eVTOLs around the corner:
The work of EASA’s Drones Team

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*Drones Section Manager*
*EASA*
Urban Air Mobility

→ Here: Transportation systems that move people or cargo by air in and around urban environments

AIR SHUTTLES

AIR AMBULANCES

AIR TAXIS

DELIVERY DRONES
Categories of operations

Operations centric, risk-based, performance based regulation

OPEN category - Low risk
- NO-PRE APPROVAL
- LIMITATIONS: 25 kg, Visual Line of Sight (VLOS), height <120m, system of zones
- 3 Sub-categories: fly over, close, far from people

SPECIFIC - Increased risk
- Authorisation by NAA based on specific operation risk assessment (SORA)
- Declaration in case of standard scenario; LUC

CERTIFIED - Risk as manned aviation
- Certification of UAS [by EASA], approval of the operator and licensed pilot (unless autonomous flight) [by the NAAs]

General public / recreational purpose
Model Flying, Photographers

BVLOS operations (line inspections, aerial work, ...)
Transport of goods

Air Taxi
International IFR (cargo, passengers)
Package delivery over people
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EASA Drones Work Programme 2020/21

‘Open’ & ‘Specific’ UAS Category

→ Regulation (EU) 2019/945 on requirements for third-country operators and technical requirements and Regulation (EU) 2019/947 on requirements for the operation and registration will become applicable on 31 December 2020

→ Acceptable Means of Compliance and Guidance Material (AMC/GM) published in October 2019; include ‘SORA’ (Specific Operation Risk Assessment – ‘specific category’)

→ Two standard scenarios allowing drone operators a simplified declaration of common drone use cases

→ Three new pre-defined risk assessments (PDRAs) to simplify the application process still being published in 2020

→ Implementation support: delivered 15 topical online webinars to NAAs and stakeholders on implementing the new drones regulations ahead of their applicability date on 31 December 2020
## Categories of operations

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‘Certified’ UAS Category (including UAM)

→ EASA busy establishing a common European regulatory architecture, including for manned and unmanned eVTOL operations

→ EASA study on ‘Societal Acceptance of UAM operations’

→ Supporting UAM initiatives in Europe, EASA entered into an Innovation Partnership Contract with airport on developing and testing UAM solutions

→ Adjusted rulemaking activities for higher risk operations and vehicles, for more appropriate prioritisation and sequencing in line with expected time-to-market of use cases
Proposed prioritisation and sequencing

Specific category
Medium risk
BVLOS in corridors

2020

Manned UAM

2025

BVLOS free route

Specific category
High risk

Unmanned UAM

2030

IFR cargo

2035
Enabling UAS operations in ‘certified’ category

Amendments needed!
EASA Drones Work Programme 2020/21

U-space

→ U-space Opinion + draft regulation – March 2020; Voting session on U-space regulation: February 2021
U-space regulation entry into force – Q3/2021 (expected) applicable – Q3/2022 (expected)

→ Development of AMC/GM to support implementation, including the four proposed mandatory U-space services:
  - network ID
  - geo-awareness
  - traffic information
  - flight authorisation
EASA Drones Work Programme 2020/21

EASA Counter-UAS Action Plan

→ EASA in 2020 continued implementing its EASA Counter-UAS Action Plan consisting of **five specific objectives**

→ In Q1 2021 EASA will publish **guidance for aerodromes** on managing drone incidents at and in the surroundings of an aerodrome

→ In 2021 **implementation continues** for remaining objectives
# C-UAS Action Plan

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| 1  | **Educate the public** to prevent and reduce misuse of drones around aerodromes | 1. Safety promotion material to create public awareness and understanding of the existence and purpose of geographical zones.  
2. AMC/GM defining a common unique digital format for UAS geographical zones.                                                                 | Complete On time |
| 2  | Prepare **aerodromes** to mitigate risks from unauthorised drone use       | EASA guidance material (in the form of a manual) describing the roles and responsibilities of the actors, and best practices on how to respond to unauthorised drones in the surroundings of an aerodrome.                             | On time      |
| 3  | Support the assessment of the **safety risk of drones** to manned aircraft | Paper (Input to Objective 2) addressing the consequences of drone collision with manned aircraft.                                                                                                              | On time      |
| 4  | Ensure that **C-UAS measures** are swiftly considered and implemented from a global safety perspective | Contribution to the development of International Standards to support the safe and harmonised implementation of Counter-UAS Systems into airport environment and ATM/ANS systems.                                                 | On time      |
| 5  | Support adequate **occurrence reporting**                                 | 1. Define high-level criteria to classify airprox events.  
2. Evaluate compatibility of existing occurrence reporting procedures for inclusion of occurrences involving UA.  
3. Develop suitable action plan to integrate UA in common occurrence reporting procedures. | Initiated     |
Join us!

Flying a Drone professionally - Find out what is important for your business

Virtual event - Information session on Drones

10 Dec 2020  POPULAR

Date & time

10/12/2020, 11:00 - 12:00 (CET). Drones Live streaming session for Commercial Users.
Talk to us!

drones@easa.europa.eu

https://www.easa.europa.eu/domains/civil-drones-rpas