



WORKING PAPER

LEGAL COMMITTEE – 40TH SESSION

(Montréal, 26 – 30 October 2026)

Agenda Item 2: Consideration of the General Work Programme of the Legal Committee

**HARMONIZATION OF THE LEGAL FRAMEWORK FOR UNMANNED
AIRCRAFT SYSTEMS AND URBAN AIR MOBILITY**

(Presented by the Dominican Republic)

1. INTRODUCTION

1.1 Urban air mobility (UAM) covers vertical landing and take-off aircraft, remotely piloted systems and solutions with different levels of automation for the carriage of passengers, cargo, and for the provision of other services in urban and interurban environments. Rollout in densely populated areas has implications for aviation safety and security, air navigation, infrastructure, environmental protection, and legal guarantees.

1.2 The ICAO Assembly recognized the rapid evolution of the advanced air mobility ecosystem and the possible need for a harmonized global framework and accordingly established the Advanced Air Mobility Study Group (AAM SG) which works together with other expert groups in the Organization. As well, the international legal aspects of pilotless aircraft remain on the Work Programme of the Legal Committee.

1.3 The Dominican Republic believes that technical developments must be supported by common legal principles that allow States to regulate operations based on risk, avoid regulatory fragmentation, and offer legal certainty to authorities, operators, manufacturers, service providers, users and third parties on the ground.

2. INTERNATIONAL FRAMEWORK AND LEGAL CONSIDERATIONS

2.1 Article 8 of the Chicago Convention stipulates special authorization for a remotely piloted aircraft to fly over the territory of a contracting State, and states that flights must be so controlled as to obviate danger to civil aircraft. Articles 12, 29, 31 and 32 contain considerations on rules of the air, onboard documents, airworthiness and licenses for remote, highly automated and autonomous operations.

2.2 The adoption of Annex 6 (Operation of Aircraft), Part IV (International Operations-Remotely Piloted Aircraft Systems) established essential components for international operations of certified remotely piloted aircraft systems, including the remote pilot license, the certificate of airworthiness and the RPAS operator certificate. Nonetheless, UAM comprises operational models and configurations that might fall outside of the traditional logic of continuous control of a flight by a remote pilot.

¹ Spanish version provided by the Dominican Republic

2.3 A legal review should distinguish between remotely piloted aircraft, highly automated aircraft, and autonomous aircraft. This classification directly influences who commands the flight, who takes operational control, and how the duties are assigned between the operator, the remote pilot, the manufacturer, the software designer, the C2 link provider, the UTM provider and the vertiport operator.

2.4 Operating over densely populated areas increases the risks to third parties, hence the need to determine whether national and international regulatory regimes in force offer adequate, predictable rules on civil liability, jurisdiction, applicable laws, compensation caps, right of recourse and mandatory insurance, especially in a case where damage results from combined failures of the aircraft, software, connectivity, data and digital services.

2.5 Remote identification, real-time tracking, flight recordings, electronic documentation and information sharing with authorities are essential for oversight. Also, the processing of images, data localization, passenger information and operational data incur safeguards for privacy, data governance, retention of recordings, legitimate access and cybersecurity.

2.6 Unmanned air traffic management and operations from vertiports require clear delineation of competencies between the aviation authority, the air navigation service provider, the authorities for telecommunications, security, data protection, environment and territorial planning, as well as local governments. Harmonization should ensure State sovereignty and at the same time facilitate technical and legal interoperability.

3. THE EXPERIENCE OF THE DOMINICAN REPUBLIC

3.1 The Dominican Civil Aviation Institute is presently revising RAD 109 which is intended to regulate Unmanned Aircraft System (UAS) operations for air mobility within urban, interurban and other designated air space, mainly as regards the specific certified categories.

3.2 The draft incorporates elements that reflect the systemic nature of UAM: aircraft registration; remote pilot certificate or license; responsibility for continuing airworthiness; oversight of the Command and Control link (C2 link) and its providers; risk assessment; rules for night flights, Visual Line of Sight (VLOS), Beyond Visual Line of Sight (BVLOS) and persons; coordination with Air Traffic Control (ATC); unmanned aircraft systems operator certificate (UOC); safety management system; maintenance; training; privacy; third-party liability, and; special permits subject to mitigations.

3.3 The draft regulation has served to highlight issues that cannot be fully resolved by adapting rules for manned flight or less complex UAS. These issues include operational autonomy; multiple digital service providers; C2 link reliability and security; UTM/ATM interaction; operations from vertiports; passenger transport; remote identification; responsibility for automated decisions, and; recognition of foreign certifications and authorizations.

3.4 This experience shows the utility of step-wise international guidance: common legal principles; model provisions for national standards, and; cooperation or recognition criteria for operations that can be considered international. A risk-based approach would introduce differential requirements without undermining the safety of passengers, third-parties and other air space users.

4. PROPOSED PATHS TO HARMONIZATION

4.1 The Dominican Republic believes that the Legal Committee, in coordination with the Secretariat Study Group on Legal Issues Related to Pilotless Aircraft (SSG-LIPA), AAM SG, Remotely Piloted Aircraft System Panel (RPAS Panel) and other competent groups, could focus its work on six priority streams:

- a) Compatible legal classifications and definitions for UAS, RPAS, UAM and AAM including levels of automation and autonomy, and determination of the person commanding or controlling the operation;
- b) Obligations and responsibilities to be attributed to the operator, remote pilot, manufacturer, software developer and providers of C2, UTM, data, navigation and vertiports, including responsibility for automated decisions;
- c) Civil liability toward passengers, third-parties on the ground, mandatory insurance, jurisdiction, applicable laws and compensation mechanisms appropriate to the nature and level of operational risk;
- d) Registration, markings, remote identification, traceability, electronic documents and recognition or validation of licenses, certificates and authorizations, in light of Articles 21, 29, 31 and 32 of the Chicago Convention;
- e) Data protection, privacy, cybersecurity, legitimate access to operational information and retention of recordings, with special consideration for connected systems and automated functions, and;
- f) Institutional coordination for UTM, integration with ATM, vertiports, air safety, emergency response, environmental protection and cross-border operations.

4.2 The initial outputs could consist of legal guidance and model clauses that States could adapt to their domestic regulations, together with a mechanism for compiling national experiences. In a subsequent phase, the Committee could determine whether the differences identified warrant amendments to existing instruments or the creation of new international provisions.

5. CONCLUSIONS

5.1 The integration of UAS into the urban air mobility environment is not only a technical and operational challenge. The many different configurations, levels of autonomy and service providers upend the usual legal categories and require a clear understanding of who is operationally in command and control, who is responsible for damages, and what guarantees should be in place for passengers, third parties and other air space users.

5.2 The experience of the Dominican Republic shows that States can immediately establish national safeguards in the form of requirements for registration, certification, risk management, airworthiness, operational oversight, privacy and civil liability. However, the fragmentation of criteria could limit interoperability, complicate recognition of authorizations and create uncertainty regarding operations and services of international scope.

5.3 Therefore, ICAO should drive the development of a stepwise, harmonized and risk-based legal framework that protects the regulatory sovereignty of States and offers common ground for the safe, secure and sustainable development of UAS. Action by the Legal Committee is essential to clarify the scope

of application of instruments in force and guide the elaboration of international provisions or model clauses to close the gaps.

6. ACTION BY THE COMMITTEE

6.1 The Legal Committee is invited to:

- a) note the information in this paper and the regulatory experience shared by the Dominican Republic;
- b) recognize the need for a shared, stepwise legal understanding on the safe, secure and sustainable integration of UAS in the urban air mobility environment;
- c) recommend that the Council continue to prioritize the topics set out in paragraph 4.1 above in the Work Programme of the Legal Committee, in coordination with the SSG-LIPA, AAM SG, RPAS Panel and other competent bodies;
- d) consider developing legal guidance and model provisions on responsibility, insurance, autonomy, digital identification and documentation, data protection, cybersecurity and interoperability, and
- e) invite States to share their regulatory frameworks, pilot projects and experience with UAS and UAM, including liability and insurance mechanisms.

— END —