Unmanned Aircraft Systems

Fact Sheet

The Future is Here!

Plans and trials for urban air mobility and last- to medium-mile cargo air delivery continue to transform the definition and operational requirements for air transport. Air travel is no longer perceived as a journey from airport A to airport B but rather a door-to-door integrated service. With IATA's continued work to ensure safe, secure, efficient, and environmentally sustainable aircraft operations, it is critical to work with both manned and unmanned industry. Considering the anticipated numbers of unmanned aircraft flying in airspace as well as new players in commercial space operations, finding the balance between regulation and innovation is paramount. In addition, standards and regulations must keep up with the pace of new technology. We can learn from existing trials and build upon their data to better understand the needed regulatory framework.

IATA will continue working with our members, industry partners and stakeholders to shape the future growth of air transport and together shape the skies of tomorrow. Our work continues in the following key areas.

Mitigation of Safety & Security Threats:

With the increasing use of UAS for recreational purposes, the number of occurrences of UAS usage in an unauthorized manner, or with malicious intent, is on the rise. Recent sightings of uncooperative drones in close vicinity of commercial airliners and airports have resulted in extensive disruption to airline and airport operations, with a large impact on the travelling public. There is a risk of aircraft accidents and incidents caused by the irresponsible use of an unmanned aircraft, primarily in situations where they are operating near airports and being flown dangerously next to aircraft. Pursuant to IATA's work with industry stakeholders and ICAO, an industry initiative was endorsed during the ICAO 40th Assembly, under which IATA, ACI and other industry partners will develop guidelines for the detection and management of unauthorized operation of drones. This work is planned to conclude by end of 2020.

Integration into Airspace:

Building on the conclusions of the ICAO 40th Assembly, IATA will be leveraging its UAS Think Tank to be a global industry platform that develops guidelines, recommendations, and proposals for future provisions or changes in provisions related, but not limited, to; the definition and performance requirements for Unmanned Traffic Management (UTM), requirements for UTM/ATM interface and transformation in ATM, review of airspace classification and new flight rules. This initiative will enable the integration of UAS into airspace, allowing for positive transformation in conventional air traffic management infrastructure and processes. The Think Tank will consist of a diverse group of experts from manned and unmanned aviation, including operators, airlines, and regulators, as well as other industry sectors, e.g., telecom industries. The Think Tank will make use of ongoing projects, pilots, and trails.

Regulations and Standards:

Standards and regulations are moving at a slower pace than technologies and innovation. One of the main concerns is that trials and demonstrations may proceed without having the regulation in place. While data from these trials and demonstrations are critical to help shape future regulations, it also is necessary to ensure that they are safe. Finding the balance between innovation and safety standards/safeguards is key.

IATA continues its work with ICAO's Remotely Piloted Airspace Systems Panel (RPASP), the UAS Advisory Group, and the Task Force on UAS for Humanitarian Aid and Development (TF-UHAD). In addition, IATA is involved in several initiatives to develop standards and best practices, including initiatives led by Airbus, NASA, JARUS, and the FAA.

Future role of Human

Digital applications, artificial intelligence, and robotics are changing the landscape of future jobs. A stronger and more efficient system can only be achieved if Artificial Intelligence, Human Intelligence, and Emotional Intelligence work together. Several jobs in aviation may be redefined and there will be new and exciting opportunities to attract young and diverse talent to the industry. IATA is looking at how automation and unmanned technology could impact the future skills required.

Engagement with Innovators

In order to better connect with innovators, drone enthusiasts, academia, and research institutes, IATA is engaging in an outreach to key players in the unmanned arena. In addition, IATA organized two Drones Innovation Weekends in 2019 to attract creative innovators and get insights and proposals of how the future system could work.