

EASA Counter Drones (C-UAS) action plan

ECTRL workshop

Brussels – October 3rd, 2019

Your safety is our mission.

EASA Task Force recommendations

Need to support aerodrome operators, aircraft operators and ATS providers to be better prepared to manage the presence of unauthorized drones around aerodromes, while ensuring the business continuity

Action plan is articulated around five objectives:

1. Educate the public to prevent and reduce misuse of drones around aerodromes
2. Prepare aerodromes to mitigate risk from unauthorised drones use
3. Support the assessment of the safety risk of drones to manned aircraft with scientific data
4. Ensure that C-UAS measures are swiftly considered and implemented from a global safety perspective
5. Support adequate occurrence reporting

Obj. #1 – Educate the public to prevent and reduce misuse of drones around aerodromes

In order to prevent and reduce the misuse of drones around aerodromes, it is considered key to facilitate the awareness of the defined geographical zones to the public and more generally to drone operators. Although the future Implementing Rules on drones impose Member States to make the UAS geographical zones available to the public using a common unique digital format, it is considered of paramount importance that the source of data be retrievable in a format compatible of Mobile App developers' constraints (e.g. open source format)

Action #1	
Coordinator	EASA
Actors	Task Force composed of 11 Member States (FR, DE, AT, SP, IT, CH, BE, NL, UK, IR, DK), Eurocontrol, Eurocae and EDA.
Timeline	6 months
TF planning	1 st meeting held in EASA on 10 th of September, 2019. Follow-up meetings planned in October and December.
Deliverables	Inputs for an ED Decision proposing AMC and GM to Article 15 of the Commission Implementing Regulation (EU) 2019/947 providing a common and unique digital format to be used by Member States to make the UAS geographical zones available to the public.

Obj. #2 – Prepare aerodromes to mitigate risk from unauthorised drones use

Preparation of aerodromes to mitigate potential misuse of drones in the vicinity of aerodromes includes the definition of roles and responsibilities of all involved actors for the following areas:

- information gathering (including detection methods)
- sharing of data
- coordination of procedures
- risk assessment taking into account security aspects
- training

→ The objective of action #2 is to develop guidance on definition of roles and responsibilities when drones are identified in the vicinity of an aerodrome

Action #2	
Coordinator	EASA
Actors	Member States (including NAAs and Law Enforcement Authorities designated by the Member States), Aerodrome Operators, Commercial Air Operators, Air Navigation Service Providers (ANSPs)
Timeline	Mid-term (6 to 12 months)
Estimate date of start	November 2019 (ToR under preparation; they will be submitted for review through EASA MAB and SAB)
Deliverables	Guidance on definition of roles and responsibilities when unauthorised drones are identified in the vicinity of an aerodrome

Obj. #3 – Support the assessment of the safety risk of drones to manned aircraft

Assessing the safety risk associated to the presence of an unauthorised malicious drone in the vicinity of an aerodrome, implies understanding the potential effect of a drone collision against manned aircraft. But currently there is a lack of conclusive scientific evidence, which led EASA to launch a research project to get understanding of the outcome of potential collision of mass market drones (“threat”) with manned aircraft (“target”), and identify and recommend drone design strategies to contain the risk that drone-aircraft collision may induce on the aircraft and its occupants (*).

Action #3	
Coordinator	EASA
Actors	Relevant Member States and stakeholders
Timeline	Mid-term (6 to 12 months)
Estimate date for the first workshop	January 2020
Deliverables	Report gathering any scientific data relevant to the consequences of a drone collision with manned aircraft

(*) EASA Research Project (Horizon 2020) – Vulnerability of Manned Aircraft to Drone Strikes:
<https://ted.europa.eu/TED/notice/udl?uri=TED:NOTICE:453363-2019:TEXT:EN:HTML>.

Obj. #4 – Ensure that C-UAS measures are swiftly considered and implemented from a global safety perspective

While the responsibility for disrupting activity of misused or malicious drones is falling under national law enforcement regulations, the choice of drone detection and drone disruption technologies is a challenge since they could create unintended safety hazards and unmitigated risks to other manned aircraft, authorized drones or aerodrome infrastructures.

Action #4	
Coordinator	EASA
Actors	Relevant Member States Law Enforcement bodies, EC - Migration and Home Affairs (DG HOME), Aerodrome operators
Timeline	12 months
Date of start	Q2 2019
Deliverables	Guidance on how to: <ul style="list-style-type: none">- to ensure the integrity of “No Flight Zones for Drones” (including technical means for detection, identification, interception and intervention)- to support public education and awareness initiatives (communication mechanism)- to reduce unintended impact on aircraft or aerodrome equipment (e.g. CNS equipment and NAV aids infrastructure)- to clarify the roles and responsibilities of stakeholders for C-UAS and law enforcement measures (including prosecution)

Obj. #5 – Support adequate occurrence reporting

Analysis of data/information related to unauthorised presence of drones in the aerodrome area and taking into account the geographical zones referred to in section 2.1 (e.g. areas of appearance, information that could help tracking the user or focus on preventive activities, etc.) and analysis of the effectiveness of the measures/decisions made are considered as key.

EASA has an essential role to play in maintaining a record of occurrences for trend analysis and initiating proactive measures. One of the fundamental element to support occurrence monitoring will be to define criteria to classify:

- an Airprox (aircraft proximity) between an unmanned aircraft (UA) and a manned aircraft, i.e. the distance between a UA and a manned aircraft as well as their relative positions and speed such that the safety of the manned aircraft involved may be compromised
- an UA airspace infringement

Action #5	
Coordinator	EASA
Actors	EASA Network of Analysts (NoA), Eurocontrol, Aerodrome Operators, Airline Associations and ANSPs
Timeline	Mid-term (6 to 12 months)
Date of start	September 2019
Deliverables	Define criteria to classify: <ul style="list-style-type: none">- an Airprox between a UA and a manned aircraft; and- an UA airspace infringement.

End

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