



Product & Services Safety  
Global Regulatory Strategies

# Environmental Impacts of UAS: State of Play Report from ICAO Committee on Aircraft Environmental Protection, WG-2 (Airports & Operations)

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# BACKGROUND

- **In 2019, it was proposed that CAEP gain an understanding of the environmental impact of RPAS operations at and around airports and communicate this information to ICAO Council.**
- **The objective of this task:**
  - to get a snapshot of the current situation at international airports throughout the world and
  - to collect the views from aviation stakeholders on their assessment of the current and potential future environmental impact of UAS operations on their own activities.
- **During the ICAO CAEP 12 Cycle (2019-2022), WG2 Task Group 11 performed work on this task**
  - Completed 2 rounds of literature reviews
  - Completed a State of Play report

# STATE OF PLAY REPORT FINDINGS (1 of 2)

- The number and potential uses of uncrewed aircraft operations are highly varied and are projected to grow globally;
- ICAO
  - RPAS Panel is focusing on safety and certification and currently does not have environment within its scope; ICAO Model UAS Regulations and ICAO UAS Toolkit focus on enabling small UAS operations;
  - CAEP WG1 is focusing on noise certification for UAS;
  - Current focus is on SARPs, airspace integration, CONOPS, etc.; however States are requesting ICAO support on smaller non-international drone operations;
- There are no current international environmental groups looking to develop standards or recommended practices for uncrewed aircraft;
- Based on experience with manned aviation, early community engagement is key to the social acceptance of new uncrewed aircraft operations;

# STATE OF PLAY REPORT FINDINGS (2 of 2)

- By being proactive, the industry has the possibility of ensuring sustainable principles in the development of uncrewed aircraft operations;
- To more accurately predict community response to uncrewed aircraft noise, new metrics, data and modelling that accounts for different type of uncrewed aircraft, as well as acoustic and non-acoustic factors, need to be developed; and,
- Concepts for uncrewed operations, particularly for urban air mobility, are evolving and some projects are underway. However, environmental data and environmental impact assessments are not yet readily available. Stakeholder collaboration is critical to ensuring that these operations can be sustainably integrated into the community and the airport environs.

# NEXT STEPS

- **WG2 Task Group 8: Eco-Airport Toolkit**
  - Updating the literature review and findings to publish the State of Play Report under [ICAO Eco-Airport Toolkit e-collection](#) in 2023.
- **WG2 Task Group 1: Airports & Operations Community Engagement**
  - Identify how community/stakeholder engagement will need to adapt to respond to stakeholder needs in the context of new/emerging entrants/technologies, and how this may be different from past engagement efforts.
- **ICAO 41<sup>st</sup> Assembly**
  - ICCAIA and CANSO support the ongoing work of the ICAO Global ATM Operational Concept for the next edition of the ICAO Global Air Navigation Plan
    - Take a holistic look at operations and technologies across all strata of airspace and
    - Gain a better understanding of how new entrants will be handled to add to our understanding of their environmental impact.

