



**UNMANNED
AIRCRAFT SYSTEMS
STANDARDIZATION
COLLABORATIVE**

OVERVIEW

Established in 2017, the ANSI UASSC's mission is to coordinate and accelerate the development of the standards and conformity assessment programs needed to facilitate the safe integration of unmanned aircraft systems (UAS)—commonly known as drones—into the national airspace system (NAS) of the United States.

The primary deliverable resulting from this initiative is a standardization roadmap describing the current and desired future standardization landscape for UAS. The goal is to foster coordination and collaboration among industry, standards developing organizations (SDOs), federal and state agencies, and others on UAS standardization issues, including pre-standardization research and development. Ultimately, the intent is to support the growth of the UAS market, with emphasis on commercial, civil, and public safety applications.

International coordination and adaptability is also key. The UASSC roadmap provides a basis for coherent and coordinated U.S. policy and technical input to regional and international audiences on UAS standardization.

The roadmap identifies published UAS standards and standards in development, as well as related conformance programs, states where gaps exist, and recommends additional standardization activity that is needed. Recommendations to address gaps are given a priority level. Organizations (SDOs, federal agencies, research organizations) that potentially can carry out the work are noted.

The UASSC itself is not developing standards. Instead, the aim is to articulate needs, drive coordinated standardization activity, minimize duplication of effort, and enable stakeholders to better focus standards participation resources.

THE DRONE MARKET



Drones are being deployed in a variety of sectors including construction, mining, agriculture, surveying, real estate, insurance, public safety, infrastructure, media and entertainment.



Technavio recently forecast a compound annual growth rate of 36% for the global commercial drones market from 2018-2022.

ANSI STANDARDIZATION COLLABORATIVES

Bring together cross-stakeholder interests from the public and private sectors to address standards and related compliance needs

Support emerging technologies and national and global priorities

Have been convened on topics as diverse as homeland security, electric vehicles, energy efficiency in the built environment, and additive manufacturing

HOW TO GET INVOLVED

Participation in the UASSC is open to UAS stakeholders that have operations in the United States. ANSI membership is not a prerequisite.

Over 400 participants are involved representing industry, government agencies, SDOs, academia, and others. See website for list of participating organizations.

The public and private sector co-chairs are:

- Earl Lawrence, Director of the UAS Integration Office, Federal Aviation Administration (FAA)
- Brian Wynne, President and CEO, Association for Unmanned Vehicle Systems International (AUVSI)

The UASSC is organized into four working groups that hold virtual meetings twice a month:

WG1 - Airworthiness

- Covers aircraft systems and communications with the ground control station
- Topics include: design and construction; safety; quality assurance; avionics; command and control link; navigational systems; detect and avoid systems; software dependability and approval; cybersecurity; maintenance and inspection

WG2 - Flight Operations and Personnel Qualifications

- Covers general flight planning and operational concerns, plus personnel training, qualifications, and certification standards
- Topics include: operational risk assessment; BVLOS; operations over people; data handling and processing; UTM; remote ID and tracking; geo-fencing; terminology; manuals; flight crew; maintenance technicians; compliance/audit programs

WG3 - Critical Infrastructure and Environment

- Covers specific operational concerns for vertical, linear, and wide area environment infrastructure inspections, precision agriculture, and commercial package delivery
- Topics include: inspections of boilers and pressure vessels; cranes; building facades; low-rise residential and commercial buildings; communications towers; railroads; power transmission lines; pesticide application; livestock monitoring

WG4 - Emergency and Medical Response

- Covers specific operational concerns for conducting public safety operations
- Topics include: hazardous materials incident response and transport; tactical operations; forensic investigations photogrammetry; search and rescue missions; response robots; counter UAS

FOR MORE INFORMATION, VISIT WWW.ANSI.ORG/UASSC

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