

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

*Sascha Oliver Schott*  
*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

*General public / recreational purpose*

*Model Flying, Photographers*



### **SPECIFIC - Increased risk**

Authorisation by NAA based on specific operation risk assessment (SORA)

Declaration in case of standard scenario; LUC

*BVLOS operations (line inspections, aerial work, ...)*

*Transport of goods*



### **CERTIFIED - Risk as manned aviation**

Certification of UAS [by EASA], approval of the operator and licensed pilot (unless autonomous flight) [by the NAAs]

*Air Taxi  
International IFR  
(cargo, passengers)  
Package delivery over people*

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## ‘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

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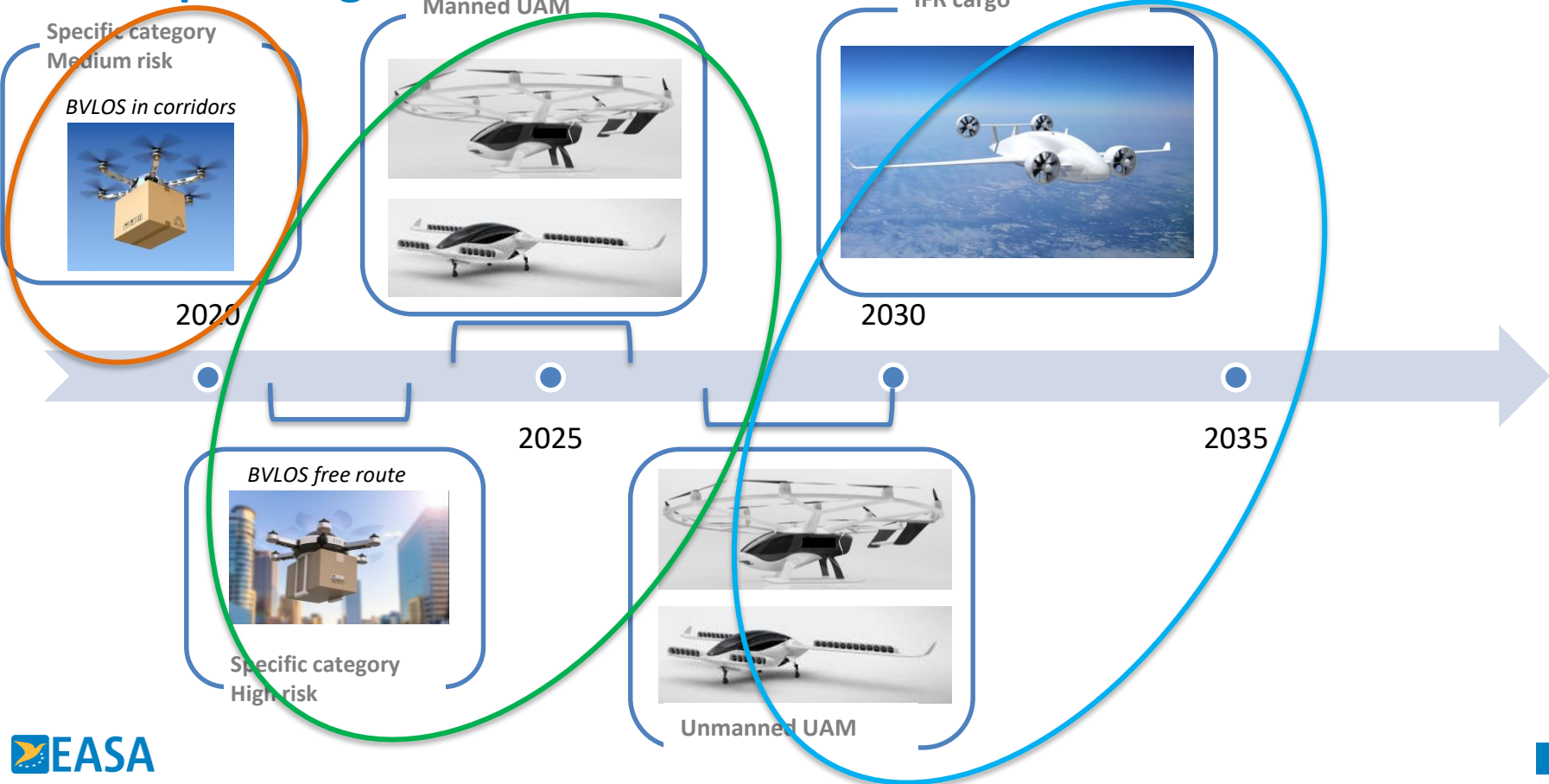
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## ‘Certified’ UAS Category (including UAM)

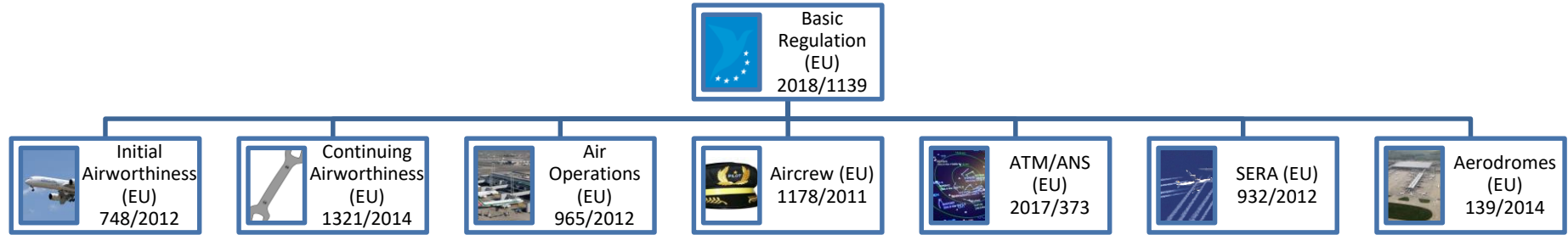
- EASA busy establishing a common **European regulatory architecture**, including for manned and unmanned eVTOL operations
- EASA study on ‘**Societal Acceptance of UAM operations**’
- Supporting **UAM initiatives** in Europe, EASA entered into an **Innovation Partnership Contract** with airport on developing 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



# 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 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

#	Objective	Deliverable	Status
1	<b>Educate the public</b> to prevent and reduce misuse of drones around aerodromes	<ol style="list-style-type: none"> <li>1. Safety promotion material to create public awareness and understanding of the existence and purpose of geographical zones.</li> <li>2. AMC/GM defining a common unique digital format for UAS geographical zones.</li> </ol>	<b>Complete</b>  <b>On time</b>
2	Prepare <b>aerodromes</b> 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.	<b>On time</b>
3	Support the assessment of the <b>safety risk of drones</b> to manned aircraft	Paper (Input to Objective 2) addressing the consequences of drone collision with manned aircraft.	<b>On time</b>
4	Ensure that <b>C-UAS measures</b> 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.	<b>On time</b>
5	Support adequate <b>occurrence reporting</b>	<ol style="list-style-type: none"> <li>1. Define high-level criteria to classify airprox events.</li> <li>2. Evaluate compatibility of existing occurrence reporting procedures for inclusion of occurrences involving UA.</li> <li>3. Develop suitable action plan to integrate UA in common occurrence reporting procedures.</li> </ol>	<b>Initiated</b>

## 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.

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# Talk to us!

[drones@easa.europa.eu](mailto:drones@easa.europa.eu)

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