF allocation with the Component FMO to deconflict allocated RF.

(2) Component FMO will use SAA or transmission plan to generate a Standard Frequency Action Format (SFAF) via Spectrum XXI software to deconflict the allocated RF.

(3) Components must advise SATCOM managers and users of any potential conflicts as a result of the deconfliction process.

(4) The SFAF shall be elevated to the CCMD Joint FMO for awareness and/or assistance in obtaining HNA.

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ENCLOSURE F

REFERENCES

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

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c. CJCSI 6811.01 Series, "Nuclear Command, Control System Technical Performance Criteria"

d. Committee on National Security Systems Policy CNSSP No., "Cybersecurity Policy for Space Systems Used to Support National Security Missions," 12 February 2018

e. DoDI 8500.01, "Cybersecurity," CH 1 - 7 October 2019

f. DoDI 8420.02, "DoD Satellite Communications," 25 November 2020

g. DoDD 5144.02, "DoD Chief Information Officer (DoD CIO)," CH 1 - 1 September 2017

h. USSPACECOM Space Instruction (SPI) 3250.01, "Satellite Communications (SATCOM)," 18 May 2020

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

j. Charter for Department of Defense (DoD) Command, Control, and Communications Leadership Board (C3LB), Version 1.0, 25 March 2021

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

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

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o. Joint Publication (JP) 5-0, "Joint Planning," 1 December 2020

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q. JCIDS Manual, "Manual for the Operation of the Joint Capabilities Integration and Development System", 30 October 2021, <https://intellipedia.intelink.gov/wiki/Joint_Capabilities_Integration_and_Development_System> (SIPRNET – accessed 4 August 2021)

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x. National Security Strategy, December 2017

y. CJCS memo CM-0182-17, "Legacy Ultra High Frequency Military Satellite Communications Transition to Integrated Waveform Requirement," 31 July 2017

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

aa. DoDI 8523.01 "Communications Security," 6 January 2021

bb. CJCSM 6254.01 Series, "Milstar-Advanced Extremely High Frequency (AEHF) Network Operating Procedures"

cc. MIL-STD 188-181, "Interoperability Standard for Access to 5-kHz and 25-kHz UHF Satellite Communications Channels," 20 March 2020

dd. MIL-STD 188-182, "Interoperability Standard for UHF SATCOM DAMA Orderwire Messages and Protocols," 7 May 2014

ee. MIL-STD 188-183, "Interoperability Standard for Multiple-Access 5-kHz and 25-kHz UHF Satellite Communications Channels," 7 May 2014

ff. MIL-STD 188-184, "Interoperability Standard for the Data Control Waveform," 17 June 2015

gg. MIL-STD 188-185, "Interoperability Standard for UHF MILSATCOM DAMA Control System," 7 May 2014

hh. MIL-STD 188-186, "Interoperability Standard for UHF SATCOM Short-Delay Report-Broadcast Service," 20 June 2019

ii. MIL-STD 188-187, "Interoperability Standard for Mobile User Objective System (MUOS) Terminals," 12 February 2021

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, "Space Systems Acquisition Policy (SSAP)," 9 December 2011

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

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

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11. DoDD 5137.02, "Under Secretary of Defense for Research and Engineering (USD(R&E))," 15 July 2020

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13. DoDI 8510.01, "Risk Management Framework (RMF) for DoD Information Technology (IT)," CH 3 – 29 December 2020

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

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24. Committee on NSS, CNSS Instruction No. 4009, "Committee on National Security System (CNSS) Glossary," 6 April 2015

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26. DoDD S-3710.01, “National Leadership Command Capability (NLCC),” 27 May 2015

27. Commercial Satellite Communications Centralized Operational Management Joint Concept of Operations, 23 December 2015

29. CJCS Notice 6250, “Interim Guidance to Chairman of the Joint Chiefs of Staff Instruction 6250.01 Series, Department Of Defense Satellite Communications,” 9 August 2019

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GLOSSARY

PART I – ABBREVIATIONS AND ACRONYMS

AEHF	advanced extremely high frequency
ACAT	acquisition category
AJ	anti-jam
AOR	area of responsibility
APEX	adaptive planning and execution
ATC	Authority to connect
ATO	authorization to operate
BLOS	beyond line of sight
C-SSE	Consolidated SATCOM System Expert
C2	command and control
C3	Command, Control, and Communications
C3LB	Command, Control, and Communications Leadership Board
C4	command, control, communications, and computers
C4I	command, control, communications, computers, and intelligence
CA	Certification Authority
CSA	combatant commands, Services, Agencies
CCMD	combatant command
CCDR	combatant commander
CDD	Capability Development Document
CDRUSCYBERCOM	Commander, U.S. Cyber Command
CDRUSSPACECOM	Commander, U.S. Space 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
CNSS	Committee on National Security Systems
COMSATCOM	commercial satellite communications
CONOPS	concept of operations
CONPLAN	concept plan
CP	Coalition Partner
CPD	Capability Production Document
CTF	Combined Task Force
CSCO	Commercial SATCOM Office

DAMA	Demand Assigned Multiple Access
DAS	Defense Acquisition System
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
DPG	Defense Planning Guidance
DSCA	Defense Support of Civil Authorities
EHF	extremely high frequency
EMI	electromagnetic interference
EMS	electromagnetic spectrum
ESG PWG	Equipment Spectrum Guidance Permanent Working Group
ESS	Evolved Strategic SATCOM
EVE	equivalent value exchange
FCB	Functional Capability Board
FCP	Functional Campaign Plan
FMS	foreign military sales
FMO	Frequency Management Office
GBS	Global Broadcast Service
HN	Host Nation
HNA	Host Nation Approval
HNCR	Host Nation Coordination Request
HNSWDO	Host Nation Spectrum Worldwide Database Online
I&S	Interoperability and Supportability
IAW	in accordance with
ICD	Initial Capabilities Document
ICW	in coordination with
IPG	Interoperability Process Guide
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
JCIDS	Joint Capabilities Integration and Development System
JEMSO	Joint Electromagnetic Spectrum Operations
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
LPD	Low Probability of Detection
LPE	Low Probability of Exploitation
LPI	Low Probability of Interception
MC4EB	Military Command, Control, Communications, and Computers Executive Board
MILSATCOM	military satellite communications
MIL-STD	military standard
MOU	memorandum of understanding
MUOS	Mobile User Objective System
NIPRNET	non-classified internet protocol router network
NR-KPP	Net Ready-Key Performance Parameter
NS4R	National Security SATCOM Systems Synchronization Roadmap
NSS	National Security Systems
NTIA	National Telecommunications and Information Administration
OPLAN	operation plan
OPORD	operation order
OSD	Office of the Secretary of Defense
OUS&P	Outside United States and its possessions
PACE	Primary Alternate Contingency Emergency
PATS	Protected Anti-Jam (AJ) Tactical SATCOM
PBR	Program/Budget Review process
POM	Program Objective Memorandum

PM	Program Manager
PMR	PATS Mission Request
RDT&E	research, development, test, and evaluation
RSSC	Regional SATCOM Support Center
SA	situational awareness
SAA	satellite access authorization
SAR	satellite access request
SATCOM	satellite communications
S-D	spectrum-dependent
SDB	SATCOM Database
SDB-MT	SATCOM Database management tool
SecDef	Secretary of Defense
SFAF	Standard Frequency Action Format (SFAF)
SIPRNET	SECRET Internet Protocol Router Network
SISC	Satellite Interoperability and Standards Committee
SOMSAT	SATCOM Ordering, Management and Situational Awareness Tools
SSE	SATCOM System Expert
SSEG	SATCOM System Engineering Group
SSRA	Spectrum Supportability Risk Assessment
TDMA	Time Division Multiple Access
TIM	Theater Information Manager
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
US&P	United States and its possessions (US&P)
USCYBERCOM	U.S. Cyber Command
USSF	United States Space Force
USSPACECOM	U.S. Space Command
USSTRATCOM	U.S. Strategic Command
VCJCS	Vice Chairman of the Joint Chiefs of Staff
WCDMA	Wideband Code Division Multiple Access

WHCA	White House Communications Agency
WGS	Wideband Global SATCOM

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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" unless indicated by the parenthetic phrase "(Approved for incorporation into the DOD Dictionary of Military and Associated Terms)" after the definition. In some cases, DOD Dictionary of Military and Associated Terms may have a general, DOD-wide definition for a term used here with a specialized definition for this instruction.

1-N list - Is a list of all currently allocated resources in CC/S/A/IP ranked order of desired restoration to assist in recovery from anomalous events. The CCMD preference for mission restoral may differ from the resources assigned CJCSI priority.

Access - The right to enter a DOD SATCOM network and make use of communications payload resources.

Access authorization - The formal message sent to assign specific SATCOM resources to authorized users for a specified time with an authorized access window and de-access date and time. An access authorization message includes technical parameters and other information necessary to establish and maintain good order for resource usage.

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 USSPACECOM arbitration process. Adjudication can only be initiated if USSPACECOM 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 USSPACECOM, 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.

Civil SATCOM - Civil SATCOM addresses State, Local and Federal as a partnership/co-stakeholders SATCOM arrangement under GSA/FSCA/Pathfinder when applicable (e.g., Alaska or Homeland Security Defense and DOD procurement of a resource (transponders, Global Enterprise Partners, telecommunications equipment)) for co-use communications.

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 5-0)

commercial monitoring list - A list of COMSATCOM allocated resources ranked by CFSCC (SIOD SATCOM EMI Watch Office (SEWO)), to be monitored for adversarial activity and updated anytime there is a new service procured or coordinated.

commercial satellite communications - SATCOM resources provided by commercial entities and operating at frequencies available to those commercial entities.

communications on the move - A mobile (air, land, or sea) SATCOM terminal that is able to establish communications with a satellite and maintain communications while the terminal is in motion (on foot, in a vehicle, in an airplane, or on a ship).

configuration management - The administration by a cognizant PM 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-SSEs are designated by CDRUSSPACECOM via mission orders for Narrowband, Wideband, Protected Strategic/Tactical, Commercial, and DOD Gateways to provide an integrated DOD SATCOM management framework supporting Combined Force Space Component Command and USSPACECOM. 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 ICW 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. (NSPD -54/HSPD-23)

cyberspace - A global domain within the information environment consisting of the interdependent network of information technology infrastructures and resident data, including the Internet, telecommunications networks, computer systems, and embedded processors and controllers. (JP 3-12)
cyberspace defense - Actions taken within protected cyberspace to defeat specific threats that have breached or are threatening to breach cyberspace security measures and include actions to detect, characterize, counter, and mitigate threats, including malware or the unauthorized activities of users, and to restore the system to a secure configuration.

Defense Information Systems Network - A composite of DOD-owned and -contracted 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 CCMDs 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. Also called DISN.

defense support of civil authorities - Support provided by US Federal military forces, Department of Defense civilians, Department of Defense contract personnel, Department of Defense component assets, and National Guard forces (when the Secretary of Defense, ICW the governors of the affected states, elects and requests to use those forces in Title 32, United States Code, status) in response to requests for assistance from civil authorities for domestic emergencies, law enforcement support, and other domestic activities, or from qualifying entities for special events. Also called DSCA.

Department of Defense Gateways - Large and small enterprise gateways with unique roles in meeting joint operational mission requirements around the globe. These joint assets are under the operational oversight and management of the Joint Chiefs of Staff and USSPACECOM.

Department of Defense SATCOM - Comprises DOD-owned and -controlled SATCOM resources, DOD-owned SATCOM resources controlled 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.

Department of Defense information network - 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. Also called DODIN.

Electromagnetic Battle Management - The dynamic monitoring, assessing, planning, and directing of operations in the EMS in support of the commander's CONOPS. Also called EMBM. (Approved for incorporation into the DOD Dictionary of Military and Associated Terms).

End to end Solutions - Fixed or mobile bespoke/purpose-built SATCOM networks designed for a specific user or mission, where the C/S/A can leverage the resources of the network to meet mission needs. End to end solutions may consist of a combination of managed services, transponder bandwidth capacity and terrestrial networks and services.

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 7062, 8062, 8063, 9062, and 9081 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 SATCOM Gateway - A joint SATCOM transmission and receive capability installed within the boundary of the real property of a Service 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 SATCOM Gateways will have the entire complement of the

aforementioned equipment. The Enterprise SATCOM Gateway provides a standardized gateway interface to MILSATCOM and DOD users of COMSATCOM. Also known as a Joint Information Environment SATCOM Gateway.

Fixed Satellite Services - Any radio communication signals that are transmitted and/or received by Earth Stations, located at specified positions or at any fixed point within a specific area, using one or more satellites.
gateway - A large, fixed terminal or suite of terminals and supporting hardware and software supporting a connection between a satellite and network services. May also be referenced as an "anchor station" in international agreements.

Global restoral priority list - A list of all CC/S/A/IP 1-N lists defining the trades space between competing CC/S/A/IP requirements necessary for orderly monitoring, restoral, re-planning, or planning of SATCOM missions. Also call GRPL.

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 with the U.S. SATCOM resources in a particular SATCOM frequency band.

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 authorized government personnel of any DOD Component, or by authorized government representatives of the Department of State or any other Department or Agency of the U.S. Government; (2) signifies the intent of the parties to be bound under 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. This includes any implementing agreement or arrangement, annex, project agreement or arrangement, or other subsidiary arrangement to a master agreement or arrangement.

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

joint electromagnetic spectrum operations - Military actions undertaken by a joint force to exploit, attack, protect, and manage the electromagnetic environment. Also called JEMSO.

managed service - A fixed or mobile service offered by the DOD or commercial entity where the provider commits to deliver service to the C/S/A based upon a service level agreement.

military satellite communications - The SATCOM resources owned and operated by the DOD, primarily in the government frequency bands. MILSATCOM includes those systems (satellites, control segments, user terminals, Enterprise SATCOM Gateways, and mission-specific SATCOM gateways) owned and operated by the DOD. Also called MILSATCOM.

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.

mission-specific SATCOM gateway - A SATCOM transmission and receive capability operating under the operational management and control of a Military Service, equipped with SATCOM terminal(s), networking devices, baseband equipment, and transport devices.

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 UHF band. 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.

National Security System - The term “national security system” means any information system (including any telecommunications system) used or operated by an agency or by a contractor of an agency, or other organization on behalf of an agency with the function, operation, or use of which; involves intelligence activities; involves cryptologic activities related to national security; involves C2 of military forces; involves equipment that is an integral part of a weapon or weapons system; or is critical to the direct fulfillment of military or intelligence missions; or is protected at all times by procedures established for information that have been specifically authorized under criteria established by

an Executive order or an Act of Congress to be kept classified in the interest of national defense or foreign policy. Defined in Section 3552 of Title 44, U.S.C. Also called NSS.

network centric - 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. Also called NC.

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

operational oversight – Recognized mission responsibility to maintain operational coordination with a resource owner and situational awareness (SA) and a common operational picture (COP) of a SATCOM resource whether directly or not directly under an organization's management and control.

Orderwire - A circuit or channel used by technical personnel for coordination and control functions relating to activation, deactivation, reconfiguration, reporting, and maintenance of communications systems, networks, and services.

Primary Alternate Contingency Emergency plan - A PACE communications plan provides redundant communications means if the primary capability is unavailable. Disciplined initiative according to the commander's intent allows units to continue operations in the absence of reliable communications. Also called PACE.

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 that must still meet all of the same criteria for non-automated systems.

Protected Strategic SATCOM - Protected Strategic SATCOM resources use waveforms that can negate or mitigate the purposeful or inadvertent degradation, disruption, denial, unauthorized access, or exploitation attempts

through all operational environments. A protected Strategic SATCOM mission is a Priority 1 mission as defined in Appendix A to Enclosure D (DOD SATCOM PRIORITY AND PRECEDENCE). Protected Strategic SATCOM resources operate at 20.2-21.2 gigahertz (GHz) (downlink), 43.5-45.5 GHz (uplink), and 60-61 GHz (crosslink) using low, medium, or extended data rate waveforms.

Protected Tactical SATCOM - Protected Tactical SATCOM resources use waveforms that have the capability to negate or mitigate the purposeful or inadvertent degradation, disruption, denial, unauthorized access, or exploitation attempts through non-nuclear environments. A Protected Tactical SATCOM mission is a Priority 2 or lower mission as defined in Appendix A to Enclosure D (DOD SATCOM PRIORITY AND PRECEDENCE). Protected Tactical SATCOM resources operate at a variety of frequencies using the PTW. Protected Tactical SATCOM uses the Protected AJ Tactical SATCOM infrastructure to operate across a variety of frequency bands including resources allocated by Wideband, Commercial, and International transponder services as well as the PTS constellation consisting of on-orbit, PTW processing free-flying and hosted payloads at Military-Ka, EHF, and possibly X-band. The PTW is a government-owned, frequency hopping waveform with embedded adaptive coding and modulation, DAMA, and power control. Requests for PATS service will be submitted via a PATS Mission Request (PMR), allowing for PMRs to be combined into a SAR for a power-bandwidth resource request from non-PTS SATCOM providers. Also called PTS.

resiliency - The ability of an architecture to support the functions necessary for mission success in spite of hostile action or adverse conditions. An architecture is considered “more resilient” if it can provide these functions with higher probability, shorter periods of reduced capability, or across a wider range of scenarios, conditions, and threats. Resilience may leverage cross-domain or alternative interagency, commercial, or international capabilities.

resource allocation - The capabilities, processes, and tools that authorize operational use of DOD SATCOM resources consistent with approved user requirements. Includes actions taken to assign power and bandwidth to authorized users, configure satellite payloads, and establish operational parameters for use of DOD SATCOM resources.

roadmap - A strategic document that provides a replenishment and deployment strategy for specific SATCOM system types (e.g., Narrowband), SATCOM gateways, and terminals. 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 system optimization, the proper mix of media, and the right sizing of future systems to meet Warfighter requirements.

Satellite Access Authorizations - Provide operating parameters, interim tactical orderwire system parameters, and interim tactical orderwire system-controlled FDMA network operating parameters. Also called SAA.

Satellite Access Authorization-like information - COMSATCOM configuration details are provided via a transmission plan which contains technical parameters so a terminal operator can configure terminal and modem. SAA like data are those items that are in a SAA but not found in a transmission plan that should include, but not limited to, the following items: mission name, mission description (mission type and purpose, e.g. training, testing, exercise, surveillance, contingency), mission/operation/exercise supported, satellite/transponder/frequency band/frequencies being utilized by terminals, SDB number and CJCSI 6250.01 priority, terminal location, terminal POC, supporting RSSC, and CCMD J6 POC information for positive control. This is critical SA information to support USSPACECOM Global DOD SATCOM responsibilities. Also called SAA-like information.

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

Satellite Communications - The use of satellites to provide BLOS 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. Also called SATCOM.

Satellite Communications resources - IT resources (including NSS), that collectively form and enable the SATCOM segment of the DODIN. 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 - The component or designated organization responsible for providing technical and operational expertise for their assigned SATCOM system(s). Also called SSE.

service level agreement - A commitment between a service provider (DOD or Commercial), which specifies a SATCOM service's expected levels of performance the C/S/A is guaranteed to receive. This may include both agreed upon performance and prioritization parameters.

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.

spectrum-dependent system - All electronic systems, subsystems, devices, and/or equipment that depend on the use of the spectrum to properly accomplish their function(s) without regard to how they were acquired (full acquisition, rapid acquisition, Joint Concept Technology Demonstration, etc.) or procured (commercial off-the-shelf, government off-the-shelf, non-developmental items, etc.). Also called S-D system. Defined in DODI 4650.01, October 2017.

State-of-concern - States subject to comprehensive economic sanctions or selective sanctions linked to space-related technology. The identified states are The People's Republic of China, North Korea, and any country that is a state sponsor of terrorism (Cuba, Iran, North Korea, and Syria).

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 SATCOM 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, or for large transportable terminals used for strategic missions.

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, ICW 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 MIL-STDs. Interoperability certification is conducted by JITC IAW DODI 8330.01 for NR-KPP evaluation of systems or DODI 8100.04 for Unified Capabilities products.

Theater Information Manager - The CCMD TIMs advocates for the advancement of GBS capabilities, provide management and operational guidance to their subordinate users in their respective AORs. The services TIMs manage training requests in the CONUS AOR. The role of the TIM is established in JP 6-0, Joint Communications Systems. Also call TIM.

transponder capacity - Defined as SATCOM services where the C/S/A procures the rights to specific satellite bandwidth and power.

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.

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