



EASA
European Aviation Safety Agency

Product Certification and Design Organisation Approval Workshop 2018

Feedback from RPAS side meeting

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Main points of discussion

- Certified Category
- MTOW for model aircraft
- Technical disciplines for RPAS DOA CVEs
- Certification Program
- RPAS Unsafe Condition



Actions identified

➤ Open & Specific Category

- EASA – February 2018 Issue of Opinion 01-2018
- EC – October 2018 Dissemination by European Commission of Draft Delegated & Implementing Regulation on rules and procedures for the operation of unmanned aircrafts (Open & Specific categories)
- Industry – 5th November Provide comments on Draft Regulations
- EC – 1st Quarter 2019 Adoption of Delegated & Implementing Regulation on rules and procedures for the operation of unmanned aircrafts (Open & Specific categories)



Actions identified

➤ Certified Category

- Part 21 already allows to certify UAS

- EASA – January 2019 Experts meeting supporting the NPA for Certified Category

- EASA – June 2019 Issue of NPA for Certified Category including all domains allowing full operational capability (Flight Crew Licensing, Initial Airworthiness, Continuing Airworthiness and Operations, Initial Changes for Rules of the Air)



Actions identified

➤ Certified Category

- EASA – Planned June 2020 Issue of the Opinion on Certified Category
- EC – Dissemination by European Commission of Draft rules
- EC – Adoption of Delegated & Implementing Regulation
- EASA – Under discussion ETSO on Ground Control Station & Detect & Avoid



Model aircraft

- Model aircraft
 - Operation within Model Clubs and associations under Member States regulations (MTOW defined by Member States)
 - Operation outside Model Clubs and associations to follow EASA Open Category requirements



Open Category

➤ MTOW

➤ Open Category

Technical requirements for MTOW < 25 Kg

- Subcategory
- Class
- Area of operation
- MTOW
- kinetic energy

Operation		Remote pilot competency (minimum age + flexibility defined by MS)	UAS				UAS operator registration
Subcategory	Area of operation (far from aerodromes, maximum height 120 m)		class	MTOM/ Joule (J)	Main technical requirements (CE marking)	Electronic ID/ geo awareness	
A1 Fly over people	You can fly over uninvolved people (not over crowds)	Read consumer info	Privately built	< 250 g	N/a	No	no
			C0		Consumer information, <19 m/s, height limit complement to Toy Directive OR <19 m/s, height limit; no sharp edges and voltage limit		
		• Consumer info • online training • online test	C1	< 80 J or <900 g	Consumer information, <19m/s, kinetic energy, mechanical strength, lost-link management, no sharp edges, selectable height limit, noise, voltage limit, optional lights for controllability.	Yes + unique Serial Number (SN) for identification	yes
A2 Fly close to people	You can fly at a safe distance from uninvolved people	• Consumer info • online training • online test • declare completion of self- practical training • theoretical test in a centre recognised by the NAA	C2	< 4 kg	Consumer information, mechanical strength, no sharp edges, lost-link management, selectable height limit, low-speed mode, noise, voltage limit, lights for controllability or visibility.		
A3 Fly far from people	You should fly: • in an area where it is reasonably expected that no uninvolved people will be exposed to danger • at a safe distance from areas used for residential, industrial, commercial or recreational purposes	• Consumer info • online training • online test	C3	< 25 kg	Consumer information, lost-link management, selectable height limit, voltage limit, lights for controllability or visibility.		
			C4		Consumer information, no automatic flight		
			Privately built		N/a		



➤ Certified Category

➤ Based on Risk Assessment of the Operation, 3 cases identified

- UAS operations involving an unmanned aircraft with any dimension above 3 m or kinetic energy above 34 KJ, intended to be operated over open assemblies of people;
- UAS operations for the transport of people;
- UAS operations for the carriage of dangerous goods, which may result in high risk for third parties in case of accident.



Actions identified

- Technical disciplines for UAS DOA CVEs
 - No UAS specific technical disciplines to date

- Industry – to propose specific technical disciplines
 - Ground Station
 - Datalink
 - Need for transversal discipline
 - Coordination among CVEs/disciplines



Actions identified

➤ Certification Program

- EASA – Provide Guidance material for Certification Program template
- Industry - Engine Certification may be included within the Cert Program
- Industry - Propeller Certification may be included within the Cert Program
- Industry - Operations and coordination with Navigation Service Provider may be included in the Cert Program
- EASA – Certification Program template to be issued with easy access Rules available



Actions identified

➤ Unsafe Condition

- EASA – Definition of in service Unsafe Condition for UAS to be included in NPA for Certified Category based on 1309 safety requirements for Catastrophic and Hazardous failure conditions
- Occurrence reporting for Open and Specific category mandated by new Basic Regulation in case of
 - Serious or fatal injury
 - Involvement of manned aircraft



What did work well

- Reduced number of participants allowed deep involvement and adequate explanations and quick and concrete feedbacks from the Agency
- The Rulemaking Roadmap is clear and seems on track
- Dissemination of the Rulemaking initiatives state of the art
- Dissemination of detailed requirements for Open and Specific categories
- Brain storming on Certified category requirements
- Attention to Industry opinion on the Rulemaking opportunities for DOA scaling approach for Specific category



Issues

- Current Certification and DOA application needs to be tailored until (2021?) new Rules will be applicable and could slowed down the process leading to Industry uncertain plan for business



Participants



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