



# An Aviation Strategy FOR EUROPE



#AviationStrategyEU >



Let drones fly in  
the EU airspace!  
The EU approach to  
drone rules



# EU Approach: how to turn technologies into jobs & growth?

- ❖ RPAS – UAS – Drones: What's in a name?
- ❖ Underlying technologies
- ❖ Further steps in automation - digitization – big data – related technologies  
(Valid for drones + remote towers)

## EU approach to drones

- ❖ Regulate underlying technology (beyond RPAS – automated - autonomous)
- ❖ Tackle this global technology at EU level on an international consensus (delete 150kg threshold)
- ❖ Drone technology is disruptive for both business and for regulators

## EU approach to drones

- ❖ Challenge: widened range of operations lead to wider range of (safety) risks and **new risks**: safety – security – privacy – environment...
  - ❖ **Need for more regulatory flexibility to keep rules proportionate**
  - ❖ **Common rules, but local application**
- ❖ ***Move from aircraft centric to operation centric approach***

- ## An EU Operation Centric Approach
- ❖ Starting point: focus on particular risk of a particular type of operation
  - ❖ Importance of risk assessments
  - ❖ Build on existing aviation system
  - ❖ Introduce new procedures / actors
  - ❖ Performance based rules - standards

Principles in  
Reviewed  
Regulation  
216/2008

- Commission proposal to review EU Basic Aviation Safety Rules
- Council & EP to adopt law
- Frame adopted in 2016-17

Detailed rules to  
set performance  
requirements

- JARUS prepares global requirements
- EASA issues opinions
- Commission adopts detailed rules

Industry  
standards to  
provide compliant  
methods

- Industry sets standards
- Methods to meet performance targets
- Evolving technologies

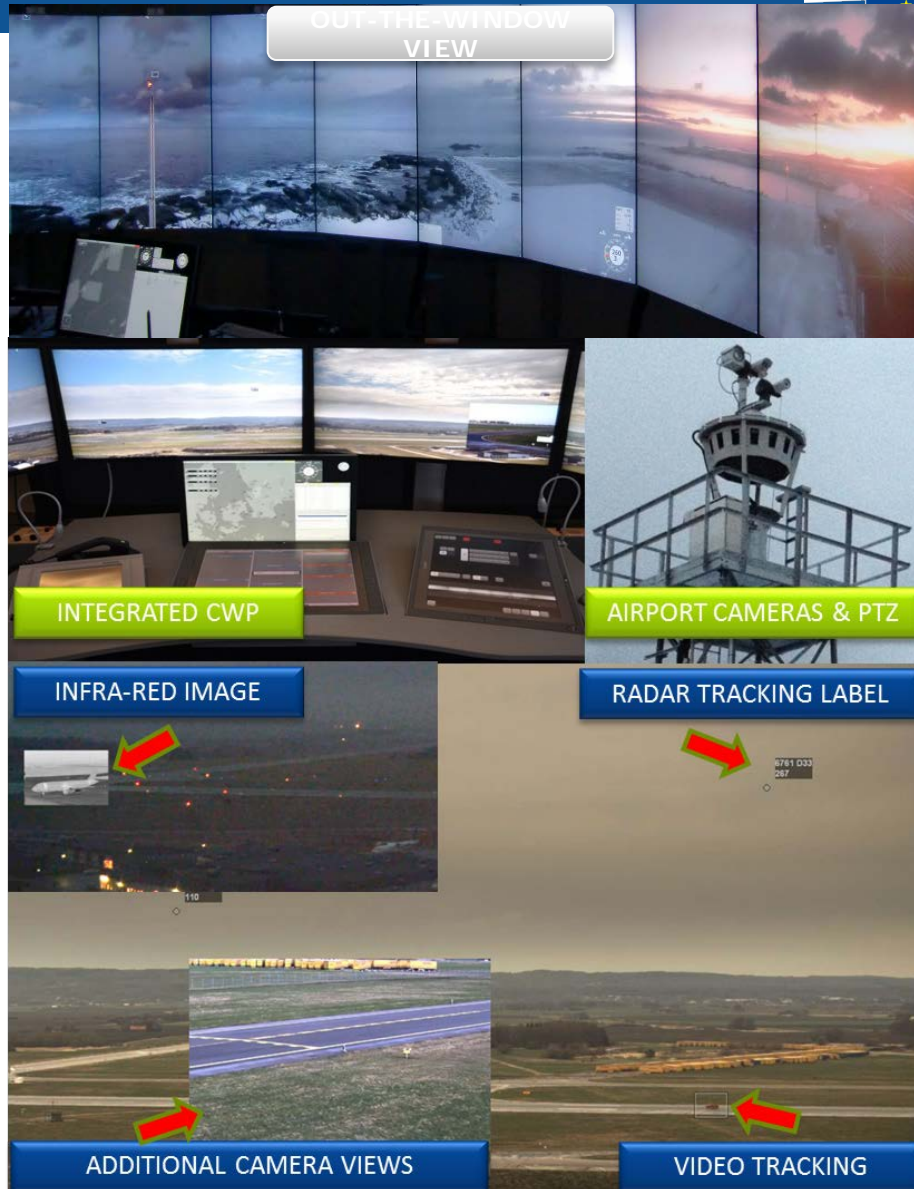
# Unmanned aircraft in reviewed EU Safety Rules (Art. 45-47)

- ❖ Means of compliance:
  - ❖ **Certification: traditional aviation approach;**
  - ❖ **Declaration: innovative and more flexible approach;**
  - ❖ **Product safety and market surveillance mechanisms for low risk operations.**
- ❖ Develop detailed rules: give substance to principles (see EASA technical opinion of 18 December 2015)

## From adoption to implementation: the EU drone roll out strategy

- ❖ Strategy of implementation (combined work of Presidency/EASA/SJU/EC).
- ❖ Addresses all issues:
  - ❖ **What concept of operations;**
  - ❖ **What rules and standards;**
  - ❖ **R&D – international action – awareness raising.**





**Manage remotely** the traffic situation in **real time** of one or more airports

### **Technology**

- Video cameras with zoom-in and infrared*
- Ground sensors*
- 360 panoramic high resolution screen*
- Navigation aids*

### **SESAR validation exercises:**

- Cost Effectiveness*
- Able to operate for longer periods*
- Lower staffing costs*
- Supporting Regional Economy*



# How to reconcile the EU approach with ICAO framework?

- ❖ *ICAO provides global framework:*
  - ❖ **International air traffic;**
  - ❖ **Instrument Flight Rules;**
- ❖ *EU – or regional systems:*
  - ❖ **Cover all drones**
  - ❖ **Cover all drone operations**
  - ❖ **Cover all issues – with all competent authorities.**

## The EU approach to unmanned aircraft

- ❖ *A next step in automation through new technologies*
- ❖ *Open – global approach*
- ❖ *Disruptive character requires an operation centric approach*
- ❖ *Combine this with ICAO global framework*