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NOV - 8 2024

MEMORANDUM FOR SENIOR PENTAGON LEADERSHIP
COMMANDERS OF THE COMBATANT COMMANDS
DEFENSE AGENCY AND DOD FIELD ACTIVITY DIRECTORS

SUBJECT: Department of Defense Directed Energy Weapons Policy

This memorandum updates and replaces DoD policy regarding directed energy weapons (DEW), including by removing the requirement for Combatant Command plans for initial operational employment of an anti-materiel DEW to be submitted to the Under Secretary of Defense for Policy for review and assessment prior to a decision by the Secretary of Defense to approve operational deployment and employment. Instead, the policy in this memo provides for the appropriate Component Acquisition Executive to determine whether an anti-materiel DEW is eligible for deployment and employment. The updated DoD policy is at TAB A.

This memorandum applies to the Office of the Secretary of Defense, the Military Departments, the Office of the Chairman of the Joint Chiefs of Staff and the Joint Staff, the Combatant Commands, the Office of Inspector General of the Department of Defense, the Defense Agencies and DoD Field Activities, and all other organizational entities within the DoD (referred to collectively in this memorandum as the "DoD Components"). It supersedes and cancels Under Secretary of Defense for Policy memorandum, "Department of Defense Directed Energy Weapons (DEW) Policy," December 22, 2017.

I direct that within 180 days of the issuance of this memorandum, DoD Components revise all relevant guidance and instructions, including Chairman of the Joint Chiefs of Staff Manual 3230.01A, "Directed Energy Weapon Initial Operational Employment Review and Approval Process," October 7, 2015, in accordance with TAB A and the definitions provided in TAB B.

Attachments:
As stated

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POC: OUSD(P) DASD(FDEC), (703) 697-2725

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Department of Defense Directed Energy Weapons Policy

November 8, 2024

- References:
- (a) Chairman of the Joint Chiefs of Staff Manual 3230.01A, "Directed Energy Weapon Initial Operational Employment Review and Approval Process," October 7, 2015 (Current as of December 15, 2021) (U//FOUO)
 - (b) Under Secretary of Defense for Policy (USD(P)) memorandum, "Department of Defense Directed Energy Weapons (DEW) Policy," December 22, 2017 (U//FOUO)
 - (c) DoD Instruction 3100.11, "Management of Laser Illumination of Objects in Space," October 24, 2016 (U)
 - (d) DoD Directive 5000.01, "The Defense Acquisition System," July 28, 2022 (U)
 - (e) USD(P) memorandum, "Directed Energy Weapons Policy Review," June 22, 2015 (U//FOUO)
 - (f) Acting USD(P) memorandum, "Directed Energy Weapons Policy Review," February 14, 2012 (U//FOUO)
 - (g) Deputy Secretary of Defense Memorandum, "Testing, Training, and Exercising of Space Control Electronic Warfare," July 8, 2019 (S//REL TO USA, AUS, CAN, GBR)
 - (h) White House Memorandum, "Space Security Guidance," June 26, 2023 (TS)
 - (i) DoD Instruction 3100.15, "Space Control," January 19, 2001 (S)
 - (j) Joint Publication 3-85, "Joint Electromagnetic Spectrum Operations," May 22, 2020 (U)

Applicability. This policy applies to the Office of the Secretary of Defense, the Military Departments, the Office of the Chairman of the Joint Chiefs of Staff and the Joint Staff, the Combatant Commands, the Office of Inspector General of the Department of Defense, the Defense Agencies and Department of Defense (DoD) Field Activities, and all other organizational entities within the DoD (referred to collectively in this memorandum as the "DoD Components"). It supersedes and cancels Reference (b).

Scope. This policy applies to directed energy weapons (DEW) operated by DoD. Specifically, this policy applies to initial operational deployment and employment of systems that use directed energy to incapacitate, damage, or destroy enemy equipment, facilities, and/or personnel. It does not apply to other electromagnetic warfare technologies. It addresses DoD operational deployment and employment of DEW and does not supersede or modify other DoD policies that may also be applicable to DEW. The development, transition, acquisition, fielding, and employment of DoD DEW is still subject to all other applicable policies and processes, including but not limited to those noted in the References above. For example, DEW activities that use lasers remain subject to the registration, notification, and coordination procedures in Section 3 of Reference (c), including with respect to the laser system classification process. Definitions relevant to the scope of this policy are contained at TAB B.

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Policy. The Department continues to encourage the responsible development, transition, acquisition, fielding, and employment of DEW that fulfill operational requirements and that can be employed in accordance with the law of war. As emphasized in the 2022 National Defense Strategy (NDS), DoD must develop new capabilities and leverage advanced technologies to build enduring advantages for the Joint Force; the NDS specifically references the need for research and development for advanced capabilities in directed energy. The Department recognizes the advantages of DEW for addressing a range of operational challenges. These advantages include increased speed of fires and targeting; improved magazine capacity; positive target identification and tracking through integrated optics; improved precision; improved force protection due to reduced engagement signatures; reduced collateral damage, including reduced risk of harm to non-combatants; and prevention of residual unexploded ordnance. Accordingly, the Department encourages the responsible development, transition, acquisition, fielding, and employment of DEW—from non-lethal and intended reversible effects up to and including lethal and non-reversible effects on personnel or materiel—contingent upon compliance with the provisions of this memorandum and other applicable policies and processes.

Like all weapons, DEW in armed conflict must not be used if the weapon is calculated to cause unnecessary suffering, is inherently indiscriminate, or falls within another class of weapons that has been specifically prohibited by the law of war from use in all circumstances. See DoD Law of War Manual § 6.4 (June 2015, updated July 2023). In addition, the use of DEW to conduct attacks in armed conflict must be in accordance with the principles of distinction and proportionality and, in particular, the law of war rules governing attacks. See DoD Law of War Manual § 5.4.2 (June 2015, Updated July 2023). Consistent with U.S. obligations under Protocol IV on Blinding Laser Weapons annexed to the Convention on Certain Conventional Weapons, the Department will not develop laser weapons specifically designed, as their combat function or as one of their combat functions, to cause permanent blindness to unenhanced vision, that is, to the naked eye or to the eye with corrective eyesight devices.

DEW will receive different levels and types of review and approval depending on the type of target that the system is designed to engage. The Department has gained meaningful experience in developing, fielding, and employing anti-materiel DEW. Based on this experience, DoD will no longer require that Combatant Command plans for initial operational employment of an anti-materiel DEW be submitted to the Under Secretary of Defense for Policy for review and assessment prior to a decision by the SecDef to approve operational deployment and employment. Instead, the appropriate Component Acquisition Executive will determine whether an anti-materiel DEW is eligible for operational deployment and employment through the process for anti-materiel DEW outlined below.

Anti-personnel DEW—those specifically designed or planned for use to directly kill, injure, or otherwise incapacitate adversary personnel through reversible or irreversible effects of directed energy on the human body—involve more complex considerations, and Combatant Command plans for initial operational employment are to continue to be evaluated pursuant to the DEW process currently described in Reference (a), which includes review and assessment by

the Under Secretary of Defense for Policy (USD(P)) prior to a decision by the SecDef to approve operational deployment and employment.

It is DoD policy that DEW will not be used unless they have been reviewed and approved through either of the processes described in this memorandum and that DoD personnel will use DEW in accordance with the approvals that have been granted through these processes. For example, a DEW that has been approved for use as an anti-materiel DEW will not be used as an anti-personnel DEW without seeking approval under the process for review of anti-personnel DEW.

Process. The following sections outline core policy parameters for the review of proposals for the initial operational deployment and employment of anti-personnel and anti-materiel DEW. These processes will be further delineated in greater detail through a revision to Reference (a). In accordance with the policy outlined above, the process for review of DEW will differ depending on the type of target the weapon is designed to engage—personnel or materiel. Additional guidance on the meaning of anti-materiel DEW and anti-personnel DEW for the purposes of this policy is provided in TAB A.

Review of anti-personnel DEW. The DEW RAP will be used to support the Under Secretary of Defense for Policy's review and assessment of the plans for initial operational deployment and employment of anti-personnel DEW from a Combatant Commander (CCDR) or other appropriate head of a DoD Component prior to a decision by the SecDef to approve operational deployment and employment. All such plans will include a capability overview of the DEW; legal review; concept of operations or concept of employment; rules of engagement; tactics; risks, including but not limited to collateral damage and human effects, as well as strategic impacts; proposed public affairs guidance; and other relevant information relevant to determining whether the proposal is adequate, feasible, and acceptable as defined in Reference (a).

The DEW RAP is managed by the Joint Staff (JS) J39 and will include representatives from all appropriate stakeholders across DoD. These offices may include, but are not limited to: JS J39; Combatant Commands (CCMD); the Offices of the Assistant Secretaries of Defense (OASD) for Strategy, Plans, and Capabilities (SPC), Space, and Cyber; the Office of the Under Secretary of Defense for Intelligence and Security (OUSD(I&S));¹ the Office of the Under Secretary of Defense for Acquisition and Sustainment (OUSD(A&S)); the United States Strategic Command; the United States Space Command; the Military Departments; the United States Coast Guard; DoD Office of General Counsel; the Office of the Chairman of the Joint Chiefs of Staff (OCJCS) Legal Counsel; OCJCS Public Affairs; and the Office of the Assistant to the Secretary of Defense for Public Affairs. Participating offices will provide their relevant expertise and recommendations on the following elements and considerations, among others:

- Legal review of the DEW and its proposed use;

¹ The OUSD(I&S) will coordinate with the Defense Intelligence Enterprise for all reviews and notifications outlined in this memorandum for both anti-personnel and anti-materiel DEW.

- Political/military impacts, including implications for both adversaries and allies/partners, as well as escalation risks;
- Intended operational and tactical effects, as well as associated strategic impacts;
- Risks, including potential second- and third-order effects, collateral damage, and human effects, as well as any associated strategic impacts;
- Deconfliction with other spectrum-dependent capabilities; and,
- Public and diplomatic messaging approaches, including consideration of notifications to host nation(s) or other countries.

For anti-personnel DEW, the JS will manage a process that begins with review and recommendations at the Action Officer, O-6 / GS-15, and General Officer / Flag Officer (GOFO) / Senior Executive Service levels. Following completion of the GOFO-level review, the JS Director for Operations will advance the RAP package for review and assessment by the USD(P) who will then present the proposal for decision by the Secretary of Defense (SecDef)..

Review of anti-materiel DEW. With the exception of anti-materiel DEW that have already been approved by the Secretary of Defense as of the date of this memorandum, anti-materiel DEW may not be deployed or employed unless the appropriate Component Acquisition Executive (CAE) has determined that the DEW is eligible for deployment and employment under this policy and the standards in Reference (a). This determination must be consistent with any other applicable DoD policies and processes. The CAE may not delegate the responsibility or authority to make this determination to a lower-level official within the Component. The CAE may review both prototype anti-materiel DEW and fully-designed anti-materiel DEW, and may determine either prototype or fully-designed anti-materiel DEW to be eligible for deployment and employment. The CAE may determine anti-materiel DEW to be eligible for both deployment and employment through a single determination or may make separate determinations regarding eligibility for deployment and employment. Per standard DoD process for the deployment of any weapon system, actual deployment of forces equipped with a weapon system, including anti-materiel DEW, will be subject to a SecDef order pursuant to Global Force Management processes. In reviewing anti-materiel DEW, the CAE will consider the same elements and factors considered in the review of anti-personnel DEW, including but not limited to: the standards in Reference (a); the legality of the DEW and its proposed use; political/military impacts and risks; intended effects and impacts; other risks, including potential second- and third-order effects, collateral damage, and human effects, as well as any associated strategic impacts; deconfliction; and public and diplomatic messaging. This memorandum, and the review described herein, is in addition to and does not relieve the anti-materiel DEW proponent from other applicable policies and processes. For example, this review does not replace existing DoD policy in Reference (d), which states that “the acquisition and procurement of DoD weapons must be consistent with all applicable domestic law, and that the resulting systems must comply with applicable treaties and international, customary international law, and the law of armed conflict (also known as the laws and customs of war). An attorney authorized to conduct such legal reviews in the DoD must conduct the legal review of the intended acquisition of weapons or weapons systems.”

Upon receiving a request for review of an anti-materiel DEW, the CAE will notify JS J39, the Assistant Secretary of Defense for SPC (ASD(SPC)), and the Director of Operational

Support and International Partnerships (OSIP) within the OUSD(I&S) of the request and the anticipated timeline to complete the review; JS J39, the OASD(SPC), and OSIP may notify other relevant stakeholders as appropriate. Stakeholders may provide input to the CAE to inform the CAE's determination of whether the anti-materiel DEW is eligible for deployment and employment.

The CAE will notify JS J39, the ASD(SPC), and OSIP of the CAE's determination regarding any anti-materiel DEW. If the CAE assesses that a particular anti-materiel DEW has possible strategic implications or political sensitivities such that the determination requires analysis of policy considerations, the CAE will request such analysis from the ASD(SPC). The CAE or the ASD(SPC) may request that the proposed deployment or employment of an anti-materiel DEW be considered by the USD(P) for a higher-level determination.

Within 90 days following the completion of initial operational deployment or employment of an anti-materiel DEW, the deploying or employing CCMD will provide a report to the OASD(SPC), the OUSD(I&S), the Office of the Under Secretary of Defense for Research and Engineering, JS J39, and the relevant Military Service regarding system performance and lessons learned.

Approved anti-materiel DEW will not require re-review for subsequent operational deployment or employment so long as the concept of operations or concept of employment; relevant tactics, techniques, and procedures and system safety protocols; intended mission sets; and intended target sets; remain consistent with what was provided when the anti-materiel DEW was previously approved. Movement of approved operationally deployed anti-materiel DEW from one geographic combatant command's area of responsibility (AOR) to another AOR for employment will require pre-notification by the Combatant Commander employing the system in the new location to stakeholders including, but not limited to, the CCMDs, the OUSD(P), and the OUSD(I&S) no less than seven days prior to the change of operational control to the new Combatant Commander, or as soon as practicable if urgent operational need precludes the seven-day advance notification. This pre-notification requirement for a specific anti-materiel DEW will expire when that anti-materiel DEW is established as a program of record and a Military Department is routinely deploying that anti-material DEW.

TAB
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**Department of Defense Directed Energy Weapons (DEW) Policy
Definitions**

Directed Energy (DE): An umbrella term covering technologies that relate to the production of a beam of concentrated electromagnetic energy or atomic or subatomic particles. (JP 3-09, 3-85)

- Common DE technologies include, but are not limited to, microwave, millimeter wave, and laser technologies.

Directed Energy Device: A system using directed energy primarily for a purpose other than as a weapon. Directed energy devices may produce effects that could allow the device to be used as a weapon against certain threats; for example, laser rangefinders and designators used against sensors that are sensitive to light. (JP 1-02)

Directed Energy Protective Measures: That division of directed-energy warfare involving actions taken to protect friendly equipment, facilities, and personnel to ensure friendly, effective uses of the electromagnetic spectrum that are threatened by hostile directed-energy weapons and devices. (JP 1-02)

Directed Energy Warfare: Military action involving the use of directed-energy weapons, devices, and countermeasures. (JP 3-85)

Directed Energy Weapon (DEW): A weapon or system that uses directed energy to incapacitate, damage, or destroy enemy equipment, facilities, and/or personnel. (JP 3-85)

- DEW commonly use DE technologies including, but not limited to, high-powered microwaves and high-energy lasers.

Electromagnetic Attack (EA): Division of electromagnetic warfare involving the use of electromagnetic energy, directed energy, or antiradiation weapons to attack personnel, facilities, or equipment with the intent of degrading, neutralizing, or destroying enemy combat capability and is considered a form of fires. (JP 3-85)

Electromagnetic Warfare (EW): Military action involving the use of electromagnetic and directed energy to control the electromagnetic spectrum or to attack the enemy. (JP 3-85)

Materiel: All items necessary to equip, operate, maintain, and support military activities without distinction as to its application for administrative or combat purposes. (JP 4-0)

- Examples of materiel include, but are not limited to land, air, and maritime platforms (both manned and unmanned); self-propelled weapons; and related spares, repair parts, and support equipment. Real property, installations, and utilities are not considered materiel.

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- For the purposes of DoD policy on DEW, an **anti-materiel DEW** is a system that has been designed to use directed energy to incapacitate, damage, or destroy materiel targets or other objects, regardless of whether the weapon's effects are intended to be reversible, and that does not fall within the definition of an anti-personnel DEW. For example, a DEW solely designed to engage objects, including a platform with persons onboard (such as a tank) would still be considered an anti-materiel DEW even though its use would be expected to result in incidental or secondary effects on individuals located on or near the platform (such as the tank's occupants).

Personnel: Individuals required in either a military or civilian capacity to accomplish the assigned mission. (JP 1-0)

- For the purposes of DoD policy on DEW, an **anti-personnel DEW** is a system specifically designed or planned for use to directly kill, injure, or otherwise incapacitate adversary personnel through reversible or irreversible effects of directed energy on the human body. A DEW is not considered an anti-personnel DEW simply because its use is expected to result in incidental or secondary effects on human beings. On the other hand, for example, a DEW that has been specifically designed or planned for use to incapacitate both personnel and materiel is classified as an anti-personnel DEW for the purposes of DoD policy on DEW.