



# Department of Defense **DIRECTIVE**

**NUMBER** 4510.11

December 23, 2014

Incorporating Change 2, August 31, 2018

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USD(A&S)

**SUBJECT:** DoD Transportation Engineering

**References:** See Enclosure 1

1. **PURPOSE.** This directive reissues DoD Directive (DoDD) 4510.11 (Reference (a)) to:
  - a. Establish policies for the DoD Transportation Engineering Program.
  - b. Assign responsibilities for conducting DoD transportation engineering, including incorporating effective transportation engineering techniques and characteristics into DoD transportation processes, equipment, and facilities.
  - c. Ensure that DoD transportation engineering interests and infrastructure concerns are considered in civil transportation programs (federal, State, local governments, and industry).
  
2. **APPLICABILITY.** This directive 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 Office of the Inspector General of the Department of Defense, the Defense Agencies, the DoD Field Activities, and all other organizational entities within the DoD (referred to collectively in this directive as the “DoD Components”).
  
3. **POLICY.** It is DoD policy to:
  - a. Integrate peacetime and mobilization transportation engineering needs into civil and DoD programs to ensure that national defense interests are protected.
  - b. Incorporate safe, efficient, and effective transportation engineering features in the design, construction, modification, and maintenance of DoD transportation processes, equipment, and facilities.
  - c. Coordinate defense peacetime and mobilization interests on design, development, and maintenance of highway, rail, port, and intermodal facilities with civil transportation agencies.

d. Ensure that the DoD Component coordinated transportation engineering interests and requirements are included in common-user DoD transportation systems and programs.

e. Evaluate the design and development of new or modified DoD equipment in accordance with Interim DoD Instruction (DoDI) 5000.02 (Reference (b)) and DoDI 4540.07 (Reference (c)).

4. RESPONSIBILITIES. See Enclosure 2.

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

6. SUMMARY OF CHANGE 2. This change reassigns the office of primary responsibility for this directive to the Under Secretary of Defense for Acquisition and Sustainment in accordance with the July 13, 2018 Deputy Secretary of Defense Memorandum (Reference (d)).

7. EFFECTIVE DATE. This directive is effective December 23, 2014.



Robert O. Work  
Deputy Secretary of Defense

Enclosures

1. References
2. Responsibilities
3. SDDCTEA

Glossary

ENCLOSURE 1

REFERENCES

- (a) DoD Directive 4510.11, “DoD Transportation Engineering,” April 12, 2004 (hereby cancelled)
- (b) DoD Instruction 5000.02, “Operation of the Defense Acquisition System,” January 7, 2015, as amended
- (c) DoD Instruction 4540.07, “Operation of the DoD Engineering for Transportability and Deployability Program,” February 19, 2016
- (d) 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
- (e) AR 55-80/OPNAVINST 11210.2/AFMAN 32-1017/MCO 11210.2D/DLAR 4500.19, “DoD Transportation Engineering Program” November 17, 2003
- (f) Section 210, Title 23, United States Code
- (g) Part 193, Title 32, Code of Federal Regulations
- (h) Part 1152.50, Title 49, Code of Federal Regulations
- (i) Executive Order 12656, “Assignment of Emergency Preparedness Responsibilities,” November 18, 1988
- (j) Title 50, United States Code Appendix, (sections 2061–2172 are known as the “Defense Production Act of 1950”)
- (k) DoD Instruction 6055.04, “DoD Traffic Safety Program,” April 20, 2009, as amended
- (l) Military Standard MIL-STD-209, “Interface Standard for Lifting and Tiedown Provisions,” February 22, 2005
- (m) Military Standard MIL-STD-810, “Test Method Standard Environmental Engineering Considerations and Laboratory Tests,” October 31, 2008
- (n) Military Standard MIL-STD-1366, “Interface Standard for Transportability Criteria,” October 31, 2006

ENCLOSURE 2

RESPONSIBILITIES

1. UNDER SECRETARY OF DEFENSE FOR ACQUISITION, TECHNOLOGY, AND LOGISTICS (USD(AT&L)). The USD(AT&L) establishes policies governing DoD transportation engineering programs.

2. DoD COMPONENT HEADS. The DoD Component heads:

a. Ensure multi-Service and United States Transportation Command (USTRANSCOM) coordination before construction or major modification of common-user Defense Transportation Systems (DTS).

b. Promote a coordinated DoD Transportation Engineering Program between the DoD Components through coordination on publication of the DoD Transportation Engineering multi-service regulation (Reference (e)).

c. Support the policies and procedures of this directive, to include budgeting for DoD Component installation and activity defense access road projects and preservation of defense-essential civil rail lines.

d. Coordinate with the Commander, United States Transportation Command (CDRUSTRANSCOM), through the Special Assistant for Transportation Engineering, regarding common-user transportation and installation transportation engineering matters to include:

(1) Unresolved or other serious conflicts with civil authorities on use of public highway facilities.

(2) Identification of public highway segments important to national defense and defense mobility.

(3) Defense access road requests, reporting requirements, and appropriate programming to fund design and construction of necessary projects.

(4) Installations requiring civil or commercial railroad access, to include consideration of DoD options to abandonment of connector rail lines to installations and activities.

(5) Identification of commercial railroad segments important to national defense and defense mobility.

(6) DoD installation transportation engineering issues and the need for transportation engineering consultation services.

(7) Requirements for new and improved transportation engineering features, to include planning, design, and development in defense transportation processes, equipment, and facilities.

e. Support the use of effective and safe transportation engineering techniques in DoD installation transportation processes, equipment, and facilities by providing appropriate consultation through the Surface Deployment and Distribution Command Transportation Engineering Agency (SDDCTEA).

f. Establish Engineering for Transportability programs, consistent with References (b) and (c), to integrate effective mobility features into the design and development of new or modified defense materiel and equipment.

3. CDRUSTRANSCOM. In addition to the responsibilities in section 2 of this enclosure, the CDRUSTRANSCOM:

a. Identifies DoD transportation engineering interests in civil and commercial transportation programs.

b. Represents DoD in negotiations and discussions with civil transportation agencies and industry concerning common-user transportation engineering matters.

c. Coordinates with USD(AT&L) to ensure that national transportation policies include DoD transportation engineering interests and requirements.

d. Coordinates defense peacetime and mobilization interests on design, development, and maintenance of highway, rail, and port (aerial and sea) facilities with civil transportation agencies and commercial entities.

e. Identifies DoD Component coordinated transportation engineering interests and requirements in common-user DoD transportation systems and programs and coordinates with non-DoD governmental and civil sector entities to ensure DoD needs are met.

f. Designates the Commander, Military Surface Deployment and Distribution Command (SDDC), as the Secretary of Defense certifying agent for Defense Access Road Program in accordance with the requirements in section 210, Title 23, United States Code (U.S.C.) (Reference (f)).

g. Designates the Director, SDDCTEA, as the Special Assistant for Transportation Engineering, charged with providing executive-level representation for DoD on all transportation engineering matters related to the National Defense Programs and related engineering services. The Director, SDDCTEA, is authorized to conduct direct liaison with DoD Components, civil authorities, and commercial entities to perform the functions in Enclosure 3.

ENCLOSURE 3

SDDCTEA

The Director, SDDCTEA, is designated as the Special Assistant for Transportation Engineering, and is authorized to conduct direct liaison with DoD Components, civil authorities, and commercial entities to:

a. Manage the Highways for National Defense Program in accordance with part 193 of Title 32, Code of Federal Regulations (CFR) (Reference (g)) and:

(1) Identify public highway segments necessary to support national defense needs and coordinate with federal and State transportation authorities to address those needs in public highway programs.

(2) Establish and coordinate effective procedures for safe movement of DoD equipment on civil highways.

b. Manage the Defense Access Road Program by:

(1) Reviewing and analyzing DoD access road requests and certifying to the Secretary of Transportation, on behalf of the Secretary of Defense, the civil highway needs of the DoD in accordance with Reference (f).

(2) Ensuring maintenance or repair to public roads serving DoD ballistic missile sites in accordance with Reference (f).

(3) Advising and assisting the DoD Components with their resource programming for eligible defense access road projects.

c. Manage the Railroads for National Defense Program by:

(1) Identifying and coordinating with federal and State authorities on civil railroad lines that are important to national defense.

(2) Integrating civil sector support and consideration of DoD needs for civil rail lines into plans, standards, programs, and regulations of the railroad industry.

(3) Assessing impacts of railroad abandonments, bankruptcies, and mergers on national defense interests as discussed in part 1152.50 of Title 49, CFR (Reference (h)).

(4) Assisting and advising the DoD Components regarding their options and the potential financial assistance to preserve defense-important civil sector rail lines.

d. Manage the Ports for National Defense Program by:

(1) Supporting the Strategic Seaports Program pursuant to Executive Order 12656 (Reference (i)) and in accordance with the authority in sections 2061-2172 of Title 50, U.S.C. Appendix (Reference (j)) and managing the identification and assessments of strategic seaports as a comprehensive program.

(2) Managing and conducting transportation engineering analyses of common-user defense important seaports.

(3) Coordinating effective design standards and criteria for safe movement of DoD equipment, as established by DoD authoritative sources, with military (e.g., United States Army Corps of Engineers) and commercial seaport authorities.

e. Monitor modal legislative processes to ensure DoD transportation engineering interests are protected.

f. Ensure the use of effective and safe transportation engineering techniques in DoD installation transportation processes, equipment, and facilities.

(1) Promote incorporation of appropriate federal standards and use of military equipment characteristics in the design and construction of DoD Component transportation facilities. Support traffic safety on DoD Component highways, as directed by DoDI 6055.04 (Reference (k)) through the Traffic Engineering Program.

(2) Analyze infrastructure of transportation facilities supporting unit deployments or resupply of material.

(3) Publish the multi-Service regulation that establishes the DoD Transportation Engineering Program, including procedures for the Highways, Railroads, and Ports for National Defense programs; the Defense Access Road Program; infrastructure analysis, Traffic Engineering Program; and the Deployability Engineering Program in accordance with Reference (e).

(4) Serve as the DoD Secretariat for the Engineering for Transportability and Deployability Program. Coordinate on all transportability and deployability matters relating to more than one DoD Component and perform duties prescribed in Reference (c).

(5) Maintain Military Standard (MIL-STD)-209 (Reference (l)), MIL-STD-810 (Method 526, rail impact section only) (Reference (m)), and MIL-STD-1366 (Reference (n)). Publish and maintain modal instructions covering proper lifting, tiedown, and lashing of military equipment for transport and publish reference pamphlets covering deployability planning, characteristics, and guidelines.

(6) Coordinate on the Military Service regulations that establish their Engineering for Transportability programs.

(7) Serve as the Department of the Army Transportability Agent in securing transportability engineering analysis and assistance, test loadings, transportability certifications, and approvals from the other Military Services.

(8) Serve as the DoD land mode transportability agent by preparing, coordinating, and maintaining joint transportability and deployability criteria for land movement and performing other mode agent responsibilities as prescribed in Reference (c).



GLOSSARY

PART I. ABBREVIATIONS AND ACRONYMS

|               |   |
|---------------|---|
| AFMAN         | Air Force Manual  |
| AR            | Army Regulation   |
| CFR           | Code of Federal Regulations   |
| CDRUSTRANSCOM | Commander, United States Transportation Command                               |
| DLAR          | Defense Logistics Agency Regulation   |
| DoDD          | DoD Directive   |
| DoDI          | DoD Instruction   |
| DTS           | Defense Transportation System   |
| MIL-STD       | Military Standard   |
| MCO           | Marine Corps Order  |
| OPNAVINST     | Office of the Chief of Naval Operations Instruction                           |
| SDDC          | Surface Deployment and Distribution Command                                   |
| SDDCTEA       | Surface Deployment and Distribution Command Transportation Engineering Agency |
| U.S.C.        | United States Code  |
| USD(AT&L)     | Under Secretary of Defense for Acquisition, Technology, and Logistics         |
| USTRANSCOM    | United States Transportation Command  |

PART II. DEFINITIONS

Unless otherwise noted, these terms and their definitions are for the purpose of this directive.

civil transportation agencies. A collective term for those organizations with statutory responsibilities to incorporate DoD requirements into non-DoD, federal, State, or local transportation programs and regulations involved with highways, railways, ports, and intermodal systems such as the U.S. Department of Transportation, the Federal Highway Administration, the Federal Railroad Administration, the U.S. Maritime Administration, and State and local transportation departments.

DTS. That portion of the worldwide transportation infrastructure that supports DoD transportation needs in peace and war. The DTS consists of two major elements: military (organic) and commercial resources. These resources include aircraft, assets, services, and systems organic to, contracted for, or controlled by the DoD. The DTS infrastructure, including ports, airlift, sealift, railway, highway, intransit visibility, information management systems, customs, and traffic management that the DoD maintains and exercises in peacetime, is a vital element of the DoD capability to project power worldwide. It provides for responsive force projection and a seamless transition between peacetime and wartime operations.

DoD Transportation Engineering Programs. The formally established DoD transportation engineering organizations and their assigned responsibilities, to include, but not limited to, the Defense Access Road Program and Highways for National Defense Program, Ports for National Defense Program, and Railroads for National Defense Program.

financial assistance. Monetary aid provided to civil transportation agencies or rail carriers considering transportation facility design, modification, construction, lease, or purchase that is determined to be important to the national defense. That assistance must meet eligibility criteria as jointly established by the transportation agencies and the DoD.

installation. A base, camp, post, station, yard, center, or other activity under the jurisdiction of the Secretary of a Military Department or, in the case of an activity in a foreign country, under the operational control of the Secretary of a Military Department or the Secretary of Defense.

intermodal systems. Specialized transportation facilities, assets, and handling procedures designed to combine multimodal operations and facilities during the shipment of cargo.

transportability engineering. A transportation engineering technology required to identify and measure limiting criteria and characteristics of transport systems, and to apply this information to the engineering design of new materiel and equipment that needs to be moved.

transportation engineering. The science of evaluating the requirements for and planning the layout and functional aspects of transportation equipment and facilities to develop the most efficient operating relationships pertaining to traffic movement and transportation processes.