

EASA Innovative Air Mobility regulatory framework and activities



Maria Algar Ruiz

Programme Manager - Drones

Your safety is our mission.

Established
2002

800+

aviation experts
& administrators



Headquarters in
Cologne
Office in
Brussels

31

EASA member states

= **27** + **4**

EU + Switzerland, Norway
Iceland, Liechtenstein



Risk based

Performance based

Applicable to all
EU + Ch, No, Is, Li

The EU drone
regulation

Mutual recognition

Flexibility

**Prescriptiveness only when
no authorisation is required**

Governing Documents for the EASA IAM-Drone Programme



UAS categories

Open



**PRESCRIPTIVE
APPROACH**

**Transitory period ends on
31 Dec 2023**

Specific



SORA

Certified

Regulations published in
2024



[Regulation \(EU\) 2019/945](#) (technical requirements and third country operations)



[Regulation \(EU\) 2019/947](#) (registration and operational requirements)

UAS OPEN & SPECIFIC CATEGORIES



Statistics as of 30 June 2024



Registered UAS operators:
>1.8M

LUC

Light UAS operator Certificates

 **29**

Remote pilot certificates



A1/A3:>1.4M

A2:>259k

STS:>63k

STS

Standard scenarios declarations

STS-01 - 1177

STS-01 - 494



Active operational authorisations issued using SORA:

>2600

- PDRA-S01 - 223**
- PDRA-S02 - 34**
- PDRA-G01 - 69**
- PDRA-G02 - 40**
- PDRA-G03 - 37**

Open category

- Drones with class mark
- Drones with DVR
- Kits to transform a drone in C5
- Kits for parachute and/or termination system

List published on the IAM Hub

<https://www.easa.europa.eu/en/domains/drones-air-mobility/drones-evtol-designs/approved-drones-eu-operations>

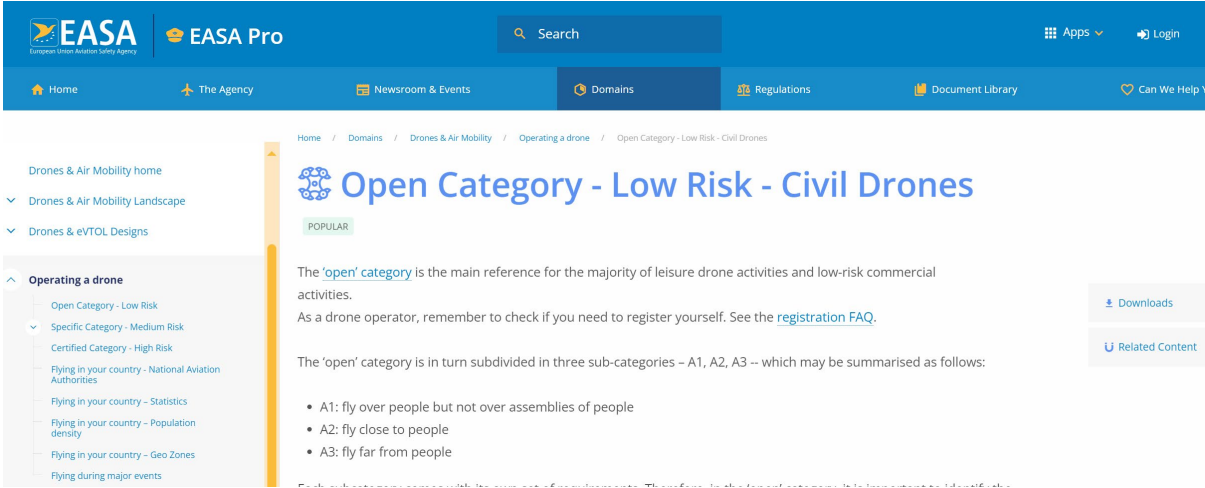
Model	Commercial Name	Operations Category	Design Organisation	Class Mark	Drone M2 Mitigation	Reference No.	Issuance Date	Type Category	Sound Power Level
ABZ Innovation M12		Open / Standard	ABZ Innovation Kft.	C4				Multicopter	
ARES	ARES	Open / Standard	OBJECTIF DRONE PRODUCTION	C5 (STS 01), C6 (STS 02)				Multicopter	104
ATLAS	ATLAS	Open / Standard	OBJECTIF DRONE PRODUCTION	C5 (STS 01), C6 (STS 02)				Multicopter	109
CHRONOS	CHRONOS	Open / Standard	OBJECTIF DRONE PRODUCTION	C5 (STS 01)				Multicopter	109
CHRONOS MINI +	CHRONOS MINI	Open / Standard	OBJECTIF DRONE PRODUCTION	C5 (STS 01)				Multicopter	104
DA25UE1A	DJI Air 2S	Open / Standard	DJI GmbH	C1				Multicopter	83
DSDR04C	ATOM	Open / Standard	Shenzhen Potensic Intelligent Co., Ltd	C0				Multicopter	

Manufacturers are invited to register their product as soon as they completed the verification process/declaration

How to operate in the open category?

Information on the EASA website including FAQ -

<https://www.easa.europa.eu/en/domains/drones-air-mobility/operating-drone/open-category-low-risk-civil-drones>



Guidelines on operations in the open and specific category

<https://www.easa.europa.eu/en/downloads/139435/en>

Contents

- Introduction and purpose of these Guidelines..... iii**
- Guidelines applicable to operations in both open and specific category 5**
 - I. Calculation of the VLOS distance (ref. Article 2 point (7))5
- Part A: Open category 7**
 - I. Overflight of moving vehicles in the open category (Ref. UAS.OPEN.060 point (1)(c))7
 - 1. Introduction on the risk of overflying moving vehicles 9
 - 2. Best practices for the overflight of highways 11
 - 3. Best practices for the overflight of other roads 12
 - 4. Best practices for the overflight of railways 13

What are the main challenges to operate in the specific category?



- new SORA 2.5
 - Focused consultations with NAAs and EU UAS associations planned for November 24
- Planned to be introduced in the EU framework in Q1 25
 - Immediately applicable
 - NAA may still accept applications using SORA 2.0 for a period defined by them (recommended 6 months)
 - Authorisations issued with SORA 2.0 remains valid

Time to improve the EU drone regulation

- Stability of the regulation, no major changes
- Collection of feedback from stakeholders
 - Improve harmonisation of geographical zones
 - Competency for remote pilot in the specific category
 - Revise the requirements for LUC
 - Clarify manufactures responsibility and verification of design of drones
 - Introduce authority requirements



UAS in the certified category and INNOVATIVE AIR MOBILITY



Certified category

Scope of New Regulations on IAM



Unmanned Aircraft Systems

- High-risk operations
- Complex environments
- Integration with manned aviation



NPA for certified category ("Type 1"), planned for 2026



Manned VTOL-capable aircraft – pilot on board

- Complex innovative aircraft
- Urban environment
- Interaction with other manned and unmanned traffic

IAM Regulatory framework (Phase 1)

PUBLISHED

UAS 'specific category' – SAIL V/VI

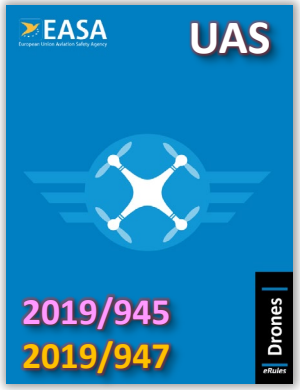
Manned VTOL-capable aircraft

Reg.(EU)
2024/1108

Reg.(EU)
2024/1107 -> Org.
2024/1109 -> CA

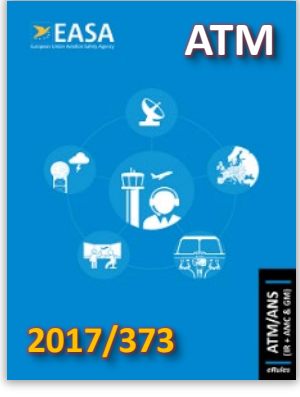
Reg.(EU)
2024/1110

Reg.(EU) 2024/1111



AMC/GM to NPA #1
Specific category
High risk
NPA 2024-06
published

AMC/GM to NPA #1
Manned IAM
(Type#3 operations)
NPA 2024-01
published



Decisions planned for 2025

DELEGATED ACTS
IMPLEMENTING ACTS



Update on the certified category

Timeline

- Regulations applicable as May 1, 2025
- ED Decisions with new AMC&GM for UAS and VCA in Q1/2025
- Focus on the implementation of new regulations
- Resuming rulemaking as of 2026

U-SPACE

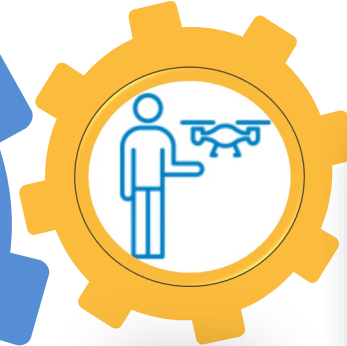
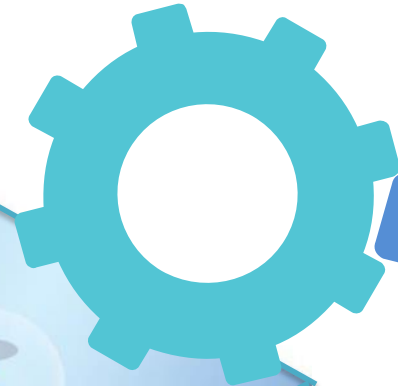


U-space

Volume of airspace

WHY ?

- to enable fair and efficient sharing and use of the airspace
- to enable dense drones operations
- to enable complex and long distance UAS operations (BVLOS)
- to enable operations in urban environment
- to ensure safe separation between manned aircraft and drones
- to ensure safe flights and operations of drones in the airspace

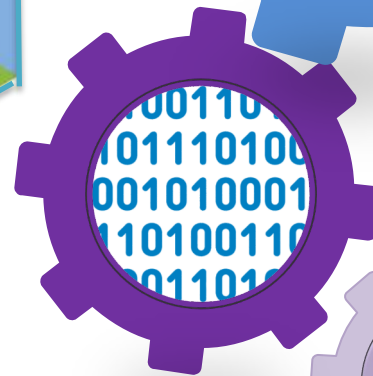


A set of services

 UAS flight authorisation	 Geo awareness	 Network e-identification
 Traffic info	 Weather info	 Conformance monitoring

Information exchange

Automated exchanges with limited human involvement



e-conspicuity

Geographical zone designated by the Member State

Candidates U-space airspace

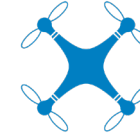
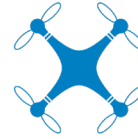


> 25 potential U-space airspaces (urban/peri-urban, controlled and uncontrolled airspace)

15 concrete U-space candidates subject to designation process

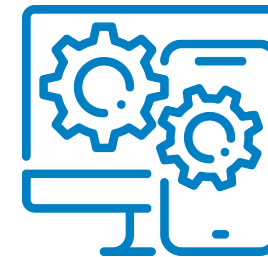
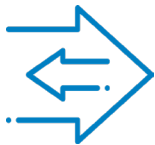
First designation expected in 2024

Candidates Single CISP and USSP



Single CISP
11 candidates
2 on-going certifications

U-space Service Providers
11 candidates
5 on-going certifications
(including 2 non-EU by EASA)



First certification
expected in end 2024

Ongoing and planned activities

Rulemaking

Publication of the
easy access rules

Collection/consolidation of
feedback and changes

Preparatory work on
targeted topics

Kick-off of the RMT.0748
NPA of major updates of
the AMC/GM

Implementation support

Continuous support and
discussion with MS

TF on certification with MS

Support to WG
(EUROCAE, JARUS, ICAO
and SJ)

External events and
international cooperation

USSP certification

Development of the EASA
certification process

On-going
organisation certification

Support to a non-EASA
certification

MS standardisation

Implementation survey

Development of the
standardisation framework
(e.g. questionnaires)

TM qualification

MS Inspections

Targeted communications
to MS (potential findings)

C-UAS



EASA Counter UAS Action Plan



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

Safety promotion material / guidance for UAS-GZ

2. Prepare aerodromes to mitigate risks from unauthorised drones use.



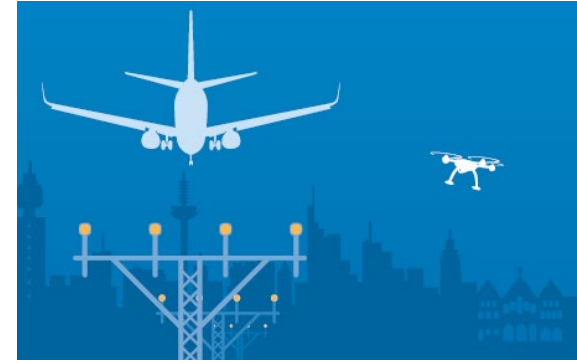
“Drone Incident Management at Aerodromes” manual

3. Support the assessment of the safety risk of drones to manned aircraft with scientific data.



Research project on open cat UAS impact on manned aircraft

EASA Counter UAS Action Plan



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

Participation to activities of:

DG-Home, -MOVE, Eurocae, FRONTEX, NATO, FAA,...

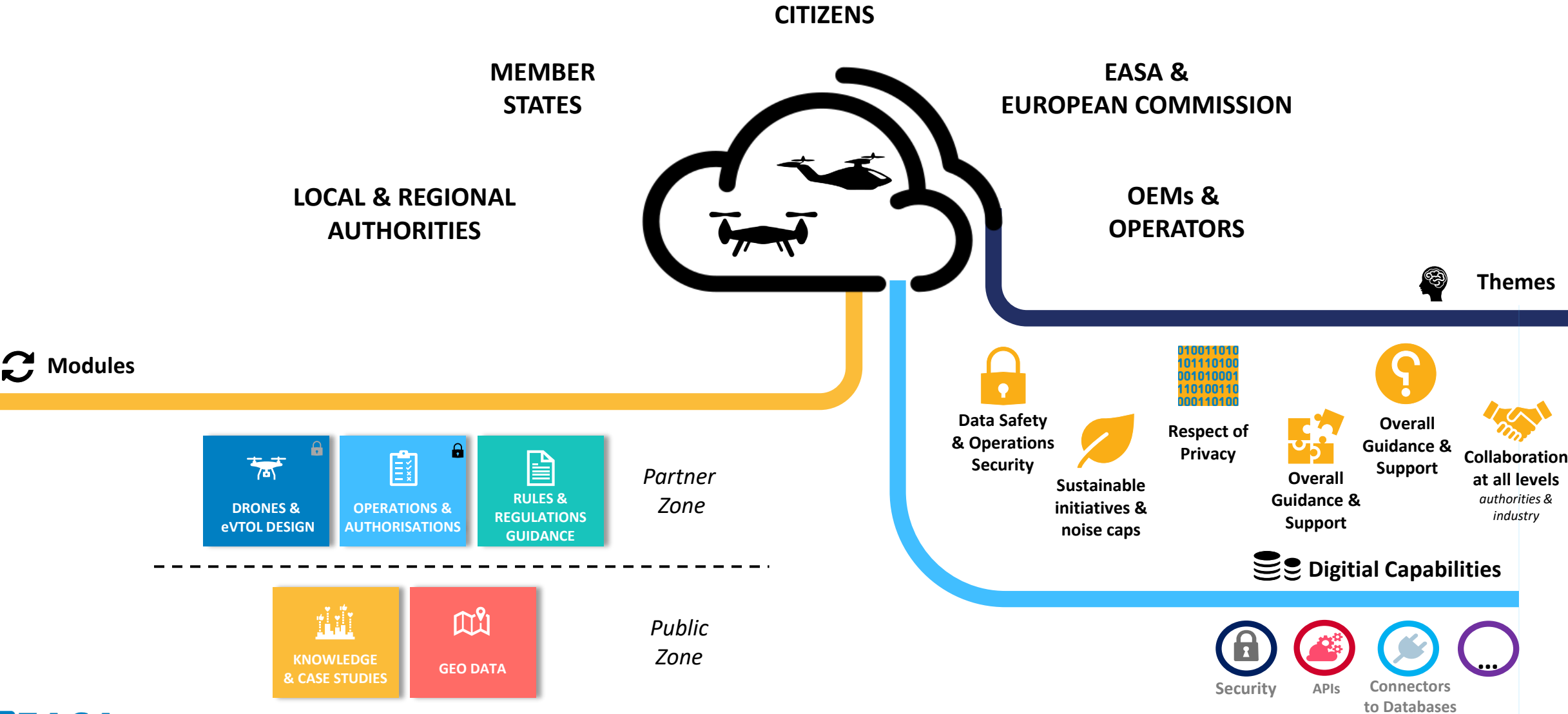
5. Support adequate occurrence reporting
Adaptation of legal basis (rules) and tools (ECCAIRS) to accommodate occurrences involving drones

Proposal being
discussed with the
commission

IAM HUB



The IAM Hub is a unique platform to connect the IAM eco system



Thanks for your attention

easa.europa.eu/connect



Your safety is our mission.

An Agency of the European Union 

