### USG NATIONAL STANDARDS STRATEGY FOR CRITICAL AND EMERGING TECHNOLOGY (USG NSSCET)

Jayne B. Morrow, PhD

Senior Advisor on Standards Policy
Directors Office
National Institute of Standards and Tochn

National Institute of Standards and Technology



### LEADERSHIP OF STANDARDS





USG National Standards Strategy for Critical and Emerging Technology supports the development of federal standards policy to ensure continued U.S. global economy competitiveness and technology leadership

# DYNAMIC GLOBAL LANDSCAPE OF STANDARDS DEVELOPMENT







The future of U.S. innovation, competition, and national security is at risk



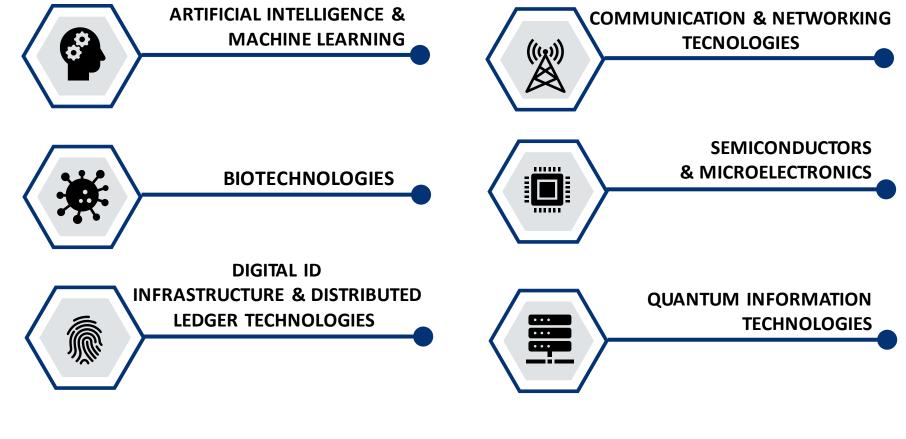
The U.S. must uphold the integrity of international standards in coordination with likeminded partners and allies



A clear vision is needed to sustain engagement in global standards-setting

# CRITICAL AND EMERGING TECHNOLOGIES IDENTIFIED IN THE USG NSSCET







#### SPECIFIC CET APPLICATIONS





Automated & Connected Infrastructure Smart cities, Internet of Things, and other novel applications



**Biobanking** 

Involves the collection, storage, and use of biological samples from individuals



**Automated & Connected Transportation** 

Autonomous vehicles, unmanned aircraft systems, automated subway systems, smart cities, internet-of-things, and other possible applications



**Electric Vehicles (EVs)** 

Standards to integrate EVs with the electrical grid



**Critical Mineral Supply Chains** 

Cross-cutting issues that are critical to enabling the development and deployment of emerging technologies and data security



**Cybersecurity & Privacy** 

Cross-cutting issues that are critical to enabling the development and deployment of emerging technologies and data security

### USG NSSCET OBJECTIVES





**Objective 1: Investment** 

**Objective 2: Participation** 

**Objective 3: Workforce** 

Objective 4: Integrity & Inclusivity

### USG NSSCET LINES OF EFFORT



## **Greater Investment in Pre- Standardization Research**



- Increase R&D funding for CETs
- Support development of standards that address risk, security, and resilience

# Participation in Standards Development



- Remove and prevent barriers to private sector participation
- İmprove communication between public and private sector
- Enhance USG representation and influence in international standards governance and leadership

#### **Workforce Development**



 Educate and empower the new standards workforce

# **Ensuring Integrity in Standards Development**



- Deepen standards cooperation with partners and allies
- Facilitate broad representation in standards development

# Implementation Planning: Listening





The U.S. Government National Standards Strategy for Critical and Emerging Technology (USG NSSCET) was released in May 2023

#### Request for Information (RFI)

- September 7 RFI seeking public input on how to best implement the Strategy.
- Seeking input on investment, participation, workforce, and integrity and inclusivity.
- Responses are due on December 22, 2023.

### Listening Sessions and Stakeholder Engagements

- NIST and the United States Patent and Trademark Office led a business roundtable on the Strategy on September 12, 2023.
- Focused on automated, connected, and electrified transportation and infrastructure.
- Additional listening sessions will be held across the country while the RFI is open.

### USG NSSCET Implementation RFI



#### **NOTE: THE RFI WILL CLOSE ON 22 DEC 2023**



**Broad questions**: Benefits, risks, and challenges faced by small- and medium-sized enterprises



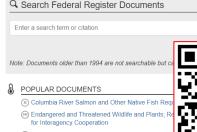
923,287 documents



**Investment:** Policies, R&D and pre-standardization budget to support standards development and encourage USG adoption of standards and demonstrated CETs.



**Participation:** Support coordination, communication, collaboration with private-sector, civil society and state and local government in participation in CET standards development



**Workforce:** Tools, resources, curricula, activities to encourage engagement and awards for increased recognition for participation in CET standards development



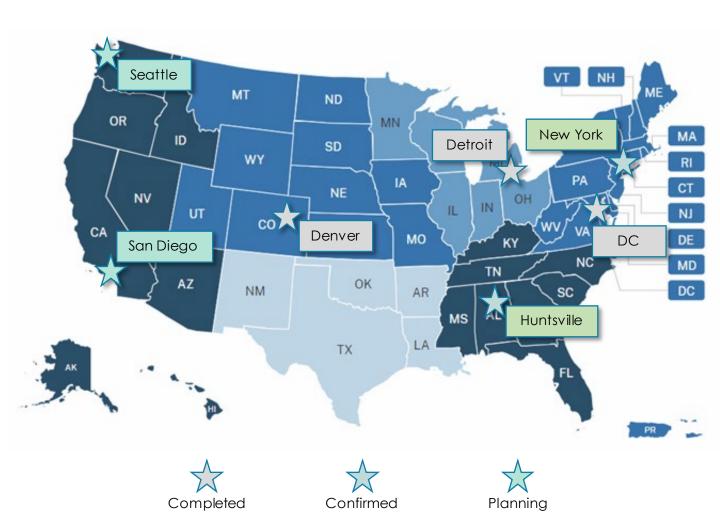


**Integrity and Inclusivity:** Support coordination, communication, and collaboration with partners and allies to reinforce TBT principles

## Listening Sessions: Locations



- Listening sessions planned around the country
- Align with the RFI to increase coordination and engagement in standards development
- Updated list on standards.gov



# Listening Sessions: Key Findings



#### Workforce

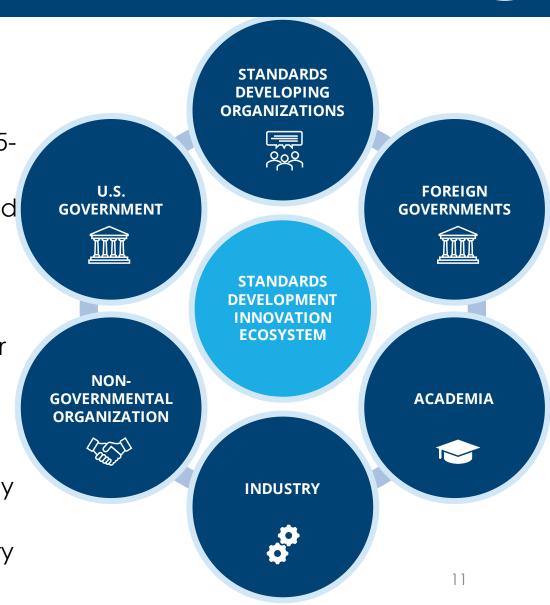
- Framing standards as a critical component to the innovation ecosystem
- Recognition and incentives for sustained engagement (5-10 years)
- Training taking research to standards vs bootcamps and skill development

#### **R&D** Coordination

- Technology convergence is a unique challenge
- Interagency coordination of CET programs and credit for standards essential to sustained standards investment

#### International Coordination

- Better coordination and support through the WTO TBT
- Need stronger engagement with industry to define policy engagement
- Establish strong coordination of standards with conformity assessment processes



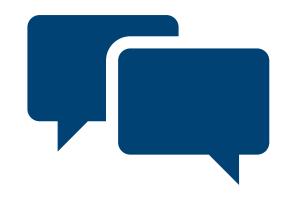
### WWW.STANDARDS.GOV



### We're Listening.

The Standards Information Center provides a gateway to navigating the dynamic U.S. and international standards landscape





The USA Enquiry Point for the World Trade Organization (WTO)



www.Standards.gov