



WORKING PAPER

LEGAL COMMITTEE – 37th SESSION

(Montréal, 4 to 7 September 2018)

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

**CLARIFICATION OF APPLICABILITY OF THE CHICAGO CONVENTION
AND SARPS TO CERTAIN CATEGORIES OF RPAS/UAS**

(Presented by the Czech Republic, France, Hungary and Poland)

1. BACKGROUND

1.1. Remotely Piloted Aircraft Systems [called also Unmanned Aircraft Systems or drones; further in this working paper jointly as, **RPAS/UAS**] have been evolving rapidly in recent years. New technologies make RPAS/UAS more affordable and capable. RPAS/UAS are becoming widespread and are partly operated by general public, not only aviation professionals. New opportunities are emerging; at the same time, new dangers to aviation or people on the ground are becoming a reality. This trend will likely even increase in near future.

1.2. RPAS/UAS are extremely variable in their weight and size: machines with MTOM of tens of tons (e.g. RQ-4 Global Hawk); as well as single kilograms or even tens of grams (e.g. various commercially available multi-copters).

1.3. The Chicago Convention contains provisions explicitly mentioning RPAS/UAS: in Article 8, which deals with (i) obligatory permit to fly in airspace of a Member State and (ii) obligation to ensure protection of manned aviation from RPAS/UAS. Article 8 uses a term “*pilotless aircraft*” and “*aircraft capable of being flown without a pilot*” (on board).

1.4. Both ICAO, regional institutions (e.g. EU) and Member States have been developing and introducing new regulation focused on RPAS/UAS recently. For example, several amendments of ICAO SARPs related to RPAS/UAS have been issued. EU is about to introduce a new binding regulation for RPAS/UAS, which will be applicable in EU states to all civil RPAS/UAS regardless of their size, weight and purpose of use. Other Member States have been involved in similar efforts.

1.5. Since 39 ICAO Assembly, the General Work Programme of the Legal Committee includes an agenda item “*Study of legal issues relating to remotely piloted aircraft*”, which has the highest priority among other agenda items.

1.6. Other Chicago Convention Articles have been informally analysed with reference to RPAS/UAS by ICAO representatives or bodies (e.g. Article 29). The Legal Committee has also considered applicability of international liability instruments to RPAS/UAS. However, none of the above assessments contains clear guidelines for legal issues identified below.

2. PROBLEMS ENCOUNTERED

(A) Applicability to smaller RPAS/UAS - unclear boundary

2.1 Applicability of the Chicago Convention (and consequently SARPs) to certain categories of RPAS/UAS seems unclear. Article 8 is worded generally and the Chicago Convention contains no guidelines apart from general principles valid for its applicability. While large RPAS/UAS involved in international flights will most likely fall under the Chicago Convention, the issue is much less clear for smaller and very small RPAS/UAS (see 1.2 above).

2.2 It remains unclear what should be the decisive criteria for RPAS/UAS to fall into/out of scope of applicability of the Chicago Convention: e.g. size, weight, purpose of use, or type of operation etc.; or their combination. Some smaller RPAS/UAS may be used both as (i) model aircraft and even toys or (ii) professional RPAS/UAS for aerial works. Moreover, while in some countries a boundary of approx. 25 kg may be a threshold for more flexible or stricter regime of regulation, in other countries this is not the case. For example, the emerging EU regulation will not exempt RPAS/UAS below 25 kg (even if used for recreation) from applicability of binding rules and obligations. At the same time, some studies proved that even RPAS/UAS of MTOM of several kilograms may cause serious danger to civil aviation (e.g. if interfering with jet engine).

2.3 The above is connected with question whether (all) RPAS/UAS should be considered “aircraft” under the Chicago Convention; and may have serious practical consequences concerning applicability of obligations stemming from Article 8 but also other Articles of the Chicago convention. For example Article 3bis: To what extent does the obligation to refrain from use of weapons against civil aircraft and obligation not to endanger safety of aircraft apply to RPAS/UAS (and their categories) or not? The objective of this prohibition is quite clear in case of manned aircraft: protection of people on board. However, it may be rather questionable in case of the small RPAS/UAS. This may be a very practical issue within the context of emerging “counter-drone” technologies and devices.

2.4 Moreover, another related question is whether the international dimension (involvement in international air navigation) is a prerequisite for applicability of the relevant Articles (e.g. 8 and 3bis) of the Chicago Convention to RPAS/UAS. Consequently, it should be clarified how to determine nationality of small RPAS/UAS, especially when some of them may not be formally registered within the sense of Article 17 of the Chicago Convention.

2.5 Within this context, there is a need for interpretational guidelines regarding the boundary of applicability of the Chicago Convention. Correct interpretation should ensure safety of international aviation on the one hand; and avoid too strict and burdensome requirements on the other hand.

(B) “Special authorization” by a Member State

2.6 Article 8 of Chicago Convention seems to be explicitly based on the principle that a Member State issues a permit for RPAS/UAS *on individual and ad hoc basis*.¹ However, in practice states often issue either long term permits to fly for RPAS/UAS; or allow certain categories of RPAS/UAS to fly without specific permit at all. Instead, they rely on dedicated provisions of legislation only (the same will be true for so called “*Open*” category of RPAS/UAS operations in the emerging EU legislation).

2.7 Additionally, the relevance of an international aspect of operation of RPAS/UAS may be unclear here as well (see analogically point 2.4 above).

2.8 It is advisable to explicitly confirm that approach described in 2.6. is in line with obligations stemming from Article 8 of the Chicago Convention (or clarify it is not, respectively).

3. CONCLUSION

3.1 It follows that there are open legal issues regarding applicability of the Chicago Convention and SARPs regarding RPAS/UAS, in particular as regards (A) smaller RPAS/UAS and (B) nature of authorization under Article 8.

3.2 These open issues may have practical consequences and require clarification. Such clarification would improve legal certainty and thus benefit both Member States, ICAO, regional institutions or organizations and other stakeholders.

4. ACTION BY THE LEGAL COMMITTEE

The ICAO Legal Committee is invited to:

- a) Take note of the legal issues identified in this Working Paper;
- b) Express its opinion on them; and
- c) Take any action it deems necessary for their clarification (e.g. to initiate a study of the Legal Affairs and External Relations Bureau or establishment of a dedicated Task Force).

— END —

¹ “No aircraft capable of being flown without a pilot [on board] shall be flown without a pilot [on board] over the territory of a contracting State **without special authorization by that State** and in accordance with the terms of such authorization.”