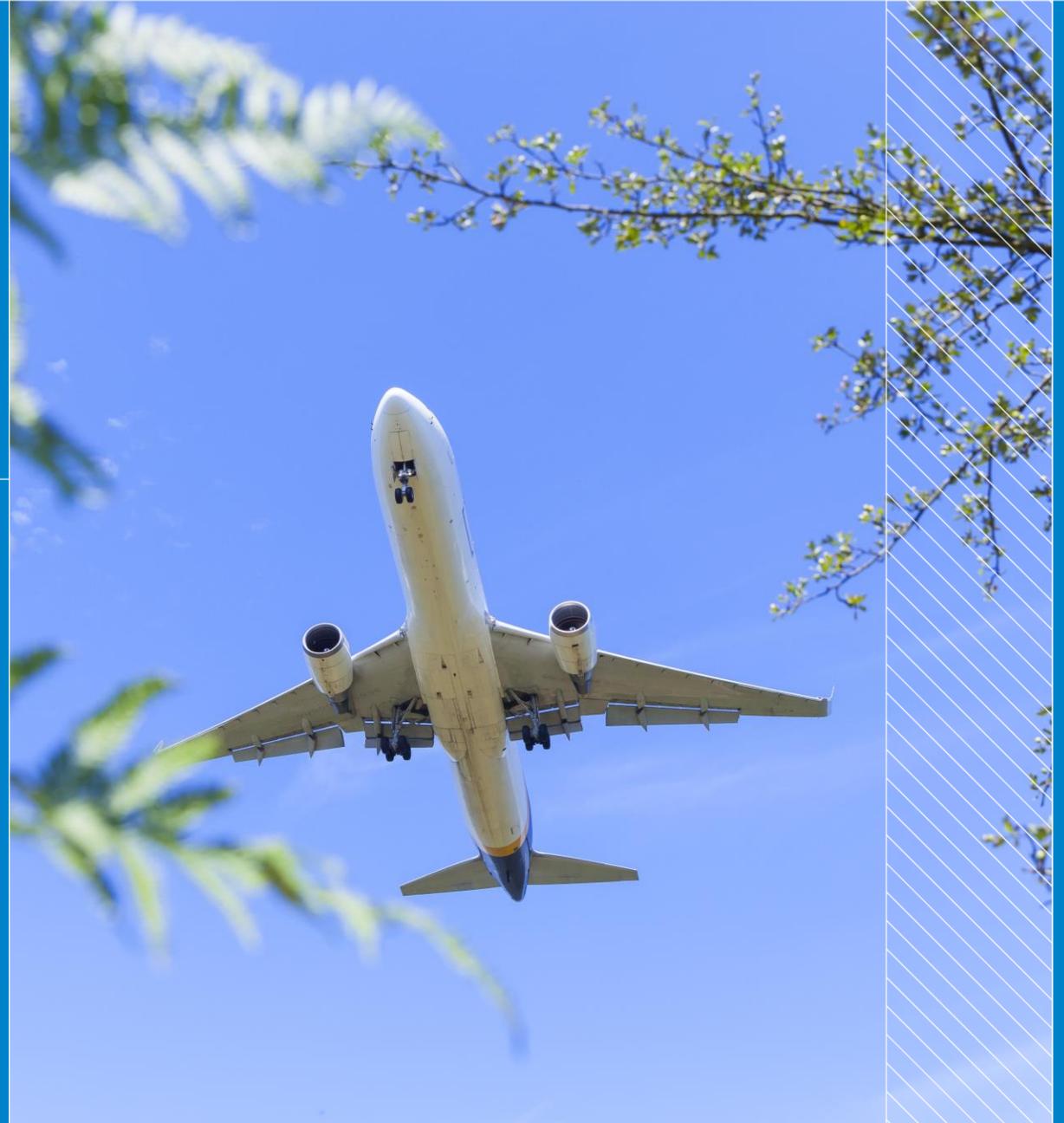


UAS operations

Natale Di Rubbo
Drone Project
Manager



Operation centric, risk-based, performance based regulation



Commission Delegated Regulation (EU) 2019/945 (UAS technical requirements and third country operators)

Commission Implementing Regulation (EU) 2019/947 (Registration and operational requirements)

Applicable from 31 Dec 2020

OPEN category - Low risk
NO-PRE APPROVAL
No Type certificate
CE marking process

SPECIFIC - Increased risk
Approval from NAA
Type certificate may be required

Recipients of goods
Professional such as photographers, inspections in unpopulated areas

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



First NPA in 2022

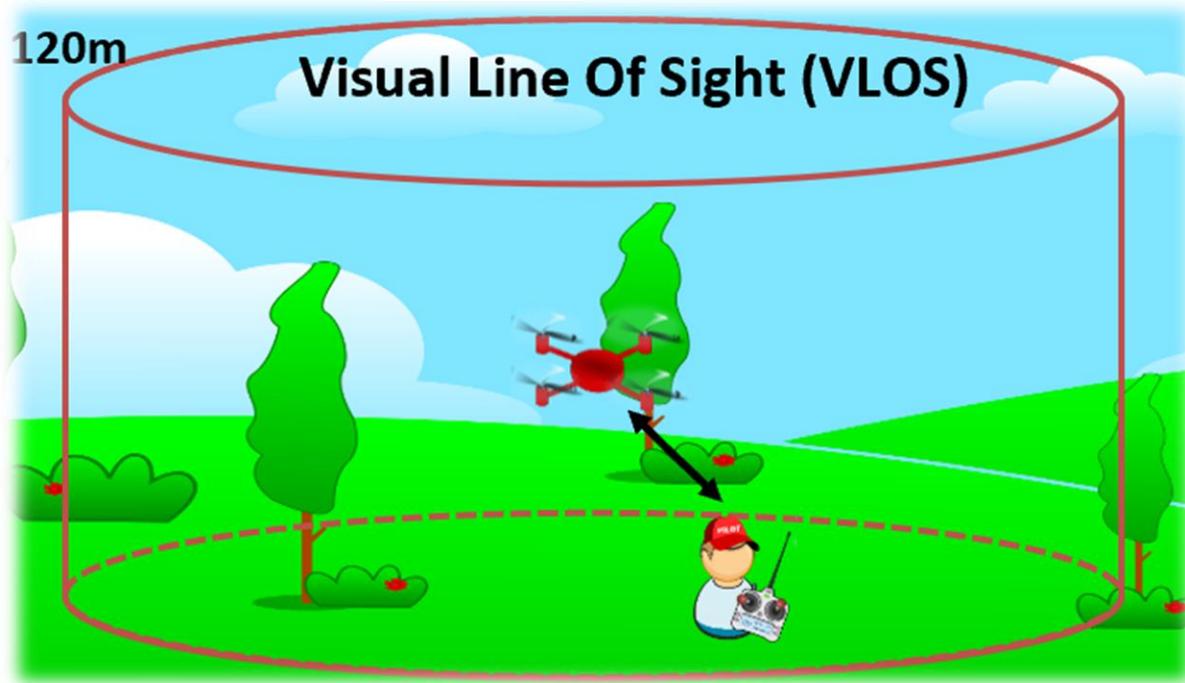
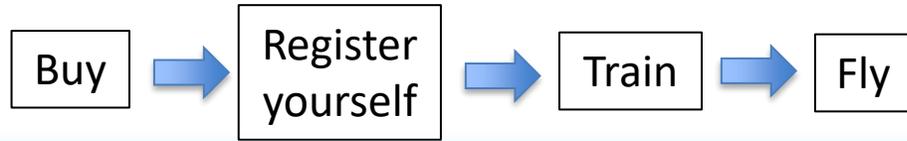
CERTIFIED - Risk as manned aviation

Certificate for the operator, for the UAS, and licensed pilot

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

Open category

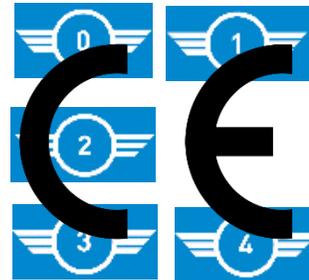
Prescriptive requirements



- A1 fly over people
- A2 fly close to people
- A3 fly far from people

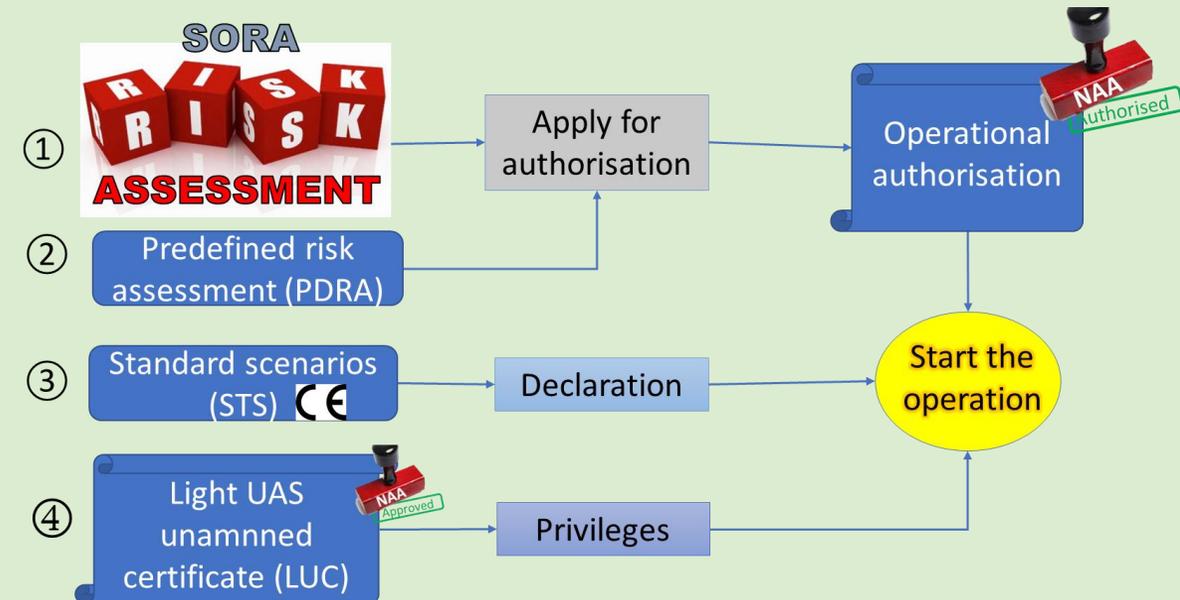
Privately built with MTOM<250g

Privately built with MTOM<25kg



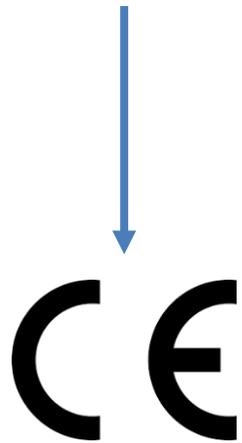
Specific category

Requirements based on the risk assessment performed by the UAS operator



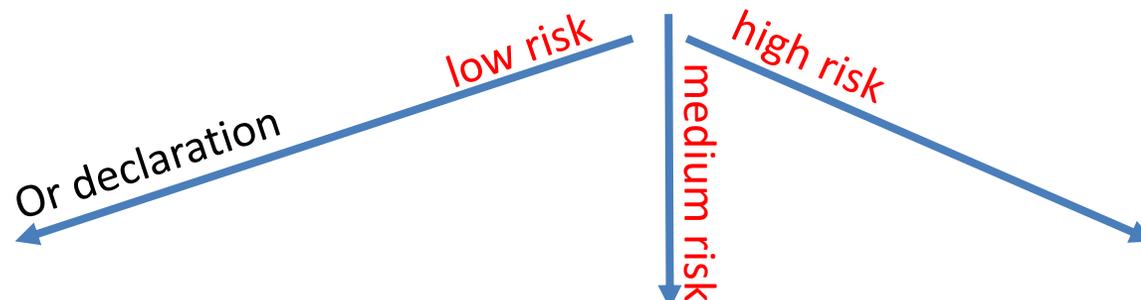
Verification of the design of the UAS

Open category



Specific category

Depending on the risk



Certified category



Certification basis:

- SC Light UAS
- or
- CS- x complemented by future CS UAS

The design verification report

- Who can apply: Any natural or legal person capable to demonstrate design compliance of the UAS, mitigation means, containment (as applicable)
- May cover one or more of the following:
 - mitigation means linked with the design;
 - enhanced containment function
 - full design of the UAS
- EASA will publish the list of design verification reports (with main data, similar to STC list)

Design Verification Report is not a type certificate – recognition only inside EASA MSs (at least for the initial phase)

The U-space

Applicability date 26 January 2023

Airspace where some services are provided.



U-space airspace

Mandatory services

Network identification

Geo-awareness

Traffic information

UAS Flight authorisation

'Optional' service

Monitoring service

Weather service

RMT.0230 – Industrial developments

Specific category
Medium risk

BVLOS in corridors



2020

Manned UAM
Type#3 operations



2025

Certified category
Type#1 IFR cargo



2030

2035

BVLOS free routing in a network



Specific category
High risk



Certified category
Type#2 operations
Unmanned UAM

Next rulemaking activities

2020		2021				2022				2023				2024
Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1

Specific category
AMC/GM Low-medium risk



NPA (Red Star) **Decision** (Blue Star)

Guidelines (Orange bar)

U-space
AMC/GM



NPA (Red Star) **Decision** (Blue Star)

Specific category
High risk



Manned UAM
Type#3 operations



NPA #1 (Red Star) **Opinion #1** (Blue Star)

Certified category
Type#2 operations
Unmanned UAM



Certified category
Type#1 operations
IFR cargo



NPA #2 (Red Star) **Opinion #2** (Blue Star)



**THANK
YOU**

