SUBJECT: Materiel Interoperability and Standardization with Allies and Coalition Partners

References: See Enclosure 1

1. **PURPOSE.** This Instruction:

   a. Reissues DoD Directive (DoDD) 2010.6 (Reference (a)) as a DoD Instruction (DoDI) in accordance with the authority in DoDD 5134.01 (Reference (b)) to establish policies and procedures for materiel interoperability and standardization with allies and coalition partners pursuant to section 2457 of title 10, United States Code (U.S.C.) (Reference (c)).

   b. In accordance with DoDD 5000.01 and DoDI 5000.02, (References (d) and (e)) provides DoD procedures and responsibilities for materiel interoperability and standardization with allies and coalition partners, and describes the role of Reciprocal Defense Procurement Memorandums of Understanding (RDP MOUs) in promoting interoperability.

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 Office of the Inspector General of the Department of Defense, the Defense Agencies, the DoD Field Activities, and all other organizational entities within the Department of Defense (hereafter referred to collectively as the “DoD Components”).

3. **POLICY.** It is DoD policy that:

   a. The Department of Defense pursue materiel interoperability with allies and coalition partners in accordance with Reference (d). This means that systems, units, and forces shall be able to provide and accept data, information, materiel, and services to and from other systems, units, and forces and shall effectively interoperate with those of allies and coalition partners.
b. Equipment procured for U.S. forces employed in North Atlantic Treaty Organization (NATO), other allied, and coalition operations be standardized or at least interoperable with the equipment of allies and coalition partners.

c. Materiel interoperability with allies and coalition partners shall adhere to the Defense Standardization Program (DoDI 4120.24 (Reference (f)) and DoD 4120.24-M (Reference (g)).

d. The Department of Defense shall comply, to the maximum extent feasible, with applicable materiel international standardization agreements ratified by the United States, subject to systems engineering tradeoffs under Reference (e).

4. RESPONSIBILITIES. See Enclosure 2.

5. PROCEDURES. See Enclosure 3 for procedures for accomplishing materiel interoperability, accomplishing materiel standardization, interoperability of future military concepts throughout the Defense Acquisition Management System, NATO commitments, and RDP MOUs.

6. RELEASABILITY. UNLIMITED. This Instruction is approved for public release and is available on the Internet from the DoD Issuances Web Site at http://www.dtic.mil/whs/directives.

7. SUMMARY OF CHANGE 1. This change reassigned the office of primary responsibility for this instruction to the Under Secretary of Defense for Acquisition and Sustainment in accordance with the July 13, 2018 Deputy Secretary of Defense Memorandum (Reference (h)).

8. EFFECTIVE DATE. This Instruction is effective immediately.

Ashton B. Carter  
Under Secretary of Defense for Acquisition, Technology, and Logistics

Enclosures  
1. References  
2. Responsibilities  
3. Procedures
ENCLOSURE 1

REFERENCES

(b) DoD Directive 5134.01, “Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)),” December 9, 2005
(c) Sections 2350a, 2358, 2457, 2533b, and 23501 of title 10, United States Code
(f) DoD Instruction 4120.24, “Defense Standardization Program (DSP),” June 18, 1998
(h) 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
(i) DoD Directive 4630.05, “Interoperability and Supportability of Information Technology (IT) and National Security Systems (NSS),” May 5, 2004
(m) DoD Instruction 8110.1, “Multinational Information Sharing Networks Implementation,” February 6, 2004
(q) DoD Directive 5230.20, “Visits and Assignments of Foreign Nationals,” June 22, 2005
(t) Sections 2767 and 2796d of title 22, United States Code

1 http://www.acq.osd.mil/ic/cwp.html
(x) North Atlantic Treaty Organization, “The Alliance’s Strategic Concept,” April 24, 1999
(aa) DoD Federal Acquisition Regulation Supplement (DFARS), as amended
(ab) Chapter 1, sections 10a-d of title 41, United States Code

2 http://www.nato.int/docu/pr/1999/p99-065e.htm
3 http://www.nato.int/docu/basictxt/b061129e.htm
ENCLOSURE 2

RESPONSIBILITIES

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

   a. Advise the Secretary and the Deputy Secretary of Defense on U.S. materiel interoperability with allies and coalition partners.

   b. Devise DoD research, development, and acquisition (RD&A) and program policies for interoperability, information assurance, and standardization; provide guidance and training for the acquisition workforce for implementation of these policies.

   c. Coordinate U.S. positions on the harmonization of NATO weapons needs and complementary schedules for new weapons development and production.

   d. Coordinate RD&A efforts with allies and coalition partners as appropriate to ensure interoperability and standardization of DoD materiel and services, to include information assurance in cooperation with the Assistant Secretary of Defense for Networks and Information Integration/DoD Chief Information Officer (ASD(NII)/DoD CIO). DoD policy for the information technology aspects of interoperability and supportability, including National Security Systems, is in DoD Directive 4630.05 (Reference (i)).

   e. Represent the United States as the National Armaments Director at the NATO Conference of National Armaments Directors (CNAD) and other appropriate international forums.

   f. Ensure and monitor DoD representation in appropriate groups and subgroups of the CNAD. Representation shall be coordinated with the Department of State, through the Under Secretary of Defense for Policy (USD(P)), on behalf of the Chairman of the Joint Chiefs of Staff, the Secretaries of the Military Departments, the ASD(NII)/DoD CIO, and the Heads of the other DoD Components, as appropriate, and other official international meetings as the USD(AT&L) deems applicable.

   g. Ensure that Military Departments and Defense Agencies consider material interoperability and standardization throughout all phases of the Defense Acquisition Management System (Reference (e)), and that U.S.-ratified international standardization agreements (ISAs) are implemented to the maximum extent practical (Reference (i)).

   h. Assist the Military Departments and other DoD Components to obtain information on allied and coalition systems and subsystems.

   i. Provide, in conjunction with the Military Departments, technical positions regarding the exchange of technology with allies and coalition partners, and oversight for ongoing programs involving the transfer of technology.
j. Consult with the Chairman of the Joint Chiefs of Staff on the interaction of interoperability and standardization, strategy, force objectives, and joint warfighting capabilities.

k. Review DoD acquisition policies and regulations and incorporate revisions to maximize, within the constraints imposed by law, the opportunity for sources in countries with which the United States has signed a RDP MOU to compete with U.S. sources for DoD business.

l. Ensure that the Department of Defense administers the acquisition policies for all programs and activities outlined in this Instruction.

m. Develop DoD logistic policies and guidelines that support and facilitate programs for materiel interoperability and standardization with allies and coalition partners.

n. Ensure appropriate representation of the United States at NATO and other international acquisition, technology, and logistics activities.

2. USD(P). The USD(P) shall:

   a. Coordinate overall DoD policy on multinational interoperability and standardization.

   b. On matters concerning interoperability and standardization, act as the principal contact within the Department of Defense for the Department of State and other U.S. Government agencies and appropriate allied and coalition partner countries and agencies, and coordinate with those organizations.

   c. Provide policy guidance on the pursuit of interoperability and standardization within NATO and with other allies and coalition partners.

   d. Initiate action to change DoD policies, procedures, and regulations or propose changes to laws that block or impede the achievement of multinational interoperability and standardization within NATO.

   e. Monitor the political and economic factors that affect interoperability and standardization.

3. DIRECTOR, DEFENSE SECURITY COOPERATION AGENCY (DSCA). The Director, DSCA, under the authority, direction, and control of the USD(P), shall:

   a. Serve as the focal point for all requests and as the approval authority for foreign military sales (FMS) involving establishment of cooperative logistics supply support arrangements (CLSSAs) in accordance with DoDI 2000.20 (Reference (j)).

   b. Establish procedures for the implementation and administration of CLSSAs.
4. **ASD(NII)/DoD CIO.** The ASD(NII)/DoD CIO shall:

   a. Lead DoD efforts to achieve interoperability for data and information, communications, and command and control with allies and coalition partners.

   b. Use the Defense Information Systems Agency (DISA) Joint Interoperability Test Command (JTIC) to test for interoperability and report results for foreign systems.

5. **SECRETARIES OF THE MILITARY DEPARTMENTS AND DIRECTORS OF THE DEFENSE AGENCIES.** The Secretaries of the Military Departments and Directors of the Defense Agencies shall:

   a. Advise the USD(AT&L) on U.S. interoperability with allies and coalition partners and ensure that materiel interoperability and standardization are considered in the basic conceptual approach in the development, production, and product improvement of all systems and equipment intended for use in coalition operations and that all applicable U.S. ratified materiel international standardization agreements are complied with to the greatest extent feasible.

   b. Ensure that weapon system design takes into account potential future transfers to allied nations, incorporates needed anti-tamper features, and accommodates modifications that make export possible and affordable.

   c. Establish and maintain close, parallel relationships with NATO allies, major non-NATO allies, friendly foreign nations, and organizations within NATO and The Technical Cooperation Program (TTCP) for developing compatible doctrine and operational concepts (see TTCP Document 201 (Reference (k))). This includes early discussion and definition of future capability needs and materiel requirements and involves close collaborating in the acquisition of interoperable or standardized systems, subsystems, and follow-on logistic support.

   d. Provide representation at appropriate groups under the NATO CNAD, the NATO Committee for Standardization, the NATO Standardization Agency, the NATO Consultation Command and Control Board, the Senior NATO Logisticians Conference, and other groups, as required by the appropriate OSD components, and provide Military Department coordination on interoperability and standardization matters developed within NATO. Proposed U.S. positions shall be coordinated with the appropriate DoD Components.

   e. Provide representation, as required, for other international forums affecting interoperability and standardization, and provide Military Department coordination on matters developed within these groups. Proposed U.S. positions shall be coordinated with the appropriate DoD Components.

6. **CHAIRMAN OF THE JOINT CHIEFS OF STAFF.** The Chairman of the Joint Chiefs of Staff shall:
a. Identify opportunities for and impediments to improved interoperability of U.S. forces with allies and coalition partners.

b. Coordinate doctrine and operational concepts with those of U.S. allies and coalition partners to enhance materiel interoperability and standardization.

c. Ensure there is appropriate U.S. representation at materiel interoperability and standardization NATO meetings and other applicable international military meetings.

d. Ensure that the combatant commands actively support the pursuit of interoperability and standardization with allies and coalition partners through validated and approved capabilities documents (Reference (d)) throughout the Defense Acquisition Management System (Reference (e)).

e. Validate that capabilities are interoperable with allies and coalition partners. Ensure that all special operations forces (SOF) weapons systems capability needs are reviewed by the U.S. Special Operations Command to ensure that SOF techniques, tactics, or capabilities are not transmitted to governments or enemies sympathetic to the overthrow of the United States, as verified by the Department of State.

f. Advise the Secretary of Defense on interaction between international interoperability efforts and national military force goals, planning, and programs.

7. COMMANDERS OF THE COMBATANT COMMANDS. The Commanders of the Combatant Commands, through the Chairman of the Joint Chiefs of Staff, shall:

a. Identify opportunities for and impediments to improved interoperability of U.S. forces with allies and coalition partners.

b. Coordinate doctrine and operational concepts and requirements harmonization with U.S. allies and coalition partners.

c. Ensure there is appropriate U.S. representation at materiel interoperability and standardization NATO meetings and other applicable international military meetings.

d. Pursue materiel interoperability and standardization with allies and coalition partners throughout the Defense Acquisition System (Reference (e)).
PROCEDURES

1. ACCOMPLISHING MATERIEL INTEROPERABILITY. Interoperability shall be accomplished by using joint, interagency and multinational concepts, technologies, integrated architectures, information technology, and national security systems. Interoperability shall also be accomplished by compliance with Reference (i) and DoDD 8000.1, DoDD 8100.1, DoDI 8110.1, DoDD 3000.05, Directive-Type Memorandum 04-006, and Deputy Secretary of Defense Memorandum (References (l) through (p)).

2. ACCOMPLISHING MATERIEL STANDARDIZATION. Standardization shall be accomplished with allies and coalition partners by standardizing on like products and technologies; using common set(s) of specifications and standards; and cooperating with industry in the development of standards. Thereby standardization will improve military operational readiness by achieving interoperability of systems, subsystems, and equipment; logistics support by reducing the variety of supply items; and reliability, maintainability, and safety of systems and supplies. Standardization also promotes requirements consensus; the use of standard commercial processes, practices and competition; the reduction of total ownership costs by reducing nonstandard parts; and current systems, subsystems, and equipment modernization through insertion of new technology and parts. Standardization is accomplished in accordance with References (f) and (g).

3. INTEROPERABILITY OF FUTURE MILITARY CONCEPTS THROUGHOUT THE DEFENSE ACQUISITION MANAGEMENT SYSTEM. The Department of Defense shall consider future military concepts for multinational operations in the acquisition of all materiel intended for use by U.S. forces. These concepts may require allied and/or coalition forces to operate seamlessly as part of a U.S.-led or supported coalition in a net-centric and cooperative, reduced logistics footprint environment. In this environment, operational effectiveness shall depend increasingly on the ability of U.S. forces, allies, and coalition forces to rapidly share information, equipment, and consumables in response to changing battlefield conditions. Therefore, the Department of Defense shall pursue interoperability and standardization and address export considerations with allies and coalition partners throughout the Defense Acquisition Management System under References (e) and (f). Interoperability and export feasibility shall be considered:
   
a. During the materiel solution analysis and technology development phases of pre-systems acquisition, through:

   (1) International forums.

   (2) Personnel exchanges under DoDD 5230.20 (Reference (q)).
(3) Information exchanges under DoDI 2015.4 (Reference (r)).

(4) Studies, including the analysis of alternatives under Reference (e).

(5) Project agreements, annexes, or arrangements under DoDD 5530.3 (Reference (s)).

(6) Procedures or streamlined procedures authorized by Enclosure 10 of Reference (e).

(7) Other activities that facilitate and provide early joint technology and capability definition, development, experimentation, refinement, testing and transition, examples of which are found in Enclosure 3 of Reference (e).

b. During the engineering and manufacturing development and demonstration phase of systems acquisition, or earlier, through:

(1) The procurement or modification of commercially available products and technologies from international sources or the additional production or modification of allied military systems or equipment under Reference (d).

(2) Cooperative research and development under authorities such as section 2767 of title 22, U.S.C. (Reference (t)), and sections 2350a and 2358 of Reference (c).

(3) International cooperative testing, testing of foreign non-developmental items, and reciprocal testing under section 2796d of Reference (t) and sections 2350a(g) and 2350l of Reference (c).

(4) Programs providing interoperability for coalition operations, including, but not limited to, the Coalition Warfare Management Plan - 2010-2011 (Reference (u)) and joint capability technology demonstrations.

(5) Compliance with applicable U.S. ratified materiel international standardization agreements (Reference (f)).

c. During the production and deployment phase of systems acquisition through:

(1) Cooperative production conducted with a partner nation under a cooperative international agreement, and featuring a division of labor. Final assembly may be conducted by one or more of the partners. Most cooperative production programs naturally evolve from earlier cooperative development phase agreements.

(2) FMS of military systems or equipment and support involving the use of FMS procedures and commercial licenses to transfer to a foreign nation, under DoD Manual 5105.38-M (Reference (v)), the ability to produce U.S. defense articles developed and fielded by the Department of Defense. Anti-tamper measures during the acquisition process need to be considered to provide allies with U.S. origin defense articles developed and fielded by the Department of Defense.
(3) Direct commercial sales of military systems, equipment, and support and licensed co-production involving the use of munitions export licenses to enable U.S. companies to transfer to foreign governments or foreign companies the ability to produce U.S. defense articles under Reference (v).

(4) Purchases of foreign military systems or equipment or foreign industrial participation in a U.S. defense production program.

d. During the operations and support phase of sustainment, through procurement of items that conform to applicable U.S. ratified materiel international standardization agreements (Reference (f)); cooperative logistics including cooperative logistics supply support arrangements (Reference (i)); and logistics support acquired or transferred under DoDD 2010.9 (Reference (w)).

4. NATO COMMITMENTS. NATO commitments are imperative. The need for U.S. forces to meet worldwide commitments does not diminish the importance of maximizing interoperability and standardization of systems within NATO by entering into cooperative projects under section 2767 of Reference (t) and sections 2350(a) and 2358 of Reference (c). NATO’s Alliance’s Strategic Concept (Reference (x)) and Comprehensive Political Guidance (Reference (y)) makes Alliance interoperability and standardization essential. NATO members and Partnership for Peace countries are likely to be future coalition partners.

5. RDP MOUs. RDP MOUs with NATO member nations and other allied and friendly governments are intended to promote standardization, rationalization, and interoperability of military equipment in accordance with Joint Publication 3-16 (Reference (z)).

a. RDP MOUs establish procurement principles and procedures that provide for transparency in the conduct of defense procurements, and enhance access for each country’s industry to the other country’s defense market by removing discriminatory barriers to purchase of defense supplies, services, and articles to the extent mutually beneficial and consistent with national laws and regulations and international obligations.

b. Based on the RDP MOU, each country affords the other certain benefits on a reciprocal basis. DoD classifies RDP MOU partners as “qualifying countries,” and the DoD Federal Acquisition Regulation Supplement (Reference (aa)) accords them special treatment, including provision for duty-free entry of goods delivered under defense contracts and considering them compliant sources for components that contain specialty metals, for purposes of the specialty metals restriction (see section 2533b of Reference (c)).

c. Blanket public interest exceptions to Chapter 1, sections 10a-d of title 41, U.S.C. (Reference (ab), also known as the Buy American Act) are usually, but not necessarily, made by the Secretary of Defense for RDP MOU partner countries.