

## **DAE comments on the EASA Draft Prototype Regulation on Unmanned Aircraft Operations**

Thank you for the opportunity to comment on the prototype regulations. As a general comment, we support the direction the draft takes. We also acknowledge the task EASA has in producing these rules and responding to a variety of stakeholders and views.

These prototype rules, and the regulation that will result from this process, must be proportionate, flexible, risk-based, and adaptable to keep pace with the growth and innovation of this burgeoning industry. This means that so long as the industry is able to ensure UAV operations are conducted in a safe and responsible manner, rules must be performance-based and set safety levels, rather than dictate the specific means or equipment used to achieve them. This technology-neutral approach to guiding innovation is the best way to ensure regulations safely accommodate rapid growth.

Below, we set out our more detailed comments to the draft prototype regulations:

### *Pilots, Operators, and Automation*

The draft rules include language that references “remote pilot responsibilities” throughout. This is certainly applicable to line of sight operations where there is a person who, via control link, “manipulates the flight controls” as defined in Article 2. However, for automated flights, especially for those beyond visual line of sight, there may not be a pilot having visual contact with the aircraft and manipulating the controls in a manner analogous to traditional piloting. The rules should allow automation to supplant the role of the pilot if the appropriate level of safety has been demonstrated.

### *Scenarios*

We support the inclusion of “standard scenarios” that will serve to expedite operational authorisations for similar operations that conform to acceptable risk profiles. But we would ask that more clarity be provided for what kind of scenarios, if any, would fall into standard vs non-standard categories. For instance, we do not believe that scenarios involving BVLOS, night operations, multiple vehicle to operator operations, parcel carriage, and moving vehicle operations should automatically fall into the non-standard categories.

Secondly, the scenarios might allow for consideration of other fall mitigation devices, such as parachutes, and the implications their use might have for the risk analysis. The current draft makes no reference to the benefit of such devices and the impact they might have on standard operations.

### *Operational Declaration vs Operational Authorisation*

We believe the proposed instruments (UAS.SPEC.40 and UAS.SPEC.50) and the draft rules that surround them should be combined into one section. Even in non-standard scenarios where an operation specific risk assessment needs to be performed, we do not believe a demonstrated level of the remote pilot’s competence should be required for highly automated operations.

### *Light UA Operator Certificate (LUC)*

We support a process by which a LUC can be granted by competent local authorities, thus obviating the need for operational declarations and/or operational authorisations. We are also encouraged to see the inclusion of safety management systems and compliance processes that ensure the LUC holders conform to minimum safety standards and, further, that there is also a facility for the sharing of safety information as highlighted in Article 11. Only through aggregated, normalised safety data will we, as an industry, be able to identify safety trends and institute appropriate mitigations to unacceptable risk factors.

### *Reciprocity*

Currently, there is no reference to EASA accepting authorisations and certifications from non-EU countries. As we have seen in the large aircraft area, this is a very helpful step to take to promote the industry. We believe EASA should have a plan to address this issue going forward.

### *Unmanned Aircraft Traffic Management (UTM) System*

Although the “Explanatory Note” references UTM and Article 12 speaks to “Airspace Areas” and “Special Zones” for UAS operations, there is no reference in the rules themselves. At the same time, there are very specific references to geo-fencing, and ID registration, which are fundamental parts of UTM. We strongly urge EASA to include a specific section on the need for a suitable UTM system, or systems, and a process by which to achieve it – with an emphasis on the need for interoperability between operators and vehicles and flexible spectrum solutions.

Further, the prototype acknowledges that each Member States’ appropriate authorities will be responsible for setting geo-fencing, registration, fees and safety regulations. These are fundamental parts of the UTM eco-system. That will require, at a minimum, a universal database to be able to comply with the various concerns and ensure reciprocity. We believe the parameters of such database should be set out in the rule.

### *Performance-Based Regulation*

Notwithstanding EASA’s commitment to a performance-based system, there are a number of very explicit and rule-based regulations and design standards in the prototype that we believe will present an unnecessary burden to manufacturers. By way of example, geo-fencing and electronic IDs are required for Open subcategories 1, 2, and 3. But the references in the rules to geo-fencing, to ‘permanent automatic function’, ‘selectable function’ and ‘selectable option’ remain blank.

At the same time, other proposed forms currently remain blank. What, for example, are your intentions for the Light UA Operator category? What is the timeline you envisage for that form to be completed



### *Alternative Means of Compliance and standards setting bodies*

The Prototype refers to a number of outside bodies working on standard setting and other aspects of UAV regulation. These include ICAO, Eurocae and JARUS. The Specific Operation Risk Assessment (SORA), being prepared by JARUS, for example, is being cited as an acceptable means of compliance. The prototype expects these to be developed by 2017 and approved by 2018.

We believe this raises a number of questions:

- Are these realistic timeframes?
- Does EASA have an alternative in the event these documents are delayed?
- Are these bodies are the appropriate ones and are there others that should be considered?
- What are the timelines for the EASA NPA?

### **Conclusion**

The Drone Alliance Europe welcomes the Prototype Regulation and believes it is a good foundation on which to make significant progress. There are areas that we believe should be strengthened and enhanced, as well as those for which additional clarity is necessary to establish processes that will be used well into the future. We are looking forward to working with EASA on this important work.