



# Department of Defense **INSTRUCTION**

**NUMBER** 3020.46

October 24, 2008

Incorporating Change 2, October 15, 2018

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USD(R&E)

**SUBJECT:** The Militarily Critical Technologies List (MCTL)

**References:** See Enclosure 1

1. PURPOSE. This Instruction, under the authority of DoD Directive 5134.01 (Reference (a)), establishes policy, assigns responsibilities, and prescribes procedures for developing and maintaining the MCTL as initially mandated by section 2401 et seq. of title 50, United States Code (also known as the Export Administration Act of 1979) (Reference (b)), and extended via section 1701 et seq. of Reference (b) (the International Economic Emergency Powers Act).

2. APPLICABILITY. This Instruction applies to OSD, the Military Departments, the Office of the Chairman of the Joint Chiefs of Staff and the Joint Staff, the Combatant Commands, the Defense Agencies, the DoD Field Activities, and all other organizational entities of the Department of Defense (hereafter referred to collectively as “the DoD Components”).

3. DEFINITIONS.

- a. militarily critical technology. Defined in DoD Instruction 2040.02 (Reference (c)).
- b. defense intelligence. Defined in DoD Directive 5143.01 (Reference (d)).

4. POLICY. It is DoD policy that the MCTL serve as a technical reference for the development and implementation of DoD technology security policies on international transfers of defense-related goods, services, and technologies as administered by the Director, Defense Technology Security Administration (DTSA) in accordance with Reference (b) and as described in DoD Directive 5105.72 (Reference (e)).

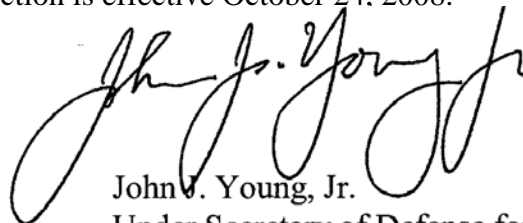
5. RESPONSIBILITIES. See Enclosure 2.

6. PROCEDURES. See Enclosure 3.

7. RELEASABILITY. **Cleared for public release**. This Instruction is available on the Directives Division Website at <http://www.esd.whs.mil/DD/>.

8. SUMMARY OF CHANGE 2. This change reassigns the office of primary responsibility for this instruction to the Under Secretary of Defense for Research and Engineering in accordance with the July 13, 2018 Deputy Secretary of Defense Memorandum (Reference (f)).

9. EFFECTIVE DATE. This Instruction is effective October 24, 2008.



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Under Secretary of Defense for Acquisition,  
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Enclosures

1. References
2. Responsibilities
3. Procedures

ENCLOSURE 1

REFERENCES

- (a) DoD Directive 5134.01, “Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)),” December 9, 2005, as amended
- (b) Sections 1701 and 2401 et seq. of title 50, United States Code
- (c) DoD Instruction 2040.02, “International Transfers of Technology, Articles, and Services, March 27, 2014, as amended
- (d) DoD Directive 5143.01, “Under Secretary of Defense for Intelligence (USD(I)),” October 24, 2014, as amended
- (e) DoD Directive 5105.72, “Defense Technology Security Administration (DTSA),” April 26, 2016
- (f) Deputy Secretary of Defense Memorandum, “Establishment of the Office of the Under Secretary of Defense for Research and Engineering and the Office of the Under Secretary of Defense for Acquisition and Sustainment,” July 13, 2018
- (g) DoD Instruction 5200.39, “Critical Program Information (CPI) Identification and Protection Within Research, Development, Test, and Evaluation (RDT&E),” May 28, 2015
- (h) DoD Directive 5230.11, “Disclosure of Classified Military Information to Foreign Governments and International Organizations,” June 16, 1992
- (i) DoD Instruction 5230.24, “Distribution Statements on Technical Documents,” August 23, 2012, as amended
- (j) DoD Directive 5230.25, “Withholding of Unclassified Technical Data From Public Disclosure,” November 6, 1984, as amended

ENCLOSURE 2

RESPONSIBILITIES

1. UNDER SECRETARY OF DEFENSE FOR ACQUISITION, TECHNOLOGY, AND LOGISTICS (USD(AT&L)). The USD(AT&L) shall:

- a. Develop, approve, and maintain the MCTL on behalf of the Secretary of Defense as required by the Export Administration Act of 1979.
- b. Coordinate with the Under Secretary of Defense for Policy (USD(P)) on policy matters relating to the licensing and transfer of militarily critical technologies.
- c. Coordinate with the Under Secretary of Defense for Intelligence (USD(I)) on matters relating to foreign capability in military technology as well as defense intelligence community implications of licensing and transfer of militarily critical technologies as specified in DoD Directive 5200.39 (Reference (g)).

2. ASSISTANT SECRETARY OF DEFENSE FOR RESEARCH AND ENGINEERING (ASD(R&E)). The ASD(R&E), under the authority, direction, and control of the USD(AT&L), shall:

- a. Provide direction and management oversight for execution of the MCTL.
- b. Advise the USD(AT&L) on matters regarding the national security implications of the transfer of technology, goods, services, and munitions in support of the DoD Technology Security Program as specified in Reference (c) and (e).
- c. Direct the MCTL process as described in Enclosure 3 and coordinate related matters with the Heads of the DoD Components, the OSD Principal Staff Assistants, and the USD(AT&L) Direct Reports as appropriate. Conduct reviews no later than every 2 years to ensure the MCTL is current and technologies are appropriately considered.
- d. Serve as the principal DoD point of contact (POC) for all matters related to the MCTL with other U.S. Government departments and agencies.
- e. Collaborate with the Director, DTSA, regarding militarily critical technologies to be controlled for export as required by Reference (b) and pursuant to References (d) and (g).
- f. Create a Community Advisory Board to assess the effectiveness, content, and processes of the MCTL.

3. DIRECTOR OF SPECIAL PROGRAMS (SP). The Director, SP, under the authority, direction, and control of the USD(AT&L), shall provide consultation to the MCTL pertaining to low-observable and counter-low-observable technologies.
  
4. USD(P). The USD(P) shall consult with the USD(AT&L) in the formulation, oversight, and enforcement of policy matters relating to the licensing and transfer of militarily critical technologies as specified in Reference (d).
  
5. DIRECTOR, DTSA. The Director, DTSA, under the authority, direction, and control of the USD(P), through the Assistant Secretary of Defense for Global Security Affairs, shall consult the MCTL when developing DoD export-control proposals, when processing export license requests under Reference (b), and when making technology transfer decisions in accordance with procedures specified in Reference (e).
  
6. USD(I). The USD(I) shall ensure intelligence, counterintelligence, and security support is available to the USD(AT&L) on matters pertaining to the MCTL, this Instruction and, when appropriate, Reference (g).
  
7. DIRECTOR, DEFENSE INTELLIGENCE AGENCY (DIA). The Director, DIA, under the authority, direction, and control of the USD(I), shall lead the defense intelligence community's assessment of MCTL technology to determine foreign availability and capability, and to identify foreign technology requirements that would provide an adversary with a significant military capability.
  
8. HEADS OF DoD COMPONENTS. The Heads of DoD Components shall:
  - a. Designate a POC who will:
    - (1) Serve as the focal point for technical coordination of MCTL products and updates.
    - (2) Nominate Military Department or Component subject-matter experts in the requisite technology areas as appropriate to assist in identifying and assessing technologies for the MCTL.
  - b. Maintain organizational continuity by ensuring that replacements are designated when current participants are reassigned.
  - c. Consult the MCTL in making foreign disclosure decisions under their delegated disclosure authority as provided for in the National Disclosure Policy as implemented by DoD

Directive 5230.11 (Reference (h)).

9. SECRETARY OF THE NAVY. The Secretary of the Navy shall, as required under paragraph 8.a. of this enclosure, designate separate Service POCs for the Navy and the Marine Corps.

ENCLOSURE 3

PROCEDURES

1. While recognizing that continuous and rapid changes in technology pose difficult challenges in technical assessments, DoD Components shall use all resources available to them to identify militarily critical technologies and monitor global technology developments. To meet these requirements, the ASD(R&E) shall:

a. Update all sections of the MCTL at intervals no greater than 2 years.

(1) Establish Technology Working Groups (TWGs); provide oversight, in coordination with DoD Component POCs; and manage the MCTL update process.

(a) TWGs assess each technology, select those meeting the definition and criteria outlined in this Instruction, and produce the MCTL. Inputs for changes, revisions, or deletions are gleaned from diverse sources, including academia, industry, and other Government agencies, and are usually introduced by TWG members from organizations working on the leading edge of those technologies.

(b) The MCTL provides important information not only to export control decision makers, but also to intelligence, counterintelligence, and security personnel to support the development of program protection plans, the execution of protection and enforcement activities, and the communication of technology transfer decisions (see Figure 1).

(2) Provide and maintain MCTL Web sites that allow appropriate users to search for relevant information.

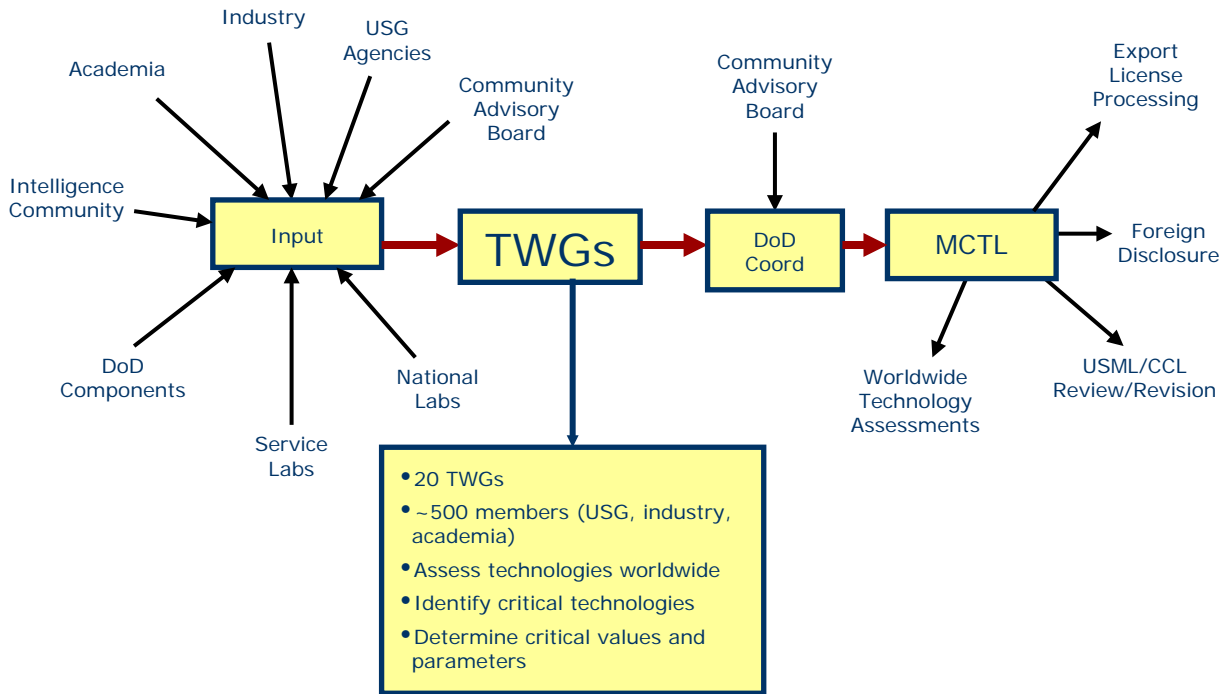
(3) Conduct periodic reviews with the Departments of State and Commerce to elicit feedback on the MCTL.

(4) Develop and publish technical addendums as necessary to the MCTL to include the identification and assessment of new technologies.

(5) Identify and assess current and developing technologies worldwide through outreach efforts as appropriate.

(6) Develop a methodology for determining whether a given technology is militarily critical. This methodology shall use objective criteria and produce logical and repeatable results.

Figure 1. MCTL Process Overview



b. Provide technical support as required for international export control regime preparations and negotiations.

(1) Provide annual technical inputs to the Director, DTSA, to support export control proposals and negotiation.

(2) Provide technical experts as appropriate to participate on the Department of Commerce Technical Advisory Committees.

c. Apply procedures outlined in Reference (c), DoD Instruction 5230.24 (Reference (i)), DoD Directive 5230.25 (Reference (j)), and this Instruction for identifying critical technology.

2. The Heads of DoD Components within their respective authorities shall:

a. Provide coordination on MCTL changes and revisions via their designated POCs. (The Signature Control MCTL section is coordinated with the Director, SP.) The coordinated product is published on the Defense Technical Information Center Internet portal in two forms; a publicly releasable version (<http://www.dtic.mil/mctl/>) and a restricted access and distribution version (<http://www.dtic.mil/dtic/registration/>).



b. Provide the ASD(R&E) with recommendations, accompanied by appropriate justification, to add, modify, or remove items from the MCTL.

c. Apply procedures outlined in References (c), (i), (j), and this Instruction for identifying critical technology and utilizing the MCTL as appropriate.