



**EASA**  
European Aviation Safety Agency

# Overview on RPAS

S Ronig

Shaping an innovative regulatory framework

21 October 2015

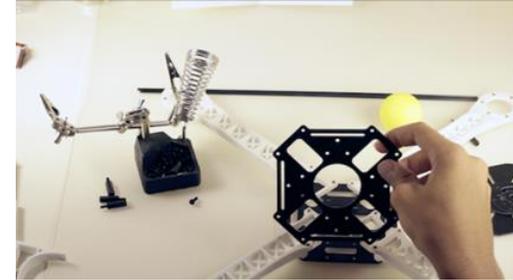
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TE.GEN.00409-001



# What is a drone?



From small consumer devices  
used for recreation to large aircraft



# Extension of Scope of EASA to smaller drones

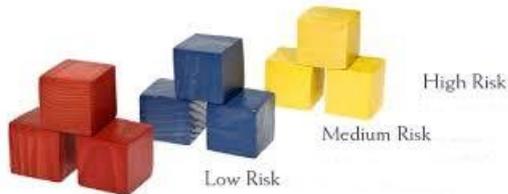
- Current scope of EASA are unmanned aircraft with a mass higher than 150 kg and not used for “state” operation.
- Impact Assessment on proposed changes to include all(!) unmanned aircraft in the scope of EASA (not used for “state” operation) run by the commission.
- Basic regulation change intended to be included in the “aviation package” proposed by the commission in November 2015.



# Pillars of proposed approach



Operation centric



Risk based

- 3 categories: open, specific, certified



Commercial/Non commercial  
Whole weight range



# Categories of Operation



## OPEN:

Low risk

No involvement of  
Aviation Authority

Limitations : Visual line  
of sight, Maximum  
Altitude, distance from  
airport and sensitive  
zones



## SPECIFIC

Increased risk

Operations  
Authorisation with  
operations manual

Specific qualification of  
drone, personnel,  
equipment based on  
safety assessment



## CERTIFIED

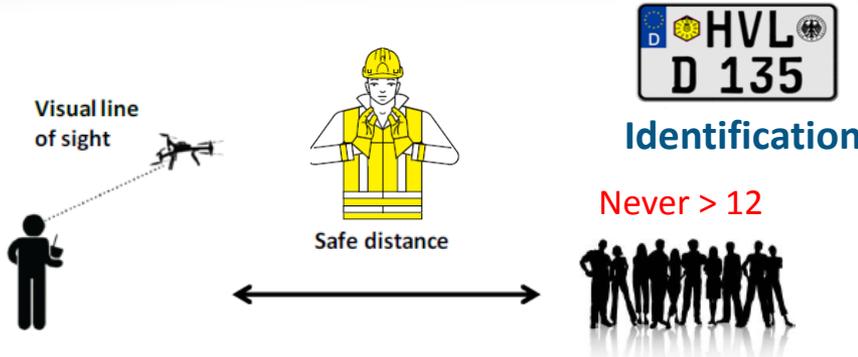
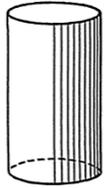
Regulatory regime  
similar to manned  
aviation

EASA and Authority  
Certificates

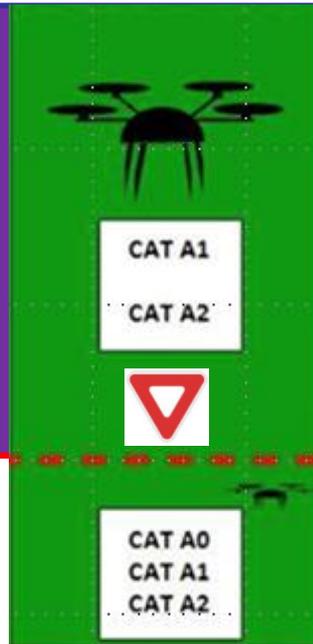
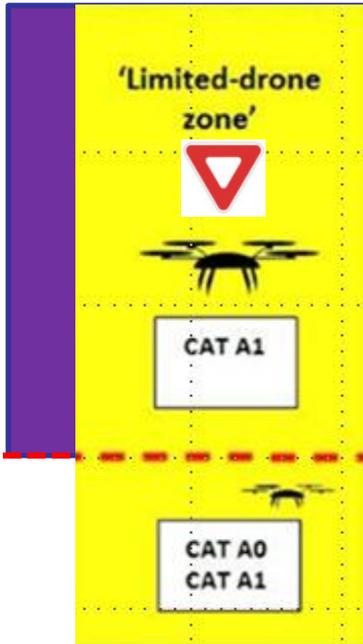


# “Open” category

Geo-fencing



A0	< 1 kg
A1	< 4 kg
A2	< 25 kg



Product safety directive

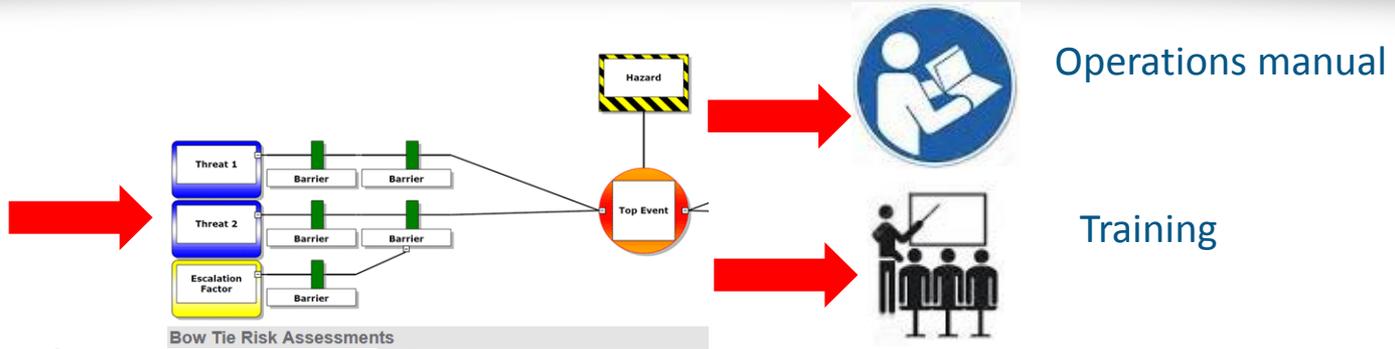


50 m



# Specific category

Operator



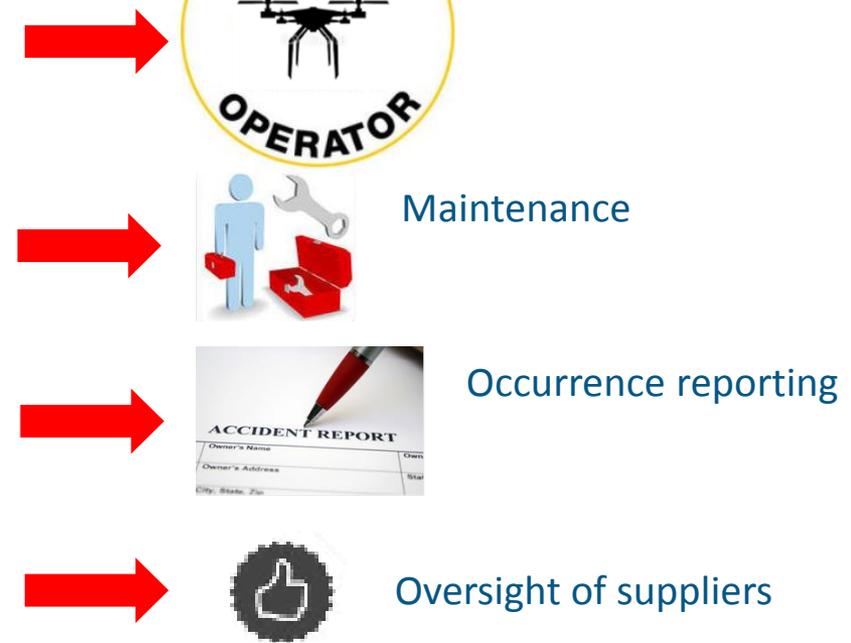
Bow Tie Risk Assessments



Competent authority



Operation Authorisation (OA)





# “Certified” category

## Implementing rules included in existing rules for manned aviation

### Drone and components

Type Certificates  
(Full / Restricted)

Certificates of  
Airworthiness

European  
Technical Standard  
Order Approvals  
(ETSO) (option)

### Organisations

Design  
Organisation  
Approval

Production  
Organisation  
Approval

Maintenance  
Organisation  
Approval

Training  
Organisation  
Approval

### Personnel

Licensed pilot

Remote Operator  
Certificate (ROC)

### Certification Specifications

Safety Objectives

Complemented by  
Technical  
Standards

Standard for  
Operational  
aspects

Standard for  
Licencing aspects



# Public Consultation A-NPA 2015-10

- A communication document (simplified version of the NPA) has been translated in all EASA languages:
  - <http://easa.europa.eu/easa-and-you/key-topics/civil-drones-rpas>
- Comments received until **28<sup>th</sup> of September 2015**:
  - <http://hub.easa.europa.eu/crt/docs>



# A-NPA - Overview of the comments

- 3400 comments received from 250 + respondents representing the drone community and more generally a broad range of aviation stakeholders:
  - What is a drone: 110
  - Regulatory framework: 585
  - Open category: 1470
    - Mass and sub-categorisation: 431
    - Technology: 291
    - Limitations: 223
  - Specific: 505
  - Certified: 156



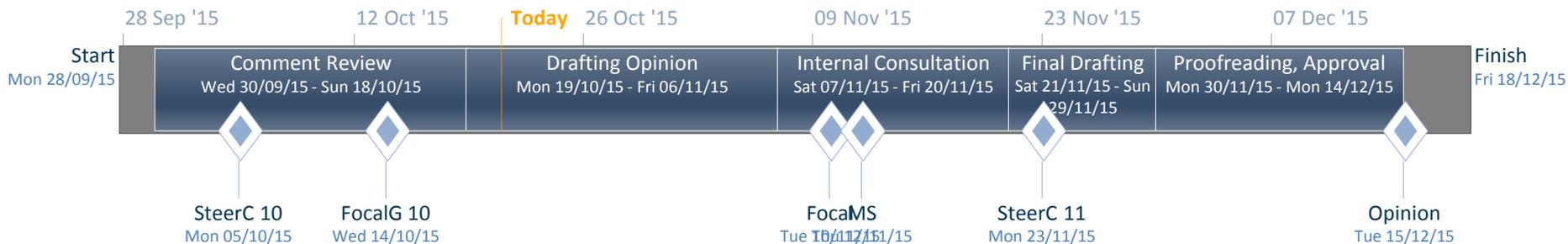
# A-NPA – Opinion - Next steps

- Review of comments and drafting of technical opinion in small internal group
- Internal consultation with EASA Drone Focal Group
- External Consultation and Coordination
  - Ad-hoc meeting with Authorities Drone experts will be organised mid November
  - A “technical opinion” will be sent to the Commission in December



# A-NPA – Opinion - Next steps

Review of comments	18/10
Drafting opinion	06/11
Internal consultation	20/11
Final drafting	29/11
Proofreading/Approval	14/12





# Update JARUS/ICAO

## ➤ JARUS

- Work continues to be market driven – focus on small vehicles
- Work is progressing on schedule.
- Work on an ATM Conops will start for low altitude operations
- Next meeting in Madrid in Q2 2016

## ➤ ICAO

- Focus continues to be on international IFR traffic
- Little or no harmonisation with other fora.
- Next RPAS panel in December 2015
- European coordination meeting planned for November 2015



# Rulemaking working method

- Proposed process:
  - EASA internal drafting of Implementing Rules using JARUS material as far as available
  - Amount of external consultation depending on maturity of JARUS deliverables and stakeholder involvement in JARUS process
  - Establishment of Working Group only when consultation is controversial
- Working Group only when EASA and JARUS path is different
  - Milestones coordinated with JARUS



# Safety Promotion

- Safety promotion is needed to reach recreational users

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# Flying a Drone

Have fun | Be responsible for safety

**DO**

 Keep your drone in sight at all times

**DO NOT**

 Do NOT fly in any way that could endanger anyone



# EASA

European Aviation Safety Agency

# Thank you for your attention!

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