ANSI
Standardization Collaboratives

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American National Standards Institute (ANSI)

◆ Founded in 1918, ANSI is a private non-profit membership organization whose mission 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

◆ ANSI represents and serves the diverse interests of more than **270,000 companies and organizations** and **30 million professionals** worldwide

   – businesses, professional societies and trade associations, standards developing organizations (SDOs), government agencies, consumer and labor organizations

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

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 through the ANSI National Accreditation Board (ANAB)

- Provides education and training services
- Offers neutral forum for coordination & identification of standards needs and priorities (ANSI Standardization Collaborative)
- Serves as a bridge between U.S. public & private sectors
- Ensures integrity of the standards and conformity assessment system
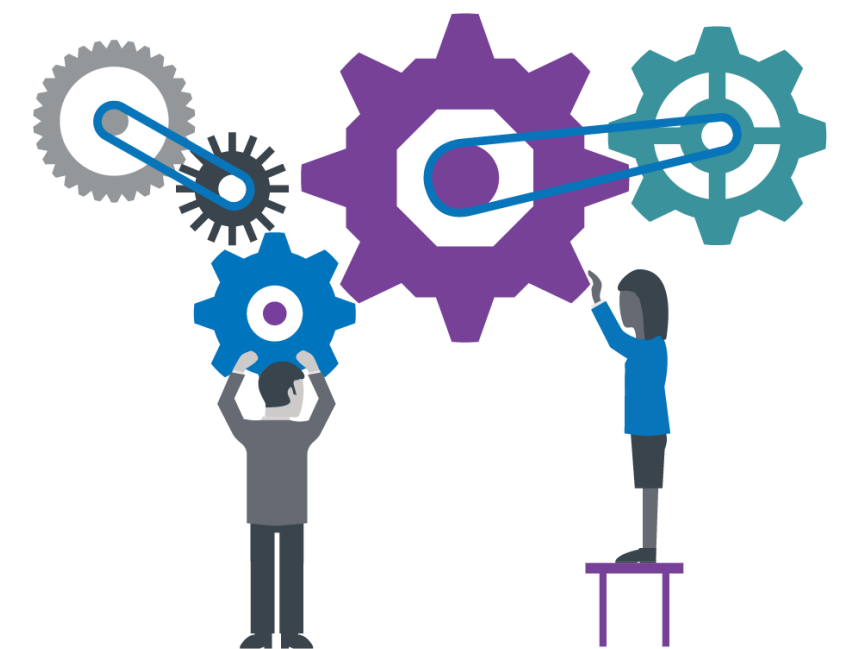- ANSI doesn't develop standards

Purposes of ANSI Include . . .
(selected excerpts from ANSI By-Laws)

◆ To serve as the national coordinating institution for voluntary standards, conformity assessment and related activities in the United States of America . . .

◆ To provide the means for determining the need for new standards and conformity assessment programs; to promote activity by existing organizations competent to resolve the need; and to work toward establishment of suitable groups for these purposes where such do not already exist

◆ To cooperate with departments and agencies of federal, state and local governments in achieving (i) optimum compatibility between government laws and regulations and the voluntary standards of industry and commerce . . .

ANSI Standardization Collaborative

◆ An ANSI **Standardization Collaborative** is a mechanism to advance cross-sector coordination in the development and compatibility of standards and conformance programs needed to support emerging technologies and national/global priorities

  – Coordinate efforts of both the private and public sectors

  – Identify existing standards and standards in development

  – Define where gaps exist based on stakeholder needs

  – Recommend additional work needed, timelines for its completion, and organizations that can perform the work

  – Help to inform resource allocation for standards participation, avoid duplication of effort, drive coordinated standards activity

ANSI Standardization Collaboratives

1994
Information Infrastructure Standards Panel

2003
Homeland Defense and Security Standardization Collaborative

2004
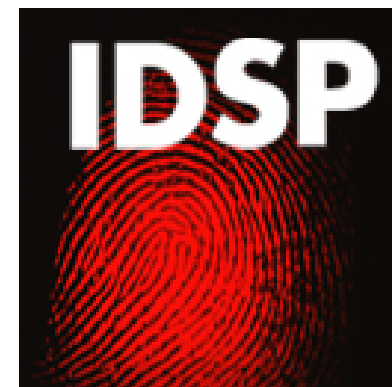Nanotechnology Standards Panel

2005
Healthcare Information Technology Standards Panel

2006
ID Theft Prevention and ID Management Standards Panel

2007
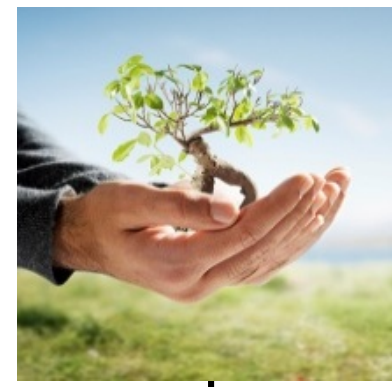Biofuels Standards Coordination Panel

2007
ANSI Network on Chemical Regulation

2009
Workshop Toward Product Standards for Sustainability

2009
ANSI-NIST Nuclear Energy Standards Coordination Collaborative

2010
The Financial Management of Cyber Risk

2011
ANSI Electric Vehicles Standards Panel

2012
ANSI Energy Efficiency Standards Coordination Collaborative

2013
ANSI Network: Smart and Sustainable Cities

2016
America Makes & ANSI Additive Manufacturing Standardization Collaborative
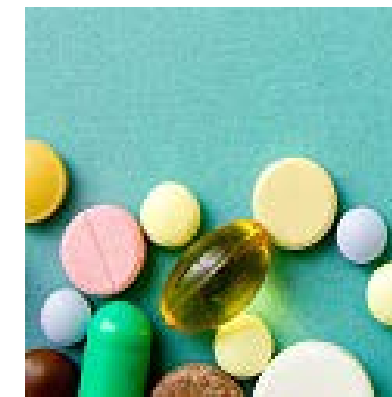
2017
Unmanned Aircraft Systems Standardization Collaborative

2018
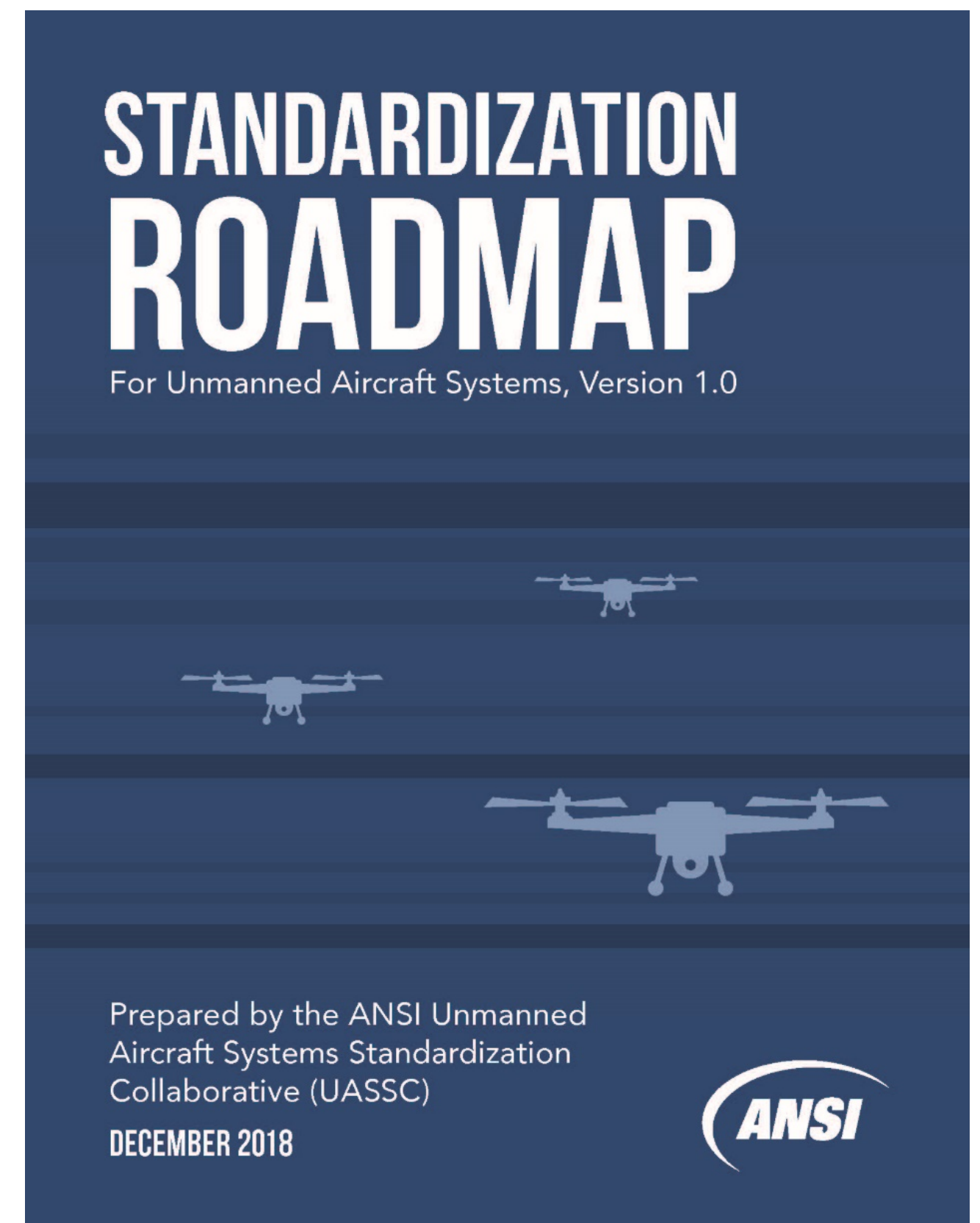Dietary Supplements Standardization Coordination Mtg.

ANSI Unmanned Aircraft Systems Standardization Collaborative (UASSC)

◆ Launched in September 2017 to coordinate and accelerate the development of the standards 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

UASSC Deliverable

◆ A comprehensive roadmap v1.0 published in December 2018 describing the current and desired standardization landscape for UAS

- 60 gaps (no published standard) identified w/accompanying recommendations

- Available as a free download at www.ansi.org/uassc

- Downloaded more than 1,650 times

- **Roadmap version 2.0 kick-off meeting took place 9/12/2019**

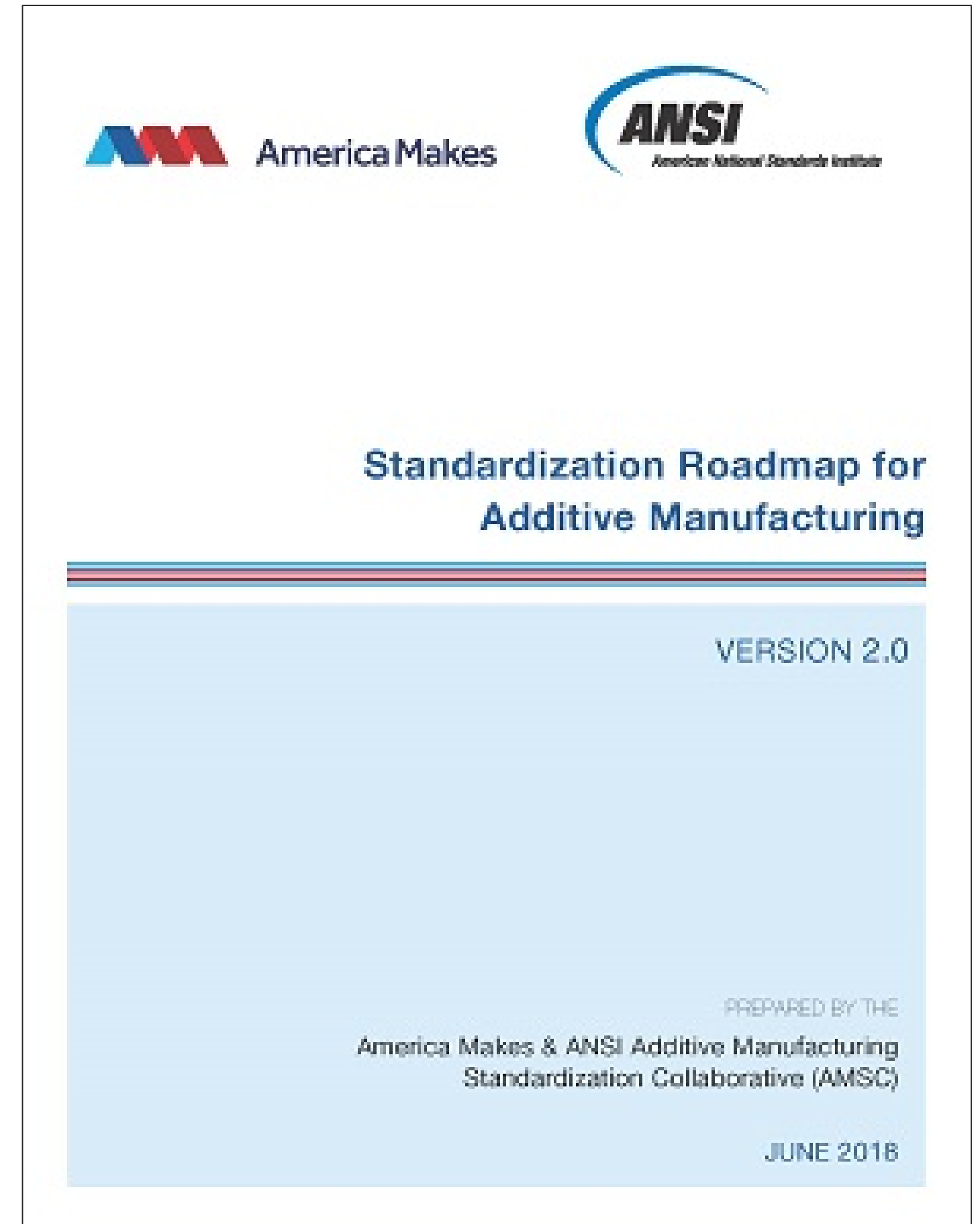- **Publication of version 2.0 in June 2020**

STANDARDIZATION ROADMAP
For Unmanned Aircraft Systems, Version 1.0

Prepared by the ANSI Unmanned Aircraft Systems Standardization Collaborative (UASSC)

DECEMBER 2018

ANSI

America Makes & ANSI Additive Manufacturing Standardization Collaborative (AMSC)

◆ 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 the growth of the AM industry

◆ 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

◆ 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

AMSC Deliverable

◆ **Standardization Roadmap for Additive Manufacturing, Version 2.0 (June 2018)**

  – 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

  – Downloaded more than 2,600 times

◆ **Standards Landscape**

  – A list of standards that are directly or peripherally related to the issues described in the roadmap

◆ **Online Gaps Portal**

  – Provides the latest updates by the SDOs to address the roadmap gaps

◆ All freely accessible at **www.ansi.org/amsc**

America Makes

ANSI
American National Standards Institute

Standardization Roadmap for Additive Manufacturing

VERSION 2.0

PREPARED BY THE
America Makes & ANSI Additive Manufacturing Standardization Collaborative (AMSC)

JUNE 2018

Participation

◆ More than 300 individuals from 175 public- and private-sector organizations involved in UASSC and AMSC individually

◆ Roadmaps well received by the community

◆ Participation open to stakeholders that have operations in the U.S.

◆ Membership in ANSI is not a prerequisite

◆ Members include:

  – Original Equipment Manufacturers (OEMs)

  – User Stakeholders – Industry and Government

  – R&D Community – Academia and Government

  – SDOs

A Standardization Roadmap

◆ Includes overviews of work in progress by government agencies, industry initiatives, SDOs

◆ Describes current and desired future standards landscape

◆ Primary focus is a gap analysis and formulation of recommendations to address gaps where standards are needed

 – A "gap" means no <u>published</u> standard exists for the issue in question

◆ Identifies priorities for action and organizations that can do the work

◆ Most of the work is done virtually via twice monthly web meetings of working groups on specific topical areas

◆ Subject matter experts draft the roadmap gap analysis

◆ Decisions are based on consensus

◆ Makes sense when multiple SDOs involved, there is a need for comprehensive analysis of issues, many which need to be addressed simultaneously

Timeline

◆ Appoint Co-Chairs and begin to constitute Steering Committee

◆ Announce initiative and do stakeholder outreach

◆ Hold a face-to-face plenary kickoff meeting

   — Approve mission statement, objectives, deliverable, timeline

   — Define working group structure

   — Breakout group discussion to identify issues to cover

◆ Appoint working group co-chairs and establish recurring call schedule

◆ Second face-to-face plenary meeting when a first draft is ready

◆ Public review and subsequent disposition of comments

◆ Copy edit and publish (roughly 1 year from kickoff meeting)

Collaborative Structure –
Role of Co-Chairs (and/or their Designees)

◆ Preside at face-to-face meetings of the Collaborative

  – Coordinate planning and scheduling with staff

◆ Preside over monthly Steering Committee calls

◆ Provide strategic direction to staff as needed

◆ Help identify potential Steering Committee members and working group co-chairs

◆ Promotion (Be the "Public face" of the initiative)

  – Speak about Collaborative activities at industry events

  – Respond to media requests in consultation with staff and ANSI's communications team

Collaborative Structure –
Steering Committee (Role & Composition)

Role

- ◆ Provide overall planning and strategic direction
  - − Commit to one call/month usually of 60 minutes duration
- ◆ Identify / recruit participants
- ◆ Hear periodic progress reports from working group co-chairs
- ◆ Ensure work stays on schedule

Composition

- ◆ Co-Chairs (Private- and Public-Sector) and Staff
- ◆ Working Group co-chairs
- ◆ At large members providing a balance of representation from affected stakeholder groups

Collaborative Structure –
Working Group Co-Chairs Role

◆ Convene and preside over WG meetings

    – Commit to two WG calls/month usually of 90 minutes duration

◆ Develop the WG's relevant sections of the roadmap

◆ Identify volunteers from the WG to help draft the document

◆ Ensure that the work proceeds according to schedule

◆ Make periodic reports on progress to the Steering Committee

ANSI Collaboratives – Ingredients for Success

◆ Demonstrated need for coordination

◆ Broad stakeholder support

◆ Clearly defined objectives, timelines, and deliverables

◆ Committed leadership and participants

◆ Stable funding mechanism

- Direct support

- Sponsorships with attendant recognition benefits

For More Information

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