

Ladies and Gentlemen good morning.

Firstly I would like to thank ICAO for the invitation to speak at this important event. Drone Lab comes at a critical time as industry, and aviation are being challenged with the hard questions of what needs to be in place to allow the safe evolution of drone operations.

IATA is a member of the ICAO Small UAS Advisory Group and we consider this an important work area for ICAO and you have already heard from Steve Creamer about our involvement to date.

IATA's top priority is Safety and I think we will all agree that this must be the priority as we evolve drone operations. However, we also need to embrace change as new technology and new investment provides the potential to benefit aviation in general.

A primary focus of this event is low altitude, but we should also not forget high altitude operations as both will have different levels of interaction with manned aviation. Drones have been identified as a disruptive technology and their proliferation to provide new commercial services and operations will cut across the aviation business.

The operation of Drones is based more on automatic and autonomous operations. Likewise the future UTM systems.

This is very different from today's traditional tactical air traffic control operations and so therefore, the UTM environment could be viewed as a development and proving ground for a completely new way of doing things.

It is essential that established aviation (current airspace users) works closely with new aviation entrants to develop the required operating environment in a different approach that could be used to evolve operations.

New entrants, are already operating at all altitudes from very low to very high, and as their operations expand the different worlds of manned and unmanned aviation will converge quickly and the traffic management system needs to be able to cope and accommodate.

This potential transformation of airspace will touch on a number of areas. UTM will doubtless include evolving technological capabilities, for example aircraft to aircraft communication, exchange of data and co-operation.

This will provide new opportunities for traffic management, separation standards, and airspace planning. Elements of UTM work will transition to manned aviation and could help advance civil aviation air traffic management. Future development of UAS and UTM systems could also, as mentioned earlier this week in this same room, help drive the safety bar even higher.

One critical factor to support progress in Drone operations and UTM is the ease with which technical and performance data can be obtained. It is relatively cheap and quick to operate UAS compared with manned aviation. That means regulatory authorities and relevant partners in the aviation value chain can have quicker access to more operational data to help prove concepts and certify operations.

UTM will incentivize new business models among air navigation service providers and actually some countries already have advanced plans in place for UTM working with their existing ANSPs.

That said, and just to use it as a good example, the UAS package delivery market development at low altitude is moving very quickly, and considering the pace of potential expansion, many countries may well forego developing a UTM framework through traditional means, preferring instead to leave it to third party, privatized providers.

The success or otherwise of such an approach will have implications for ANSP business models—and airspace users costs—going forward.

The US and Europe are actively testing and designing UTM systems. Additionally, work is advancing quickly in Japan and Singapore. It is clear that UTM capabilities will be implemented incrementally over the next few years.

Certain discussions take a holistic approach to future airspace regulatory and operational requirements, with UTM assumed to operate in conjunction with civil airspace.

There are those, however, who argue that such integration is unlikely to be necessary.

As certain UAS operations are unlikely to share the skies with manned aircraft, the suggestion is that a flight plan, predefined corridors, and the bare minimum of regulation would be enough to cope with certain UAS operations.

There may be unexpected consequences for those responsible for managing and overseeing UTM.

For future UTM operations the economic and political context will be completely different.

Third party oversight providers and competition would be both possible and practical.

IATA has a positive and inclusive stance on Drones.

We believe that their operations and UTM are developing new thinking, and while safety and efficiency are always the primary concern, the opportunity to reshape the future for all airspace users, manned or unmanned, is readily apparent.

It is essential that we ensure that safe airspace operation and integration occurs where unmanned and manned systems overlap.

To do this we need new concepts of operation capable of accommodating new diverse operations.

On that note, I look forward to learning more over the next two days on at least: Registration Identification and Tracking, Communications Systems and Geo-fencing.

Thank you very much.