ANSI's Role in Standards Coordination to Support



Vice President for Government Relations and Public Policy American National Standards Institute

1918 - 2018

Emerging Technologies

Mary H. Saunders

July 10, 2018

Defense Standardization Program Office Workshop



American National Standards Institute (ANSI)

- is to enhance U.S. global competitiveness and the American quality of life by promoting, facilitating, and safeguarding the integrity of the U.S. voluntary standardization system
- labor organizations
- (IEC)





Founded in 1918, <u>ANSI</u> is a private non-profit membership organization whose mission

ANSI members include businesses, professional societies and trade associations, standards developing organizations (SDOs), government agencies, and consumer and

Official U.S. representative to the International Organization for Standardization (ISO) and, via the U.S. National Committee, the International Electrotechnical Commission





ANSI's Roles

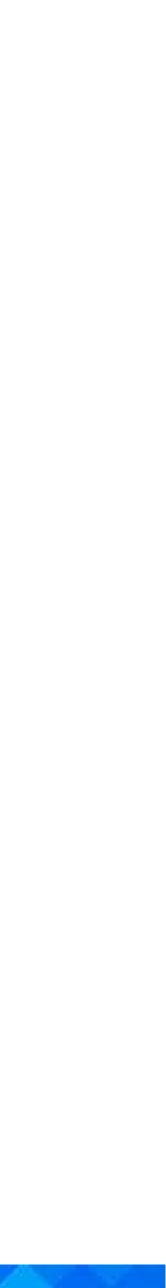
- Represents U.S. globally
- Accredits standards developing organizations (SDOs) and approves American National Standards
- Accredits / approves technical advisory groups (mirror committees) for ISO / IEC technical work

Accredits conformity assessment bodies



Provides education and training services

- Offers neutral forum for discussing standards needs and priorities
- Serves as a bridge between U.S. public & private sectors
 - Ensures integrity of the standards and conformity assessment system
 - ANSI doesn't develop standards



Examples of ANSI-accredited SDOs

ASTM IEEE International ASTM INTERNATIONAL IAPMO AAMI American Society of NSF Mechanical International SETTING THE STANDARD Engineers American Society SAE of Civil International AMERICAN SOCIETY OF CIVIL ENGINEERS Engineers







National Fire Protection Association





National Electrical Manufacturers Association







NSF®

UL





International Code Council



And more than 200 additional organizations

Collaboratives Overview



Benefits of Standards and Conformance to Standards – Key for New Technologies

- Spur innovation and drive business growth
- Enable interoperability of products, processes, and systems
- Lower research and development costs
- Promote quality and efficiency throughout global supply chains
- Reduce time to market

ANSI

- Protect safety, health, and the environment
- Reduce liability and regulatory compliance risks
- Demonstrate that products perform as claimed
 - Create public trust and foster widespread acceptance





www.standardsboostbusiness.org



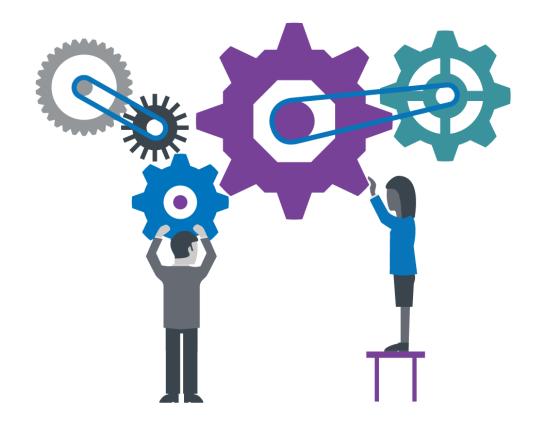
Coordination and Harmonization Activities

- ANSI Standards Panels, Collaboratives, and Workshops are cross-sector coordinating activities established to promote the development and compatibility of voluntary consensus standards and conformity assessment programs necessary to support emerging technologies and national/global priorities.
 - Coordinate the efforts of the private and public sectors
 - Identify existing standards, standards in development, and compliance programs
 - Define where gaps exist based on stakeholder needs

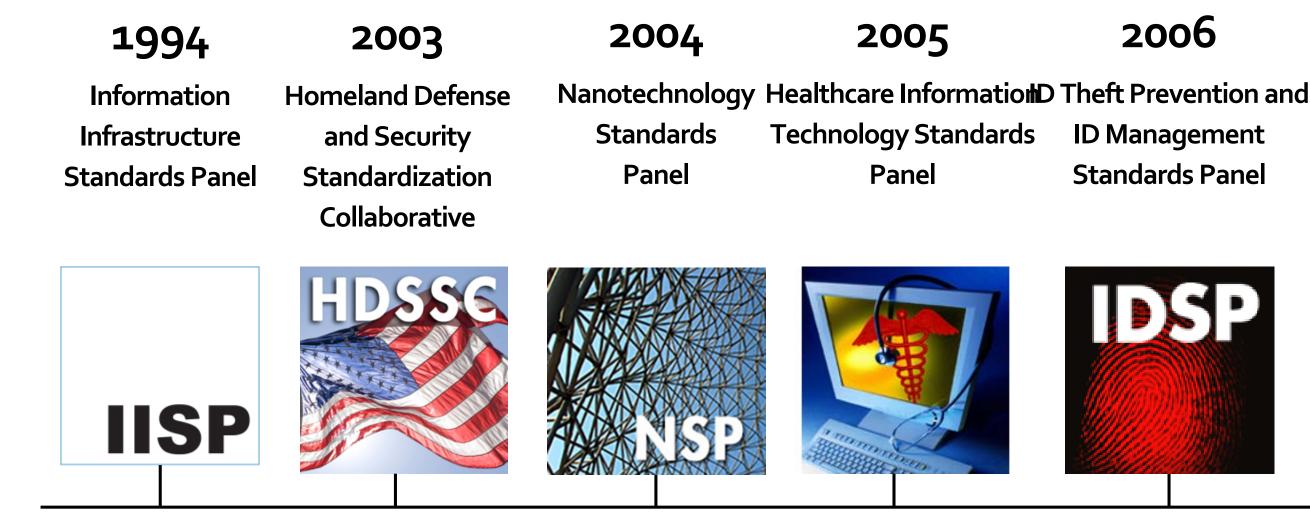
ANSI

- Recommend additional work needed, timelines for its completion, and organizations that can perform the work
- Helps to inform resource allocation for standards participation, avoid duplication of effort, and drive coordinated standards activity





ANSI Collaboratives and Workshops



2009

ANSI-NIST Nuclear Energy Standards Coordination Collaborative

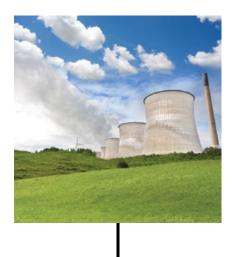


The Financial Management of Cyber Risk

2011

ANSI **Electric Vehicles Standards Panel**

ANSI **Energy Efficiency Standards Coordination Collaborative**











2007

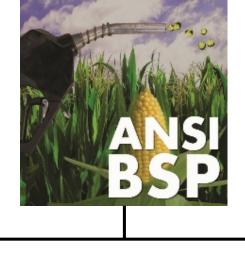
Biofuels Standards Coordination Panel

2007

ANSI Network on Chemical Regulation

2009

Workshop Toward **Product Standards for** Sustainability







2012

2013

ANSI Network: Smart and Sustainable Cities

2016

America Makes & ANSI Additive Manufacturing Standardization Collaborative

2017

Unmanned Aircraft Systems **Standardization** Collaborative





Collaboratives Overview



America Makes & ANSI Additive Manufacturing Standardization Collaborative (AMSC)

- the growth of the AM industry
- Before AMSC there was no process for identifying priorities and interdependencies in the development of standards and specifications for additive manufacturing
- A number of SDOs are engaged in standards-setting for various aspects of AM, prompting the need for coordination to maintain a consistent, harmonized, and non-contradictory set of AM standards and specifications



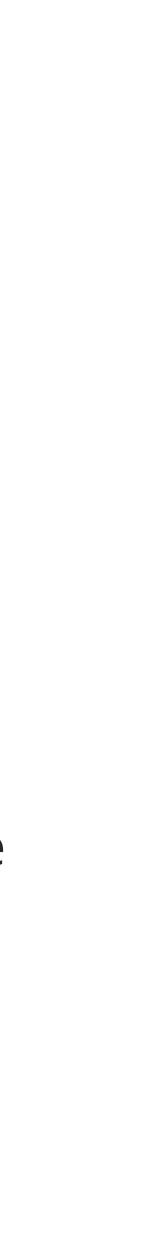


Launched in March 2016 to coordinate and accelerate the development of industry-wide additive manufacturing (AM a/k/a 3D Printing) standards and specifications to help facilitate

National Institute of Standards and Technology (NIST), U.S. Department of Defense (DoD), Federal Aviation Administration (FAA) and several SDOs were instrumental in its formation







AMSC Deliverables

- 2018)
 - Updates and expands on gaps identified in version 1.0 (February 2017)
 - Identifies existing standards and specifications, as well as those in development, assesses gaps, and makes recommendations for priority areas where there is a perceived need for additional standardization
- **AMSC Standards Landscape**

ANSI

- A list of standards that are directly or peripherally related to the issues described in the roadmap
- Both available as free downloads at <u>www.ansi.org/amsc</u>



AMSC Standardization Roadmap for Additive Manufacturing, Version 2.0 (June



ANSI Unmanned Aircraft Systems Standardization Collaborative (UASSC)

- Launched in September 2017 to coordinate and accelerate the development of the standards \blacklozenge and conformity assessment programs needed to facilitate the safe integration of unmanned aircraft systems (UAS a/k/a drones) into the national airspace system of the United States, with international coordination and adaptability
- Federal Aviation Administration (FAA), Association for Unmanned Vehicle Systems International (AUVSI), and many other public- and private-sector stakeholders participated in a May 2017 exploratory meeting which indicated broad-based support to establish UASSC
- Focus is to support the growth of the UAS market with emphasis on civil, commercial, and public safety applications
- A standardization roadmap is targeted for completion by end of 2018
 - More info is available at <u>www.ansi.org/uassc</u>

ANSI



ANSI UNMANNED AIRCRAFT SYSTEMS STANDARDIZATION COLLABORATIVE (UASSC)







Consider ANSI a Resource

We're happy to discuss providing assistance to members of the community as standards coordination needs develop!

Thank You







Collaboratives Overview



For More Information

Mary H. Saunders	An
Vice President for Government Relations and Public Policy	Hea
Relations and Public Policy	189
202-331-3610	11tl
msaunders@ansi.org	Wa
	T: 2
	E. C



merican National Standards Institute

adquarters 99 L Street, NW th Floor ashington, DC 20036 202.293.8020 202.293.9287

 New York Office

 25 West 43rd Street

 4th Floor

 New York, NY 10036

 T: 212.642.4900

 F: 212.398.0023

www.ansi.org

webstore.ansi.org