

APPENDIX 1-3

Terms of Reference of a UAV Regulatory Task-Force

1) **Introduction:**

Following a request from the Swedish CAA, the JAA Executive Board has tasked the JAA Chief Executive to develop Terms of Reference for a study group on Unmanned Airborne Vehicles (UAVs).

Also the EUROCONTROL Safety Regulation Commission, at its last meeting, has agreed the need for the development of a harmonised regulatory framework governing the operation of UAVs.

UAVs are increasingly used by the military forces for reconnaissance duties and their use as combat vehicles are also envisaged (UCAVs).

It is likely that the military UAVs will use civil airspace. Also UAVs will find civil applications such as telecommunication relays, surveillance vehicles etc.

UAVs cover a broad scope of vehicles ranging from micro vehicles (25cm long) to high altitude long range endurance vehicles weighing several tonnes.

2) **Preliminary Proposal for Terms of Reference:**

- A Task-Force should be set-up to develop a concept for UAVs regulations addressing the following:
 - design, manufacturing and maintenance of UAVs
 - operations of UAVs and in particular the approval of the operators
 - rules of the Air, in particular the anti-collision issue.
 - UAVs security issues

The objective of such regulations should be to protect third parties (airborne and on-the-ground). Such regulations should not contain requirements addressing the failure of the mission (e.g. during a surveillance mission, photos not recorded).

Concept should be understood as an outline and the guiding principles for such regulations. It does not mean actual drafting of requirements.

This concept should be based on:

- An identification of the various UAVs technologies (in particular control system) and an identification of the possible use. The possibility of classification of UAVs in categories should be considered and a lower mass limit will be defined under which UAVs will not be regulated at JAA level.

- A review of existing or draft standard, including airworthiness codes and a review of existing research studies. The possibility to use a total system approach through the development of a safety case should be explored with consideration of the operational and airspace (the intended area of operation) factors that will influence design and equipment requirements.

Particular attention should be brought to the:

- Approval of the operator, including its personnel (licences ?; qualifications; training), procedures, quality system, reporting system.
 - Legal issues in relation to ICAO Convention Article 8 that forbids UAVs cross border operation without "special authorisation" of the State concerned.
 - Terminology issues.
- Composition of WG: it should be a joint EUROCONTROL/ JAA WG. Its composition should reflect JAR-11 and EUROCONTROL stake holders involvement requirement.
 - Deliverables: a concept for UAV regulation with its justification and recommendations for future work These recommendations will also address how to organise the actual development of the regulation
 - Time scale: The above deliverables should be developed within 12 months from the initial meeting of the group.
 - Documents of interest: Flimsy 5 from SRC 12 and JAA CNS/ATM Position Paper 26.4. (Doc 26.4 being available electronically is attached to this revised proposal).