



Chengdu, China

中国成都

DRONE ENABLE / 2

10 to 14 September 2018

Stephen P. Creamer

ICAO Director, ICAO Air Navigation Bureau

Wrap-up Session





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What is UTM?



A concept ...?



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What is UTM? A concept..?

- **Urgent need for a common vision, language, reference points, and secure data exchange between UTM and ATM.**
- **International bodies, including ICAO, will play a key role in setting this vision.**
- **Collaboration between operators UTM and air navigation service providers is essential to determine conditions for interoperability with ATM**

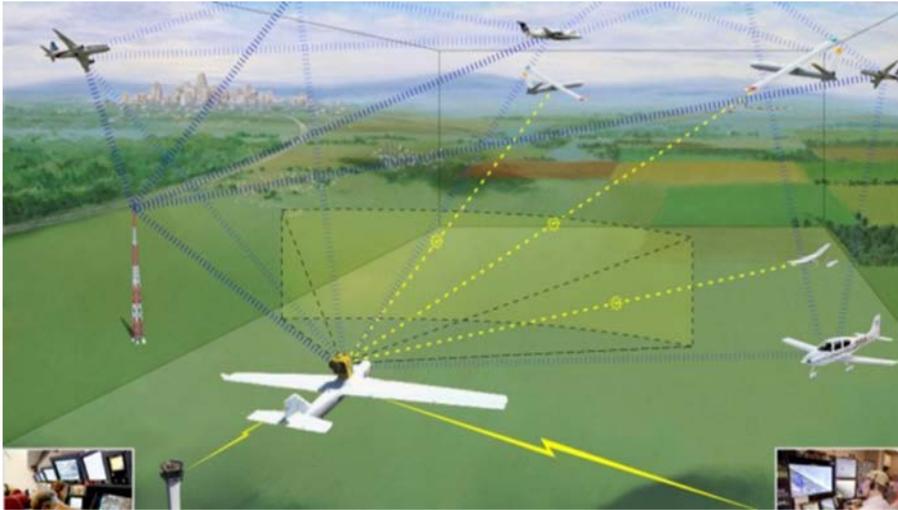


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UTM/ATM Transitions: different perspectives?





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UTM/ATM Transitions: different perspectives?

- **Need to understand scope of end-user operations in order to define UTM rules and ATM interface**
- **Incremental and pragmatic approach**
- **Need for secure, reliable, accurate data and communication exchange**
- **Centralized or Decentralized approach?**



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ICAO Global Aviation Trust Framework



What will be invented that is more important to humanity than a single sky?





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ICAO Global Aviation Trust Framework

- ICAO is undertaking an initiative to create a trust framework building upon the foundations of the existing regulatory framework.
- The ICAO Trust Framework represents an architecture that will enable secure digital communications
- ICAO is also working with internet governing bodies to isolate critical safety communications from the public internet.



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ICAO Global Aviation Trust Framework

- The framework should eventually support all aviation safety-critical functions
- ICAO would like to engage the new entrant community to define this future concept
- ICAO expects the innovators in the new entrant community to help define the way forward for the benefit of all



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ICAO is working on UTM...





- **Version 1 of the ICAO UTM Framework nearing completion**
- **The UTM Framework provides States with high level guidance**
- **Industry engagement remains critical to help move UTM forward**
- **Will remain a living document**





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DRONE INDUSTRY INSIGHTS

The Drone Market Environment 2018

Beyond UTM...

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Beyond UTM...Re-examining legacy systems

- **Increasing flexibility and scalability in digital services**
- **Holistic risk evaluation that takes into account public needs**
- **Expanding scope of information being transmitted to manned aircraft**



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Interoperability?



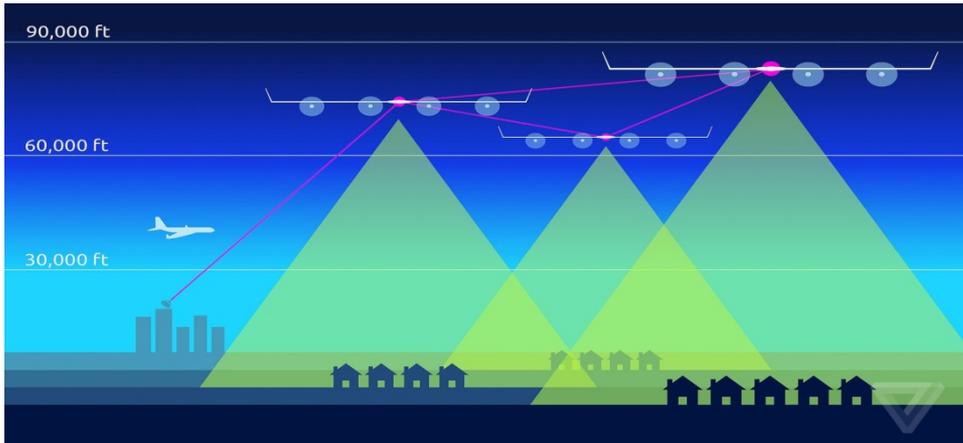


Interoperability?

- **We are not ready for integration**
- **Panelists agreed that we can't go from crawl to marathon**
- **Data on new capabilities are needed to offer airspace access**
- **UTM has to be safer**



UTM and Very High Altitude Operations : Are there commonalities?





UTM and Very High Altitude Operations : Are there commonalities?

- UTM and High Altitude Traffic Management have the same DNA
- Industry-based cooperative traffic management
- Incremental approach to integration of more complex operations
- HATM is in the field of ICAO



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You need ICAO....

And

ICAO is you !



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THANK YOU