



Overview of Defense Standardization Program

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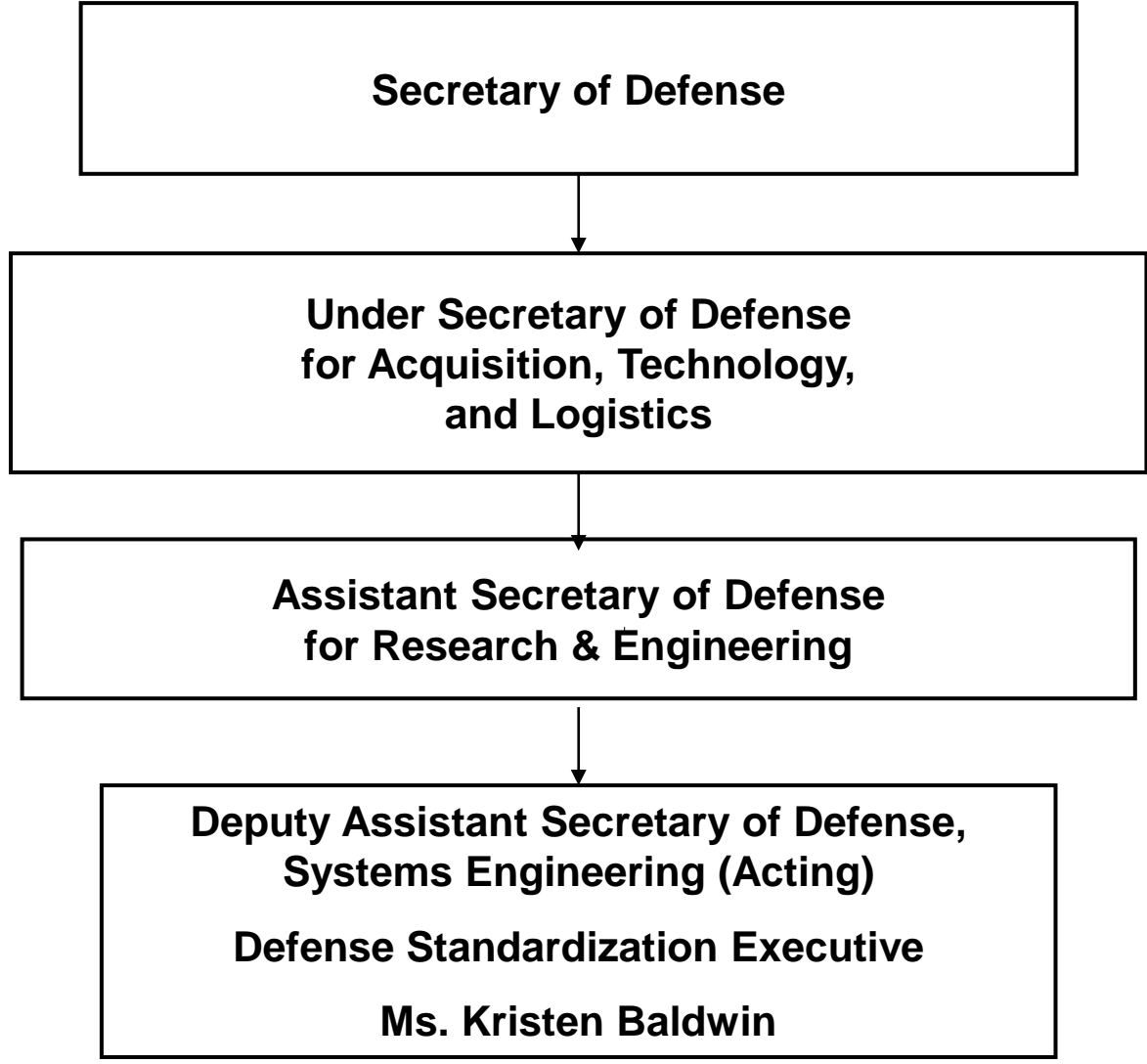
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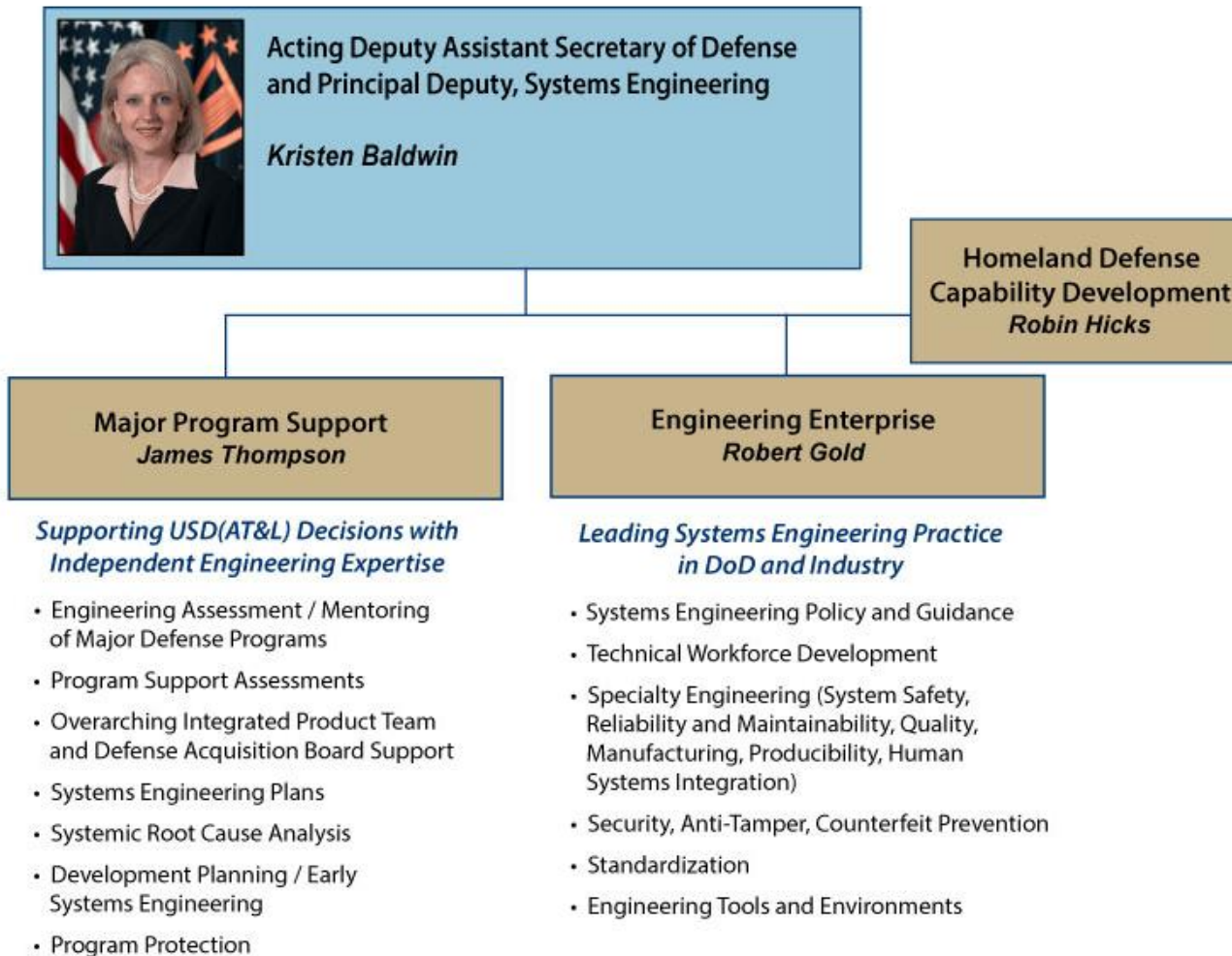


Defense Standardization Program Policy Responsibilities





Systems Engineering Organization





Defense Standardization Council



Senior Level Policy and Strategic Direction



Standardization Executives



OSD – Ms. Kristen Baldwin

Army – Mr. Nathan Godwin

Navy – Dr. John Burrow

Air Force – Mr. Jeffrey Stanley

DLA – Ms. Edilia Correa

DISA – Mr. Sherman Charles

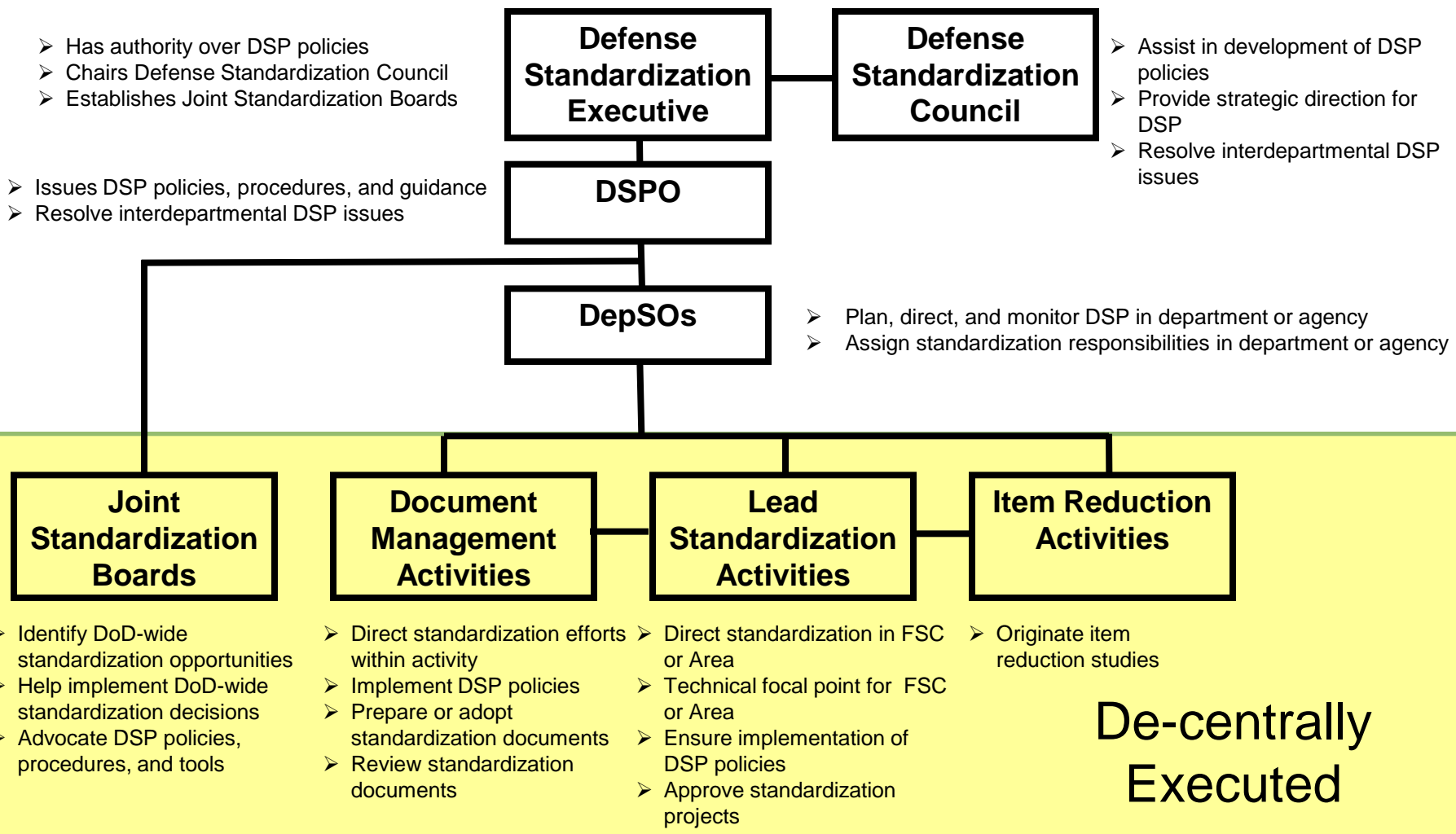
NSA – Mr. Frank Goss





DSP Management Structure

Centrally Managed



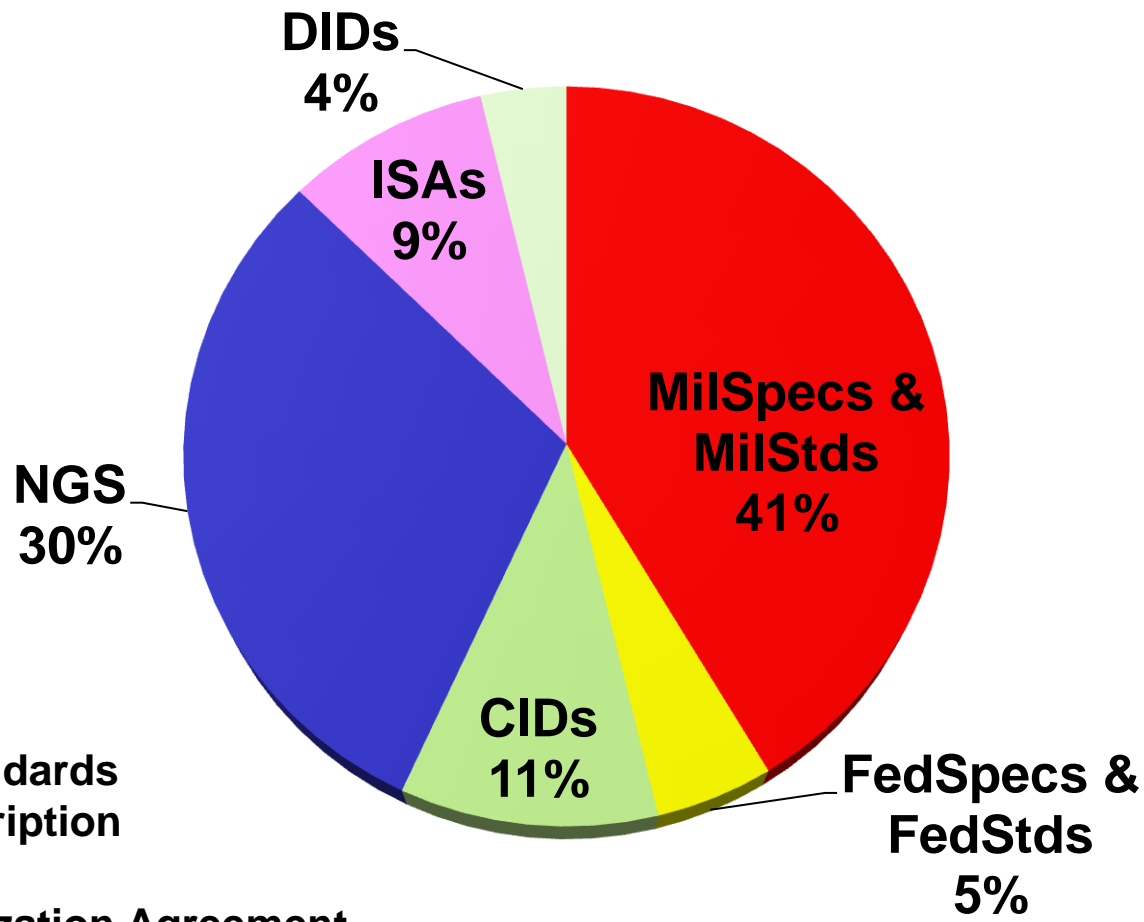
De-centrally Executed



Types of Standardization Documents Used by the DoD



28,957 Active Documents as of February 2017



NGS = Non-Government Standards
CID = Commercial Item Description
DID = Data Item Description
ISA = International Standardization Agreement



Defense Standardization Program Office (DSPO) Provides Support



TOOLS	TRAINING AND EDUCATION	JOINT AND SERVICE SPECIFIC EFFORTS	COALITION EFFORTS	STANDARDS DEVELOPMENT ORGANIZATIONS
<ul style="list-style-type: none"> • Acquisition Streamlining and Standardization Information System (ASSIST) • Government Industry Data Exchange Program (GIDEP) • Diminishing Manufacturing Sources and Material Shortages (DMSMS) Knowledge Sharing's Portal • Guide Books • Weapon System Information Tool (WSIT) 	<ul style="list-style-type: none"> • Defense Standardization Annual Conference • DAU Led Courses • Continuous Learning Modules • Defense Standardization Program Journal • DSPO Led Courses • Case Studies • Industry Conferences <ul style="list-style-type: none"> • AIA • Aging Aircraft • DMSMS • ARSSG 	<ul style="list-style-type: none"> • Defense Standardization Council • Joint Standardization • Boards • Annual Defense Standardization Program Awards • Parts Managements & Qualification 	<ul style="list-style-type: none"> • NATO – operational, materiel, and administrative standards • ABCA - Australia, Britain, Canada, America – mostly land based standards • AUSCANZUKUS - Australia, Canada, New Zealand, United Kingdom, USA – mostly naval standards • ASIC - Air and Space Interoperability Council • CCEB - Combined Communication Electronics Board 	<ul style="list-style-type: none"> • ANSI - American National Standards Institute • ISO – International Standards Organization • IEC – International Electrotechnical Commission • ASTM International • SAE - Society of Automotive Engineers • AIA – Aerospace Industries Association • AIAA – American Institute of Aeronautics and Astronautics • IEEE – Institute for Electrical and Electronic Engineering



DSP Tools Help Program Offices To:



- **Select most appropriate requirements for their application - ASSIST**
 - Provides a way to search for and download Mil Specs and Stds, create custom reports, contact key DoD personnel, and monitor standardization projects. An Alert Service notifies users when changes are made to--or planned for--documents of interest. This management system supports DoD Standardization in establishing projects, coordinating documents, obtaining project and document numbers, and submitting documents for indexing. It is a portal for DoD users to access such applications as the Program Manager's Tool (PMT) and Weapon Systems Impact Tool (WSIT).
- **Mitigate risks of unavailability of obsolete products - GIDEP**
 - Provides web access to fact-based information from across the federal government and its industry partners on non-conforming parts and processes (faulty, defective, fraudulent, counterfeit); DMSMS (obsolescence notices and solutions); a variety of engineering, reliability and maintainability databases; and metrology and calibration information. Also, provides access to a network of subject matter experts on above topics throughout government and industry. GIDEP's mission is to enhance safety and readiness and reduce total ownership cost across the research, development, acquisition and support lifecycle.
- **Respond to changes in technology - WSIT**
 - Provides cross reference information relating Specifications and Standards to the weapon systems they support.



DSPO Guidebooks Provide Helpful Procedures



- **SD-2 – Buying Commercial and Non Developmental Items** provides guidance on the technical aspects of specifying, researching and buying commercial and NDI products to meet Defense needs at lowered developmental, reliability, and cost risk.
- **SD-9 – DoD Interaction with Non Government Standards Bodies** provides guidance on effective participation with NGSBs and on adoption of industry standards such as ASTM, SAE, IEEE, AIA, ASME, and 90 others.
- **SD-19 –Parts Management Guide** provides advice and guidance on establishing effective parts management programs to reduce logistics footprint and life cycle costs.
- **SD-21 – Specifications Mandated for Use** lists and provides reference information on Specs and Standards mandated for use by law, executive order, or DoD direction.
- **SD-22 - The DMSMS Guidebook** is a compilation of the best proactive practices from across the DOD for managing the risk of obsolescence. The guidebook addresses both electrical and mechanical parts obsolescence issues. Program Managers should make this guidebook the desktop reference to quickly pinpoint key actions required in managing DMSMS issues and concerns.
- **SD-23 – Item Reduction Program** provides guidance for eliminating duplicative items from DoD stock.

This is a sampling; visit the DSP website for the full set of SDs.



Training Covers a Range of Topics



- **DAU Courses**
 - PQM 103, "Defense Specification Management"
 - PQM 104, "Specification Selection and Application"
 - PQM 202, "Commercial and Nondevelopmental Item Acquisition"
 - PQM 203, "Preparation of Commercial Item Descriptions"
 - PQM 212, "Market Research"
- **DAU Continuous Learning Modules**
 - DMSMS
 - Others being developed



Case Studies Provide Examples



- **Navy Self-Contained Breathing Apparatus**
- **Aircraft Batteries and Components**
- **Army Battery Standardization**
- **Hull Mechanical and Electrical Equipment Standardization Program**
- **Army Tactical Vehicle Blackout Light**
- **The Virginia Class Submarine Program**
- **Common Air Defense Interrogator**
- **Consolidated Acquisition of Standards-Related Information**
- **Obsolescence Management for Virginia-Class Submarines**
- **Alternative Sustainable Plating for Electrical Connectors**
- **Common Parts Catalog for Industry Shipyards**



Joint Standardization Boards Benefit Services and the Department



- **Responsible for defining enterprise-wide standardization objectives and strategies for a designated commodity area**
- **Current Joint Standardization Boards (JSB)**
 - Aerial Refueling Systems
 - Intermodal Equipment
 - Medical Materiel/Equipment
 - Microcircuits and Semiconductors
 - Mobile Electric Power (MEP) Generating Sources
 - Tactical Rigid Wall, Soft, and Hybrid Shelters



NATO Standardization Supports Coalition Interoperability



- **NATO Committee for Standardization – Support Head Of Delegation.**
- **Allied Committee 327 – Life Cycle Systems Management – Head Of Delegation**
- **Standardization Management Group – Chair**
 - AAP-03 Writing Team
 - Standardization Strategy
- **Standardization Within NATO Training Course for US participants.**



DSPO Represents DoD at Standards Developing Organizations



- **ANSI – American National Standards Institute**
 - Committee on Education
 - Conformity Assessment Policy Committee
 - Executive Standards Council
 - US National Committee of the International Electrical Technical Commission
 - Board of Directors
 - Gov Forum
- **ASTM International**
 - Board of Directors – Past Chairman
 - Committees on: Corrosion, Aerospace, Unmanned Aerial Systems
- **SAE International – Society of Automotive Engineers**
 - Aerospace Council
 - Technical Standards Board
 - Board of Directors
 - Aerospace VP
- **Institute for Electrical and Electronics Engineers**
 - Board of Governors – Past member
- **AIA – Aerospace Industries Association**
 - Strategic Standardization Forum for Aerospace
- **PRI – Qualification Policy Management Committee**
- **AIAA – Standards Executive Council**
- **Society of Manufacturing Engineering**
- **Standards Engineering Society**



Ongoing Activities related to NDAA for FY 2017, Section 875



Performance Specifications and Standards



Section 875. (a) “The Secretary of Defense shall ensure that the Department of Defense uses performance and commercial specifications and standards in lieu of military specifications and standards...”

Federal and DoD Policy already requires use of performance specifications and limits use of military specifications:

- DoD Directive 5000.01, Defense Acquisition System – paragraph E1.1.16
 - “When using performance-based strategies, contract requirements shall be stated in performance terms, limiting the use of military specifications and standards to Government-unique requirements only.”
- DoD Manual 4120.24, Defense Standardization Program Procedures
 - Enclosure 4, paragraph 7, “Pursuant to DoDD 5000.01, requirements must be written in performance terms. SD-15 provides guidance on writing performance requirements.”
 - Enclosure 7, paragraph 1.f gives preference to performance specifications



Performance Specifications and Standards

(Continued)



- **FAR paragraph 11.101(a) on Order of Precedence for Requirements Documents already requires this**
 - “(a) Agencies may select from existing requirements documents, modify or combine existing requirements documents, or create new requirements documents to meet agency needs, consistent with the following order of precedence:
 - (1) Documents mandated for use by law.
 - (2) Performance-oriented documents
 - (3) Detailed design-oriented documents.
 - (4) Standards, specifications and related publications issued by the Government outside the Defense or Federal series for the non-repetitive acquisition of items.”



Non-Government Standards



Section 875. (a) “The Secretary of Defense shall ensure that the Department of Defense uses performance and commercial specifications and standards in lieu of military specifications and standards...”

Public Law, OMB Circular, and DoD Direction Already require use of non-government standards – and we’re quite successful at it:

- **Public Law 104-113, “National Technology Transfer and Advancement Act,” March 7, 1996, Section 12(d) already requires this**
 - Preference for developing and using non-government standards instead of government specifications and standards
- **OMB Circular A-119, Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities**
 - all Federal agencies must use voluntary consensus standards in lieu of government-unique standards in their procurement and regulatory activities



Non-Government Standards

(Continued)



- Federal Acquisition Regulation (FAR) paragraph 11.101(b) on Order of Precedence for Requirements Documents already requires this
 - “In accordance with OMB Circular A-119, “Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities,” and Section 12(d) of the National Technology Transfer and Advancement Act of 1995, Pub. L. 104-113 (15 U.S.C. 272 note), agencies must use voluntary consensus standards, when they exist, in lieu of Government-unique standards, except where inconsistent with law or otherwise impractical.”
- DoD policy in DoD Instruction 4120.24, Defense Standardization Program (DSP) already requires this
 - Implements the OMB Circular and Public Law 104-113
- DoD has adopted over 8300 non-government standards



Other Efforts Implementing Intent of FY17 NDAA, SEC 875



- Under MilSpec Reform (1994-2000), over 29,000 military specifications and standards were assessed
 - 6100 military specifications and standards were canceled without replacement
 - 3500 military specifications and standards were superseded by non-government standards, performance specifications, commercial item descriptions, or guidance handbooks
- Defense Standardization Council (DSC) jointly reviewed and decided fate of 110 military specifications and standards identified by 1994 Coopers & Lybrand study as cost drivers
 - 85 documents were canceled or superseded by non-government standards, performance specifications, or guidance handbooks
 - Only DSC can authorize reinstatement of these documents
- Since 1995, DSC has authorized reinstatement of only 3 military standards



Limit Use of Military Specifications



- SEC. 875. (b)(1) Mil Specs shall be used only when there is no acceptable non-Government standard
- Federal Acquisition Regulation (FAR) paragraph 11.101(b) on Order of Precedence for Requirements Documents already requires this
 - “In accordance with OMB Circular A-119, “Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities,” and Section 12(d) of the National Technology Transfer and Advancement Act of 1995, Pub. L. 104-113 (15 U.S.C. 272 note), agencies must use voluntary consensus standards, when they exist, in lieu of Government-unique standards, except where inconsistent with law or otherwise impractical.”
- DoD policy in DoD Instruction 4120.24, Defense Standardization Program (DSP) already requires this
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Limit Use of Military Specifications



- **Sec. 875 (b)(2) Waiver - ...for the use of Mil Specs...approved by MDA, SAE, or USD(AT&L)**
 - Implementation under review
- **Policies, Processes and Practices implemented under Acq Reform provide controls:**
- **Defense Standardization Council (DSC) created to oversee standardization**
 - Provides senior management oversight and direction for implementing the Defense Standardization Program and other initiatives related to DoD specifications and standards.
 - Chaired by Deputy Assistant Secretary of Defense (Systems Engineering)
 - Participants are senior officials designated by Military Departments and Defense Agencies as Component Standardization Executives.
 - Review of existing documents required every 5 years (matches ANSI Best Practice) for need, adequacy and accuracy



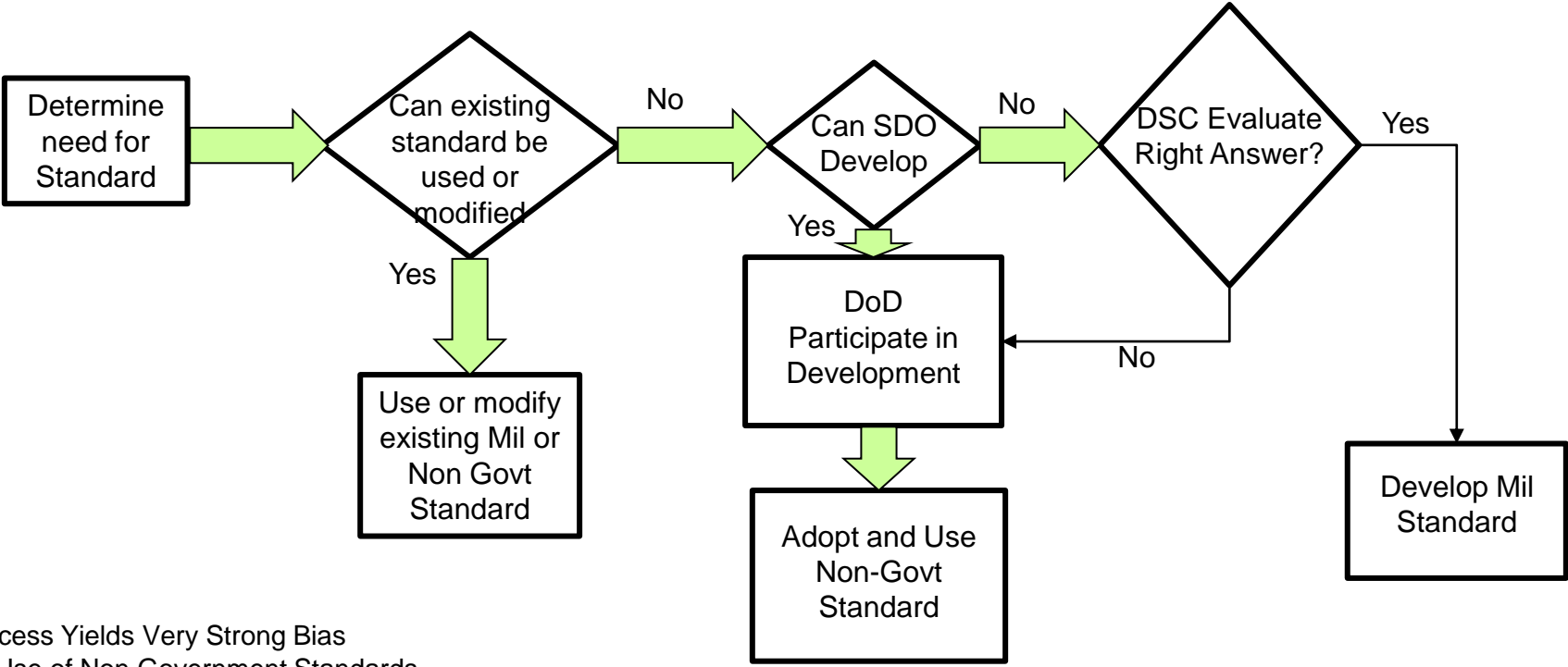
Defense Standardization Governance



- DSC oversees processes to validate need for new or reinstated military standards
 - Military standards canceled by DSC decision can only be reinstated by DSC
 - Military standards canceled by Component Standardization Executive (CSE) can be reinstated by that CSE or by DSC decision
 - New military standards with DoD-wide application must be approved jointly by DSC
 - E.g., MIL-STD-3023, High-Altitude Electromagnetic Pulse Protection for Military Aircraft
 - New military standards with Service-unique application may be approved by CSE
 - E.g., MIL-STD-3036, USAF Aircraft Arresting Systems Test Method
 - E.g., MIL-STD-3045, U.S. Navy Surface Ship Machinery Arrangements
- From 2010-2016, only 15 new military standards have been approved



Process to Address Standardization Needs Overseen by the Defense Standardization Council



Process Yields Very Strong Bias for Use of Non Government Standards



Examples of Standards Governance Process



- DSC determined need for systems engineering standard for consistent requirements across programs
 - Research indicated IEEE 15288 standard nearly met DoD requirements.
 - DSC established working group to work with industry on existing IEEE technical committee to develop IEEE 15288.1 to satisfy requirements gap.
 - DoD adopted IEEE 15288 and 15288.1.
- DSC determined need for technical reviews and audits standard for consistent requirements across programs
 - Research indicated that a non-government standard did not exist.
 - Several Standards Developing Organizations (SDOs) contacted to determine interest and capability to develop standard.
 - IEEE selected to form government-industry committee to develop new standard IEEE 15288.2.
 - DoD adopted IEEE 15288.2.



Examples of Standards Governance Process



- DSC determined need for configuration management standard for consistent requirements across programs
 - Research indicated EIA 649 standard nearly met DoD requirements.
 - DSC established working group to work with industry on existing SAE International committee to develop EIA 649-1 to satisfy requirements gap.
 - DoD adopted SAE EIA 649-1.
- DSC determined need for manufacturing management standard for consistent requirements across programs
 - Research indicated that a non-government standard did not exist.
 - Several SDOs contacted to determine interest and capability to develop standard.
 - SAE International was selected to form a government-industry committee to develop a new standard SAE AS 6500.
 - DoD adopted AS 6500.



Revise DFARS



- SEC. 875. (c) USD(AT&L) “shall revise the Defense Federal Acquisition Regulation Supplement (DFARS) to encourage contractors to propose non-government standards...”
- FAR Contract Clause 52.211-7 already requires this
 - “The Offeror may propose voluntary consensus standards that meet the Government’s requirements as alternatives to the Government-unique standards. The Government will accept use of the voluntary consensus standard instead of the Government-unique standard if it meets the Government’s requirements unless inconsistent with law or otherwise impractical.”



Development of Non-Government Standards



SEC 875. (d) – The USD(AT&L) “shall form partnerships with appropriate industry associations to develop non-government standards for replacement of military standards where practicable.”

- DoD already participates in over 120 private sector Standards Developing Organizations, such as ANSI, ASME, ASTM, IEEE, ISO, SAE, etc
- Over 1700 military and federal specifications and standards have been canceled and superseded by SAE standards
- Over 500 military and federal specifications and standards have been canceled and superseded by ASTM standards



Training



SEC 875. (e) – USD(AT&L) “shall ensure that **training** and education programs throughout the Department are revised to incorporate specifications and standards reform.”

- Since 1994, over 13,000 DoD personnel trained in development and use in non-government standards and performance specifications.
- Defense Acquisition University already has online course, CLE 065, Standardization Documents, that emphasizes preference for using non-government standards and performance specifications.



Licenses for Access to Non-Government Standards



SEC 875. (f) - The Under Secretary of Defense for Acquisition, Technology, and Logistics shall negotiate licenses for standards to be used across the Department of Defense.

- DoD has not implemented this. The Defense Standardization Council has identified this as an opportunity that could benefit the Department.



*For more
information:
<http://www.dsp.dla.mil/>*



Defense Standardization: Critical to Defense Acquisition



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<http://www.dsp.dla.mil/>