



**EASA**  
European Aviation Safety Agency

# Unmanned Aircraft: Specific Category

**EASA team**

**UAS workshop  
24 October 2016**

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# *Agenda*

- Specific category boundaries
- Specific Operation Risk Assessment
- Standard scenarios
- Operation declaration/authorisation
- Light Unmanned operator Certificate (LUC)
- Mutual Recognition



# *Specific category boundaries*



## **OPEN**



## **SPECIFIC**



## **CERTIFIED**

VLOS

Unpopulated area

Separated from manned traffic

MTOM <25 kg



High risk required full certification  
similar to manned aircraft



# Specific Operation Risk Assessment (1/2)

## SPECIFIC



Operator



Competent  
authority



## OPERATIONS

### Specific Operation Safety Risk Assessment (SORA)

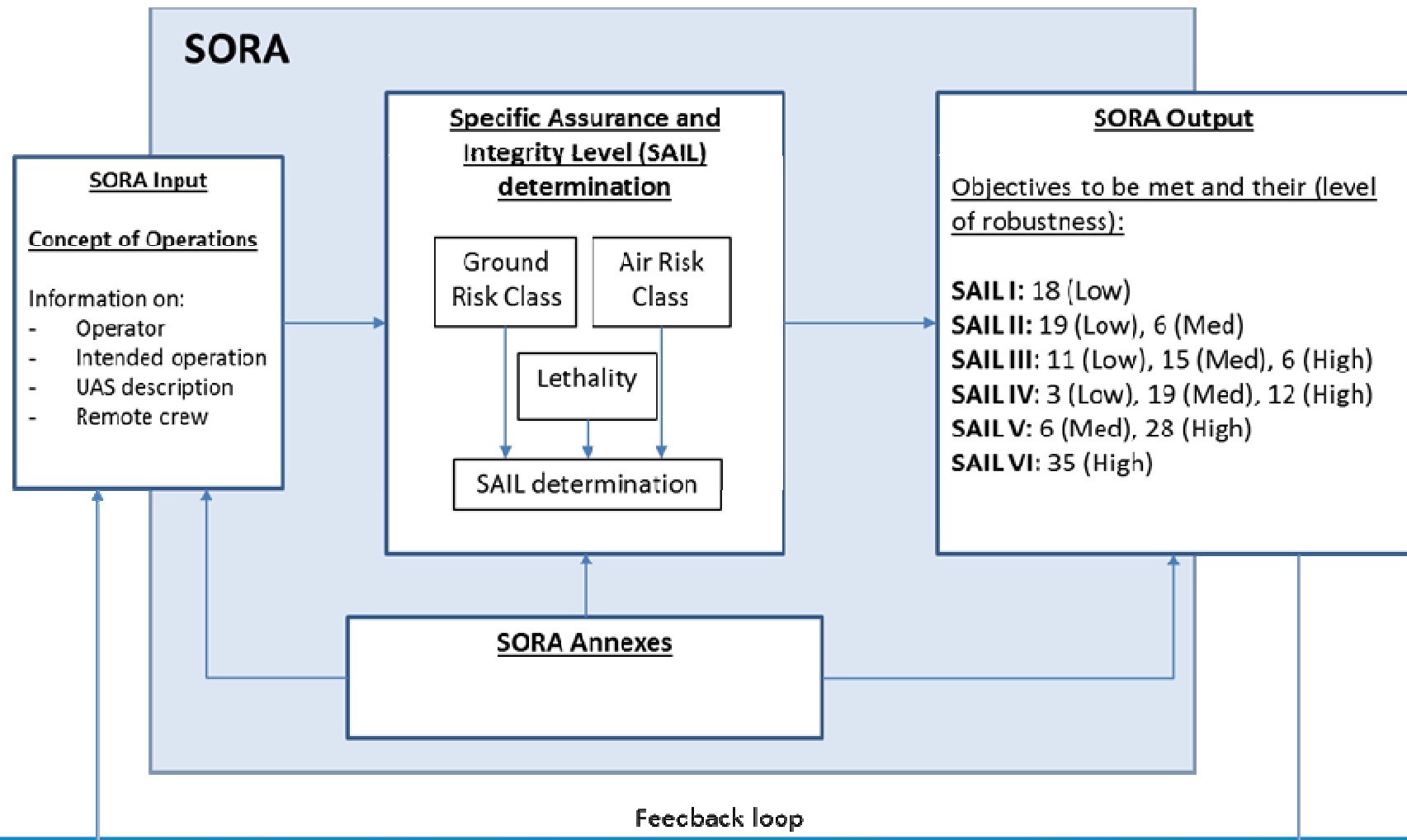


Operation  
Authorisation (OA)



# Specific Operation Risk Assessment (2/2)

## JARUS SORA as an AMC





# *Standard scenarios*

## **SCOPE**

- Provide to operators with a predefined risk assessment for more common operational scenarios

## **STANDARD SCENARIO DEVELOPMENT**

- Developed by the Agency, Members States, operator and/or industry, published by the Agency
- National Standard Scenarios as Alt MoC process.

## **2 Types of scenarios:**

- Low risk: declaration by operator.
- High risk: authorisation required before starting the operation



# *Standard scenarios - Structure*

## **APPLICABLE OPERATIONAL ENVIRONMENT**

- Generic to identify the risk rather than the operation (i.e. fly over medium density populated area ( $x \text{ inh/km}^2$ ), in VLOS, below 500ft)

## **SAIL**

- Risk level already identified in the scenarios as it will be the outcome of the SORA approved by the Agency

## **MITIGATION MEASURES**

- List of all required mitigation measures that the operator needs to put in place before flying, to reduce the risk to an acceptable level. Mitigations will include additional: technical requirements, test, pilot competence, operational limitations



# Standard scenarios – 2 possibilities

**Low risk  
Standard scenario**

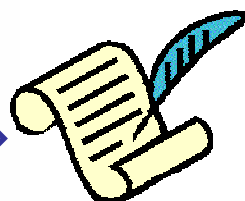
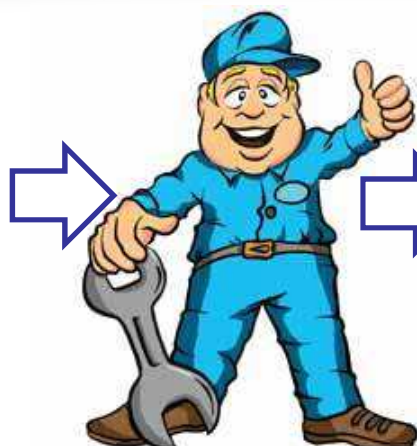
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SAIL=1

Mitigations

\_\_\_\_\_

\_\_\_\_\_



Declaration  
taking on  
responsibility



**High risk  
Standard scenario**

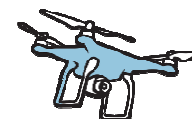
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SAIL>1

Mitigations

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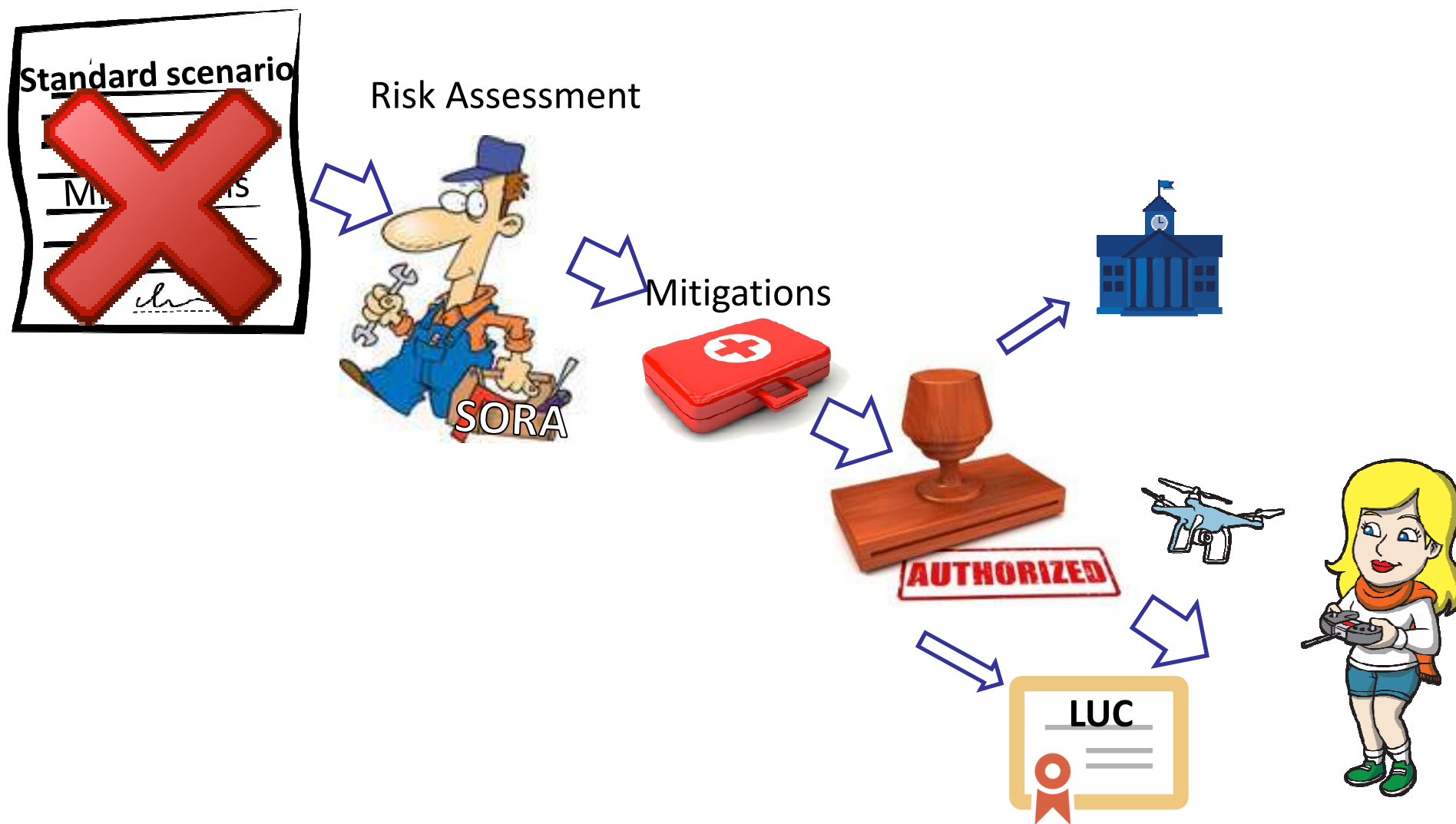
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# *No Standard scenarios*





# *Light Unmanned operator Certificate (LUC)*

## **LUC is not mandatory**

Operator demonstrating to have an organisation able to identify and manage safety risk (SMS) can require the competent authority to be issued a LUC

## **POSSIBLE PRIVILEGES**

- Not required to submit to the competent authority a declaration before starting an operation covered by a low risk standard scenario
- Self authorise its operation covered by a high risk standard scenario
- Carry out the risk assessment for an operation not covered by a standard scenario and self authorise the operation



# Mutual recognition

**Competent authority:** in the Member State where the UAS operator has its principal place of business or place of residence

Low risk standard scenario operations



Declaration to be submitted to the competent authority

High risk standard scenario or operation not covered by a standard scenario:



Request for authorisation to be submitted to the competent authority

LUC:



Operator applies to its competent authority

In case of operation performed in a State other than where the operator is registered, he is responsible to verify if local conditions require additional limitations.

Cooperation between Authorities (Authority of place of business and of place of operation).



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European Aviation Safety Agency

**Questions and comments are  
welcome**

**Prototype regulations available  
at**

**<http://www.easa.europa.eu/easa-and-you/civil-drones-rpas>**

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# Back Up Slides

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## *Standard scenarios – 3 possibilities*

### **Operation included in a low risk standard scenario (SAIL I)**

- Operator, after ensuring he complies with mitigations defined by the standard scenario, submits a declaration to the competent authority and starts the operation under his responsibility

### **Operation included in a high risk standard scenario (SAIL >I)**

- Operator, after ensuring he complies with mitigations defined by the standard scenario, collects the documentation listed in it and seek for authorisation before flying

### **Operation not included in a standard scenario**

- Operator carries out a risk assessment (SORA is an AMC), proposes appropriate mitigations measures and seeks for authorisation before flying