The Future Air Mobility





Why is this important to us?

Airlines are exploring the use of new concepts for the air transport of goods and people.

Airspace is a finite resource and to share it safely and efficiently, integration of new entrants is required.

UTM and STM provide an opportunity to modernize legacy ATM systems/concepts.

COVID-19 pandemic may have **fast-tracked** certain future operational concepts.

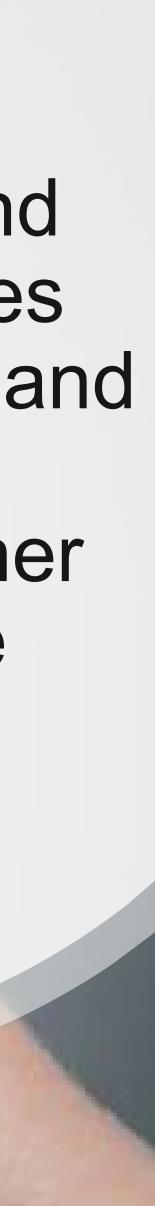




Future Construct



Transition from humancentric to technology and data centric architectures and solutions where AI and Human/ Emotional Intelligence work together for a stronger and more efficient overall system

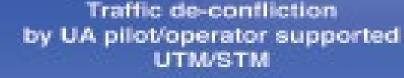


The main challenge

The operating characteristics, the scale, and type of operations that will be / are performed by an everincreasing fleet of new entrants in airspace are incompatible with some of the underlying assumptions for how traffic is managed.



Cooperative Separation









Mix of ATC and traffic de-confliction by UA pilot/operator in designated areas



Controlled Airspace

Traffic de-confliction by UA pilot/operator supported by UTM

Cooperative Separation

UA traffic de-confliction by ATC



What is needed to reach an end state of highly automated ATM system?

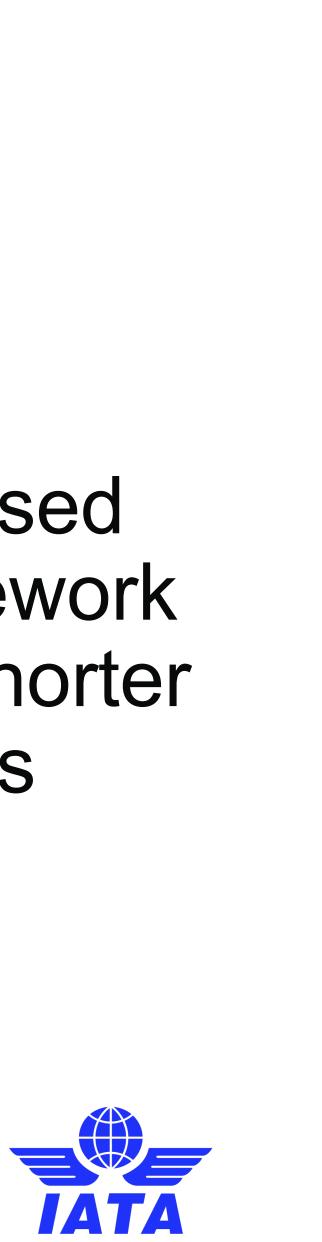








Performance based regulatory framework that allows for shorter innovation cycles



Cyber resilience and trust



Partnerships and Collaboration



Harmonization & Interoperability







Obstacles

- System integration & regulatory framework
 - Investment
- Workforce & new players



Actions

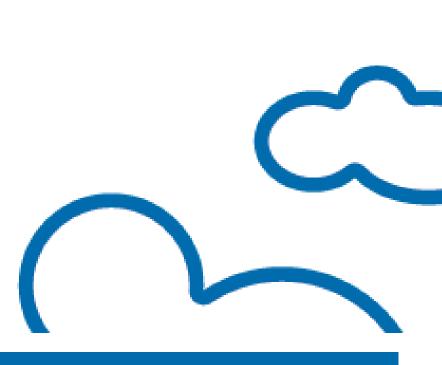
- Review ATM assumptions
- New mechanism for global standards
- Prioritize tech roadmap
- Regulators' competence
- Efficiency at system level
- Competence of workforce



WE ARE ALL ONE IN THE SKY

There is only one sky and all stakeholders, new and traditional, need to collaborate to keep it safe, secure, efficient and fair.









Thank You

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