



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
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Bundesamt für Zivilluftfahrt BAZL
Innovation & Digitalization

UTM

Regulation and Open Source



The big picture





What government can talk about

- Market power
- Externalities
- Information asymmetry
- Capability failures



Industry standards





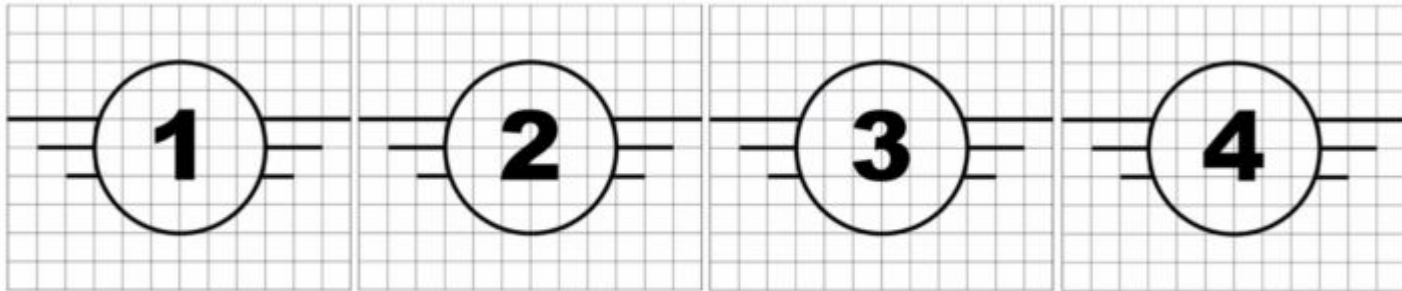
Acceptable Means of Compliance



Software Considerations in Airborne Systems and Equipment Certification

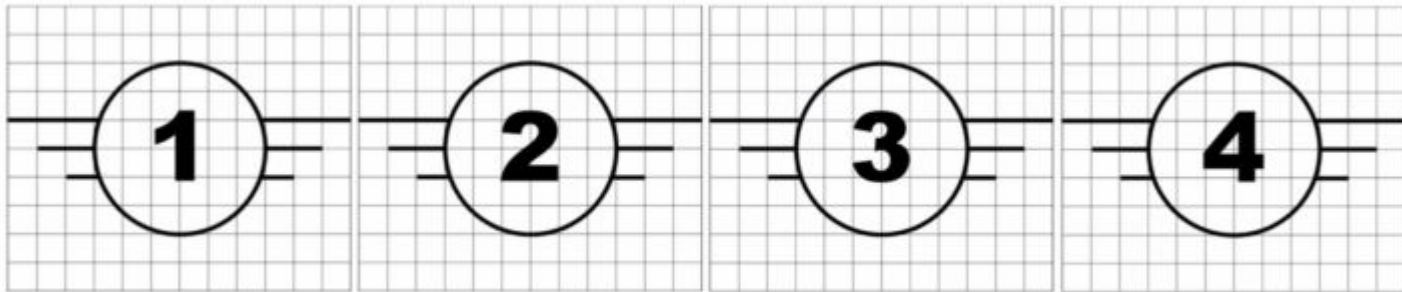


Regulatory Standards





Regulating Standards



has a physical serial number compliant with standard ANSI/CTA-2063 Small Unmanned Aerial Systems Serial Numbers





**UTM does not exist,
but it's already here.**

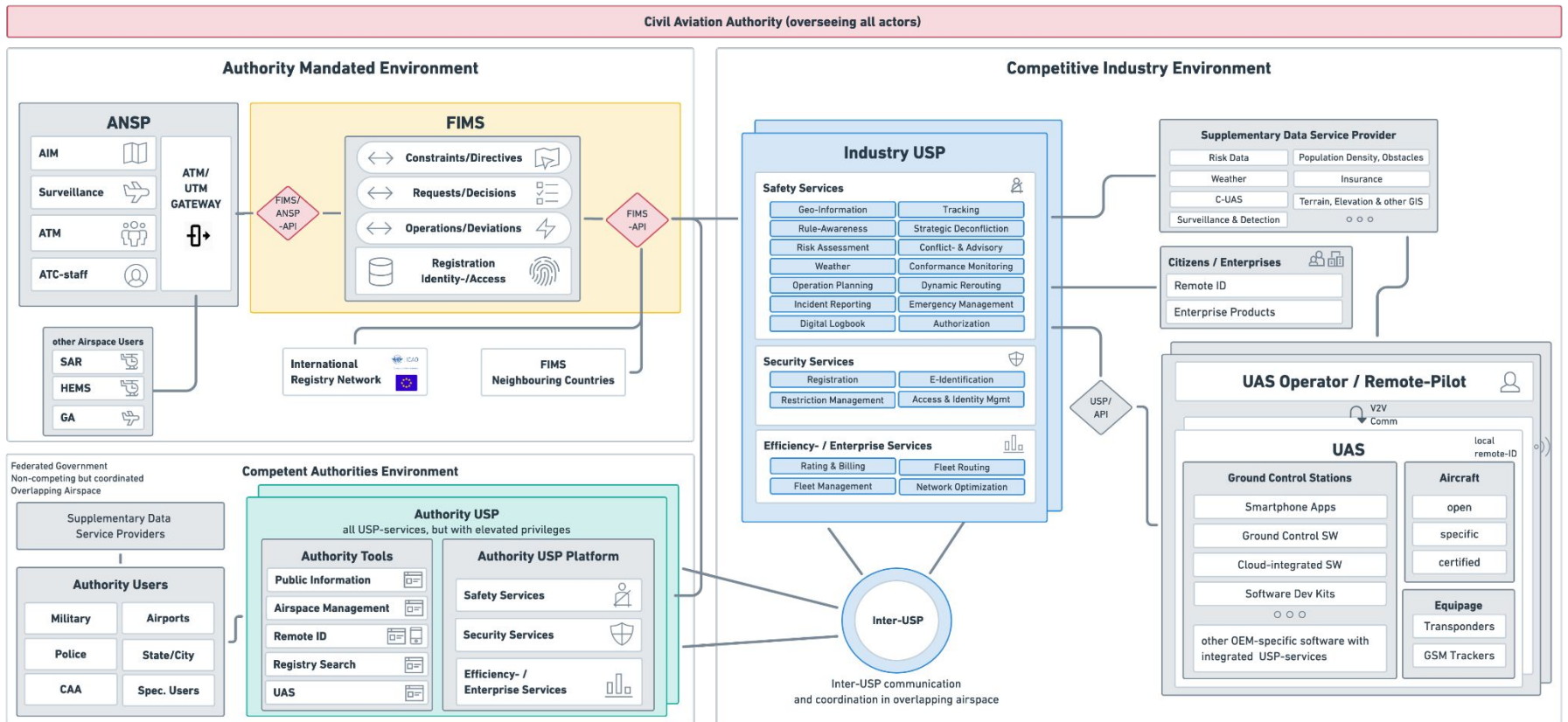


UTM / U-Space

U-Space is a federated set of services designed to ensure the safe, secure and efficient integration of multiple manned and unmanned aircraft in the airspace in collaboration among all involved parties.



UTM / U-Space



Date: 2019-03-21



Strategic Deconfliction

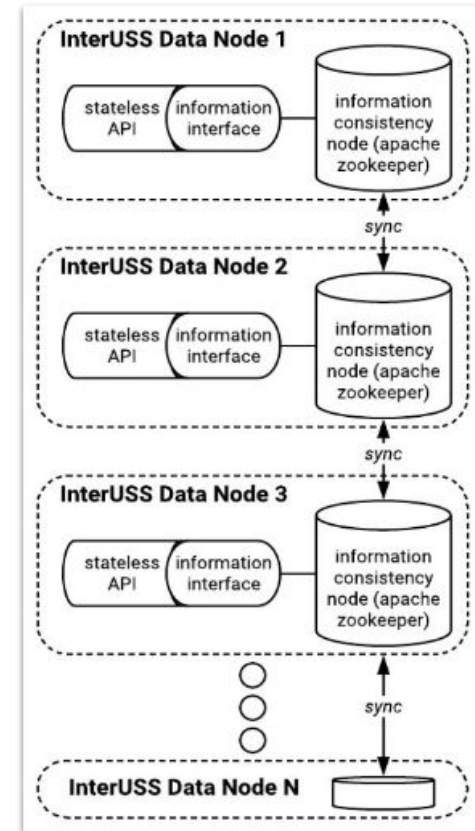




InterUSS

Platform Architecture

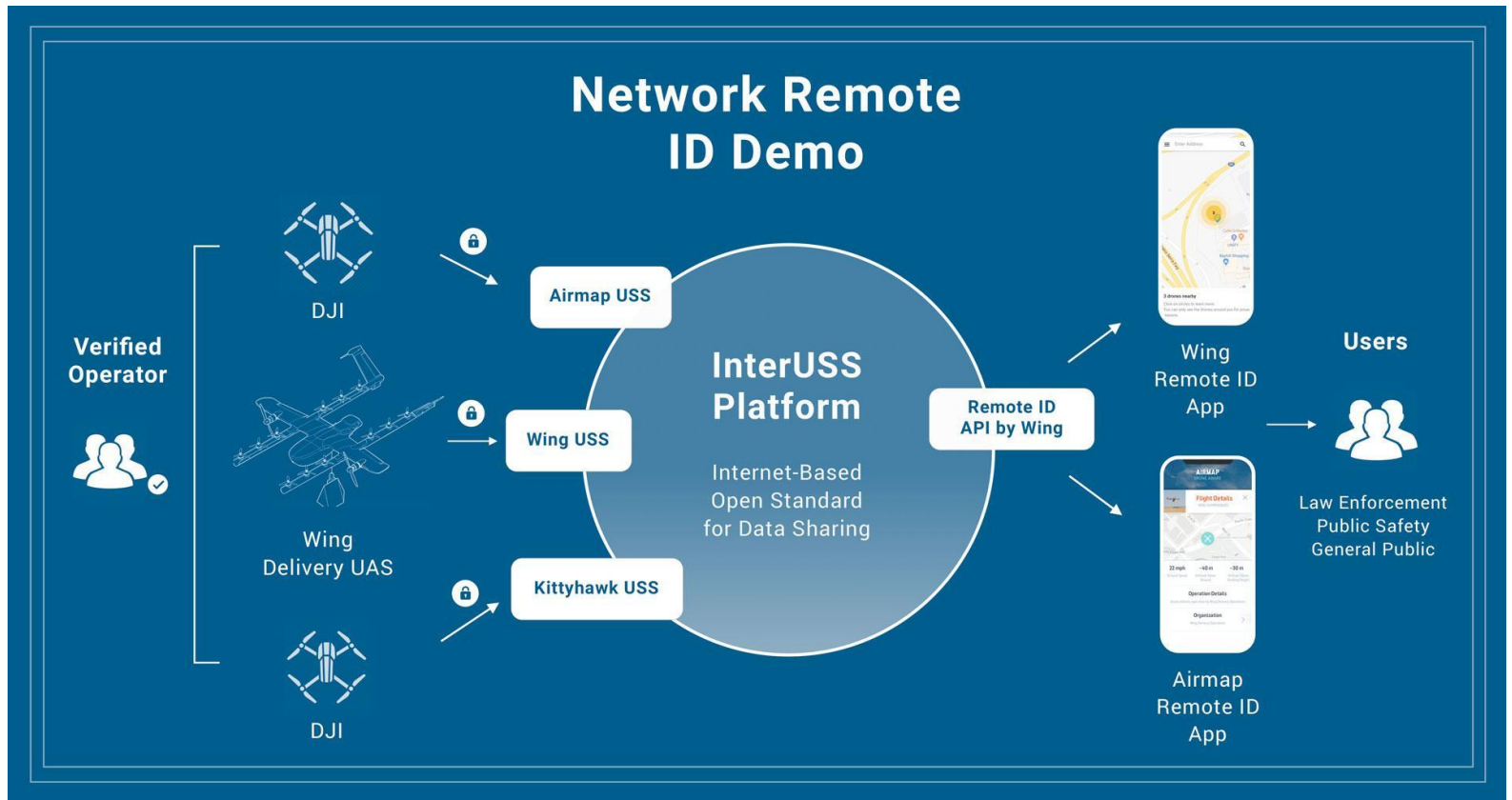
- **Gridded system**
 - The world space is separated into a well known grid format, minimizing contention and over-sharing, while allowing flexibility as the number of USSs and countries with UTM systems grows.
- **Distributed Consistency**
 - Multiple open source data consistency nodes hosted by USSs result in a scalable, distributed, auditable, and flexible way to prevent race conditions when multiple USSs are planning at the same time.
- **Pull based**
 - Flight information is acquired at the time of need, which protects operator and consumer privacy while sharing the right amount of information to safely deconflict and inform multiple USSs.



github.com/wing-aviation/InterUSS-Platform/



Remote ID



Discovery and Synchronization



Role of the authorities



List of approved USS



Open questions

Process

Industry Standards	AMC	Regulatory Standards
Easy	Possible	How?

Topics

- Strategic Deconfliction
- Networked Remote ID
- Tactical deconfliction ?
- Rules of the air ?
- ...