



canso
civil air navigation services organisation

**REALITY CHECK: A
DISCUSSION ABOUT THE REALITIES
OF ATM AND UTM ACHIEVING
INTEROPERABILITY**

TRANSFORMING
GLOBAL ATM PERFORMANCE

Drone Enable/2 Symposium Chengdu 13-14 September 2018

Reality Check



Why interoperability

- Although ATM and UTM will likely be divided, there may be instances where Drones will interact with commercial aviation in controlled airspace.
- There must be a way for ATMs be aware of and alerted to drone activity in controlled airspace.
- UTM is being designed to work without reliance on the existing ATM system, but there is a need to exchange information.



- UTM is NOT ATM
- Safety can never be the same
- If COTS HW/SW is allowed to proceed, UTM can NEVER interoperate with ATM.

How interoperability

- Air traffic controllers (ATCOs) don't need or want to see all drone traffic.
- Only when there is a possible conflict of traffic there should be warnings.
- Fundamental Ground Rules & assumptions on equipage, daylight ops, nighttime ops, contingency operations etc.
- UTM must be developed and installed to be interoperable with ATM systems.



**SAFETY
ALWAYS HAS
TO COME
FIRST**

Coordination between UTM and ATM

- When operating next to each other UTM and ATM should be able to be in direct contact when situations arise
- Regulators should only allow UTM close to controlled airspace when interoperability and coordination between UTM and ATM providers are in place.



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Question:

- How do we deal with automated UTM?

Training

- ATCO's, pilots, remote pilots, UTM providers and ATM providers should be trained on the interoperability and coordination between UTM and ATM.
- Governments should receive guidance from ICAO how to implement UTM systems, based on global expertise.



Prepare for the
future

Awareness

- Drone operators, including hobby users should be made aware of the risk to civil and military aviation when operating drones close to controlled airspace or airports.
- States should launch awareness campaigns towards the general public regarding the limits put on operating drones.



Thank you for inviting CANSO



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Thank you!



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