

AOC ISSUE REPORT

DoD Releases Long-Awaited EMS Superiority Strategy

Last month, the Department of Defense (DoD) released its new Electromagnetic Spectrum (EMS) Superiority Strategy (EMSSS). The strategy is the crowning achievement of the Electromagnetic Spectrum Operations (EMSO) Cross-Function Team (CFT), a body originally created by Congress through the FY 2019 National Defense Authorization Act (NDAA), whose mission was expanded by Secretary of Defense from narrowly electronic warfare (EW) to EMSO, which includes both EW and Spectrum Management, and focuses on the imperative of EMS Superiority for US national security in the future.

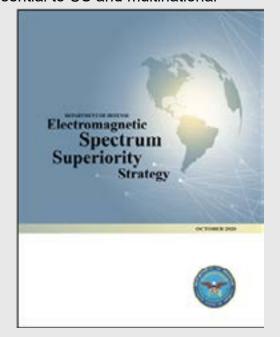
ABOUT THE STRATEGY

The EMSSS is not just another strategy document but represents both the progress and frustrations of the advocates for the importance of EW, Spectrum Management and related-capabilities and disciplines. What sets this strategy apart from other related strategies in the past is the buy-in at the point of origin. Throughout DoD and the military service, leadership voices are more in alignment today about EMS Superiority than in the past, even if approaches differ. This alignment is steadily flowing through doctrine, policy, and other directives necessary for change. The vision of the EMSSS states that, "Freedom of action in the electromagnetic spectrum is a *required* precursor to the *successful* conduct of operations in all domains. Forces in 2030 and beyond will be ready to fight and win through the deliberate, institutional *pursuit* of EMS Superiority [emphasis added]." This vision is builds upon the the new Joint Publication 3-85, which states that, "Freedom of action in the EMS is essential to US and multinational

operations," and that EMS Superiority requires integration

"into all joint domains (p. I-1)."

Arguably the most important part of this strategy is that it defines the EMS as a maneuver space. This debate has divided our community for years. "The EMS is not a separate domain of military operations because the EMS in inseparable from the domains established in joint doctrine (p. 3)." Rather, the EMS is described as a maneuver space defined as "the movement in three-dimensional positioning, time, and EMS operating parameters (e.g., frequency, power, modulation) to gain an advantage over the enemy." EMS maneuver includes all actions in the EMS and is fundamental to gaining and securing an advantage over the enemy. Again, this reiterates JP 3-85, which states, "The EMS is a maneuver space essential for facilitating



control within the operational environment (OE) and impacts all portions of the OE and military operations (p. I-1)."

The alignment of the strategy with new joint doctrine to unequivocally define the EMS as a maneuver space sets it apart from the 2017 DoD EW Strategy, which left this question unanswered and it affected the unity of effort across DoD and the military services. Thus, the strategy was unable to overcome institutional and cultural hurdles to accomplish enduring reform. Defining the EMS as a maneuver space still leaves certain questions unanswered, especially in matters of governance, but it becomes easier to address these questions from a shared starting point. AOC accepts the starting point of the EMSSS that the EMS is a maneuver space and the alignment of Service and Joint Doctrine. This is progress in the right direction.

STRATEGIC GOALS

The EMSSS lays out five (5) goals, a few of which build upon the goals of the 2017 DoD EW Strategy. There are two goals that warrant close attention as implementation moves forward. The first pertains to force readiness. One of the glaring shortfalls in our ability to conduct coordinated and integrated EMSO has been the dearth of trained EMS professionals across the services and supporting each of the Combatant Commands. There is currently insufficient infrastructure and organization to attain the core objective that "all personnel are indoctrinated and trained at the appropriate level on EMS core concepts that enable an EMS maneuver

EMS Superiority Strategy Goals

- 1. Develop Superior Capabilities
- 2. Evolve to an Agile, Fully Integrated EMS Infrastructure
- 3. Pursue Total Force EMS Readiness
- 4. Secure Enduring Partnerships for EMS Advantage
- 5. Establish Effective EMS Governance

mindset (p. 13)." JP 3-85 calls for standing JEMSO cells (JEMSOCs) across Combatant Commands and subordinate Joint Force Commanders (JFCs). These JEMSOCs are vital to project EMS Superiority in any gray zone and provide operational and technical reach back to our warfighters when they conduct any mission. The DoD simply does not have established standards of training, nor the sheer number of personnel currently to achieve this goal. Furthermore, this expertise must be adapted and flow through both military and civilian personnel associated with operations, training, acquisition, and all technical fields. There is no quick fix, and it is not simply about adding personnel. Any progress will require lengthy end-to-end

assessments of related positions and skills sets throughout DoD, comprehensive modeling and training standards for production and sustainment of human capital, and new workforce metrics to measure progress.

The second goal that warrants close attention is establishing permanent EMS governance. Over the past 20 years, the evolution of EMSO as an imperative for 21st Century

military operations has been through temporary or episodic initiatives. These initiatives highlight recurring themes, gaps, and recommendations, but a lack of enduring authority and resources has stifled implementation and sustainable progress. The most recent example is the EMSO CFT. which is responsible for developing the EMSSS. The EMSO CFT is still a relatively nascent organization in OSD reporting to the EW Senior Designated Official (SDO), which is currently the VCJCS. The EMSO CFT, originally authorized as the EW CFT in the FY 2019 National Defense Authorization Act (NDAA), should be applauded for its tremendous efforts to produce the EMSSS over a very short period of time. However, like other CFTs, they are a short-term initiative that does not have the authority to implement significant reforms, some of which are not universally embraced across DoD and military services.

As the DoD pursues an EMS Enterprise mindset, it is significant that in September, DoD Directive 3610.01 designated the DoD Chief Information Office (CIO) as the lead for executive governance for oversight and guidance on EMSrelated activities. The CIO is expected to play an important an important role in EMS governance; however, DoD must ensure balance between the operational and governance elements of the EMS Enterprise. A commensurate organization must be designated or designed to grow, integrate and manage the EMS Enterprise across the joint force with the authority to hold COCOMs and the military services accountable, and

Questions for the Way Ahead

- 1. Where is the best "home" for EMSO within the operational community? With organizations such as the Joint Electromagnetic Warfare Center (JEWC) and the Joint Electromagnetic Preparedness for Advanced Combat (JEPAC), US Strategic Command (USSTRATCOM) is currently the leadingcenter of EMSO expertise and operational support within the DOD. Will USSTRATCOM remain that the best place to unify EMS capabilities and workforce going forward? Should EMSO fall under CJCS as a CCA. or other COCOM or Unified Command?
- 2. What is the future of the EMSO CFT? What steps can or should be taken to transition the CFT into a permanent organization?
- 3. How do we develop, staff, and train JEMSOCs across the COCOMs to provide operational and technical "reach back" for our warfighters?
- 4. How do the COCOMs coordinate with the military services to conduct electromagnetic battle management (EMBM) at the joint level? How do the COCOMS establish a pipeline of expertise and enforce training standards for EMBM?
- 5. How do you ensure an EMS governance structure has the authority, resources, and accountability to implement reforms throughout DoD to ensure EMS Superiority in 2030?
- 6. How do we advance cooperation, sharing, and management of EMS users across commercial and defense sectors to ensure our military forces have the access to the spectrum for training and technology development to stay ahead of rapidly evolving threats worldwide?

coordinate with the CIO to ensure a uniform DoD-wide approach to EMS Superiority. Through the EMSSS implementation plan and roadmap, the DoD must design a pathway to permanence for the EMSO CFT and other operational elements distributed across the COCOMs that provides the requisite authority and resources to strengthen EMSO DOTMLPF and to better organize it in support of the warfighter.

A ROLE FOR CONGRESS

Congress continues to play a quiet but extensive role in the evolution of EW and EMSO over the past 20 years. However, in recent years, Congress has more boldly stepped forward with legislative initiatives. As noted earlier, it was Congress that led to the establishment of the SDO and what is now the EMSO CFT. Most recently, the Senate version of the FY 2021 NDAA called for EMSO to become a Chairman's Controlled Activity (CCA) under the Chairman of the Joint Chiefs of Staff. AOC released an analysis of the language here. The outcome of this language has yet to be determined, as the NDAA remains in Conference Committee until the lame duck session of Congress returns in November; however, the outcome of this language will indicate the path that DoD expects to take since the release of the EMSSS. The EMSSS states that, "Forces in 2030 and beyond will be ready to fight and win through the deliberate, institutional pursuit of EMS superiority." When the next session of Congress begins in January, regardless of the administration or majorities in either the House or the Senate, Congress will begin its annual preparation for the FY 2022 defense budget cycle. 2030 is an ambitious but necessary timeline to achieve the reforms associated with EMSSS goals and objectives.

The bureaucracy that envelops DoD and the military services has evolved episodically and too slowly over the past 20 years. That does not mean that it cannot achieve the changes necessary to assure EMS Superiority in 2030; however, Congress should not hesitate to inject accountability and, if necessary, legislative direction if there is insufficient progress toward implementing the EMSSS.

A WAY AHEAD

The EMSSS now moves toward the development of an implementation plan and roadmap within 180 days, which means we will have a clearer picture in the April 2021 timeframe. In the meantime, DoD, Congress and defense industry must begin to grapple with important questions that will define how we strengthen the DoD's EMS enterprise and enable US forces to achieve EMS Superiority in future conflicts – working toward a 2030 target.

AOC applauds the work and progress of the EMSO CFT and accepts the cornerstone determination that the EMS is a maneuver space. We are is committed to working with all stakeholders in government and industry to weigh the implications of the EMSSS and any future legislation that contributes to meaningful and sustainable reform to ensure our warfighters have the capabilities they need to win in combat and return home safely.