



European  
Commission



# Regulating Drones

**The EU Vision  
for a drone services market**

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**Florence Air Forum, 18 September 2015**

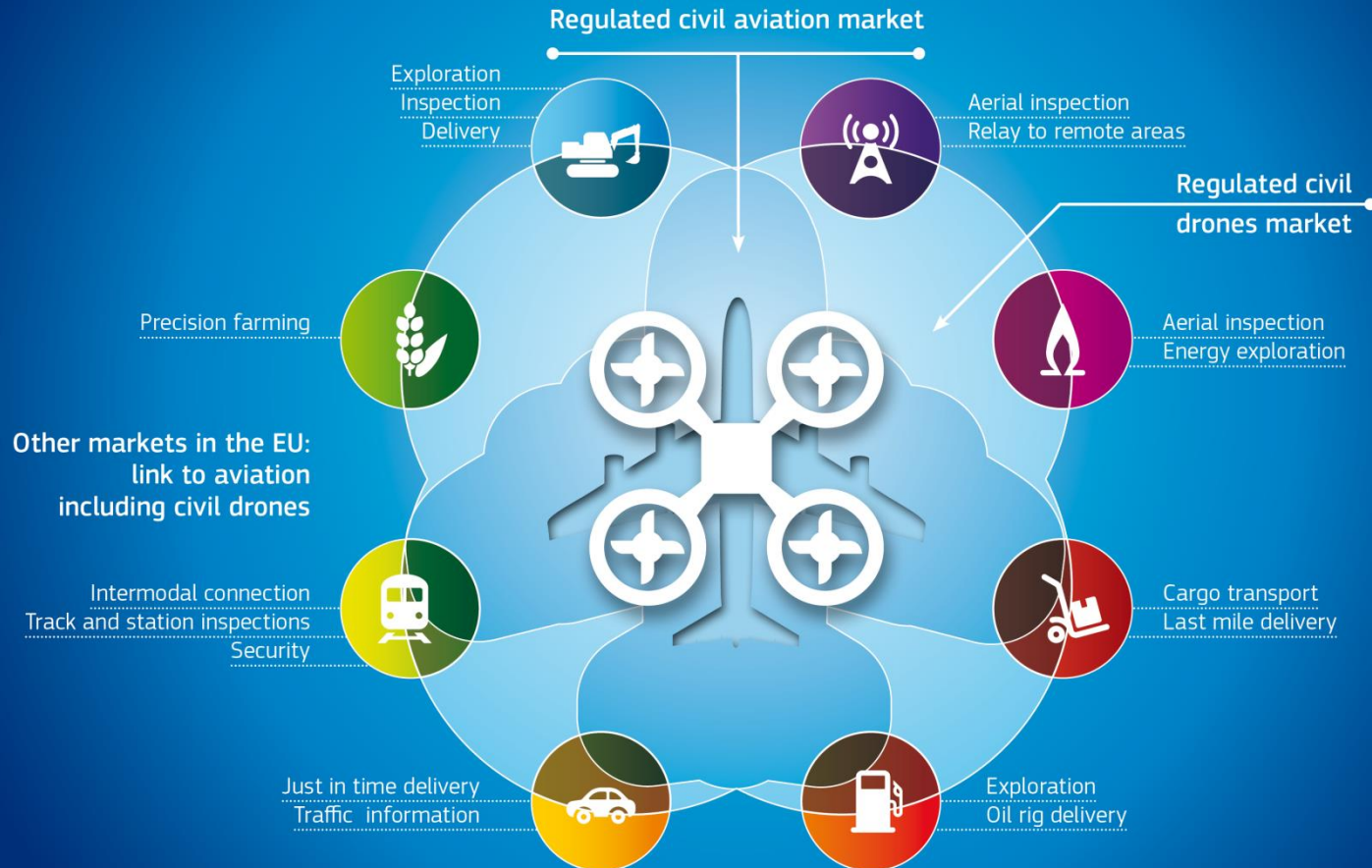
# Wide range of drones and drone operations





European  
Commission

# Future aviation services



# The Drone Regulatory Framework

## Actors – Form of deliverables

**First layer:** Parliament & Council decide on the Commission proposal

**Second layer:** Commission adopts EASA opinions, based on JARUS deliverables

**Third layer:** Industry Standard Setting bodies adopt in line with performance

# The Drone Regulatory Framework

## Structure - A layered approach

**First layer: Principles** (e.g. a drone operator should at all times be identifiable)

**Second layer: Implementing Rules** (e.g. all drones shall be equipped by an IDrone that authorities can interrogate)

**Third layer: Industry Standards** (e.g. drones of type X shall be equipped with an electronic chip with characteristics YY accessible by policy through software ZZZ)

# The Drone Regulatory Framework

The philosophy: performance based rules

**First layer:** political objectives covering safety, security, privacy & data protection, environment

**Second layer:** performance based requirements setting safety targets and performance levels

**Third layer:** methods delivering targets & performance levels

# The Drone Regulatory Framework

## Concrete substance

**First layer:** EASA Basic Regulation revised – rules on accident investigation – incident reporting – rules of the air - environment

**Second layer:** risk classification scheme – three pillar approach with basic performance requirements for open/specific/certificated categories – rules of the air

**Third layer:** industry standards meeting performance targets e.g. wrt Detect&Avoid, Command&Control, Contingency, etc.

# The Drone Regulatory Framework

## Timing

**First layer:** Commission proposal end 2015 –  
Adoption EP and Council 2016-2017

**Second layer:** first consultations summer 2015 –  
opinions end 2015 – Commission decision 2016 –  
JARUS + EASA working programmes

**Third layer:** EuroCAE work programme – other  
standard setting bodies



# The Drone Regulatory Framework

## Application and Enforcement

**First layer:** EU rules – regulation – EU wide rights and obligations for citizens / pilots / operators / authorities / bodies – enforcement by police and aviation authorities

**Second layer:** EU rules – EASA standardization inspections

**Third layer:** Recognized standards are means of compliance

# The Drone Regulatory Framework

## Subsidiarity and involvement CAA/MS

**First layer:** consultation by Commission – part of JARUS – EP & Council adopt – Application & Enforcement

**Second layer:** consultation by EASA – part of JARUS – EASA committee – Application & Enforcement

**Third layer:** CAAs follow work of standard setting bodies

# The EU Drone Services Market

## Principles

- Commission proposal in 2015
- Council & EP to adopt law
- Frame adopted in 2016

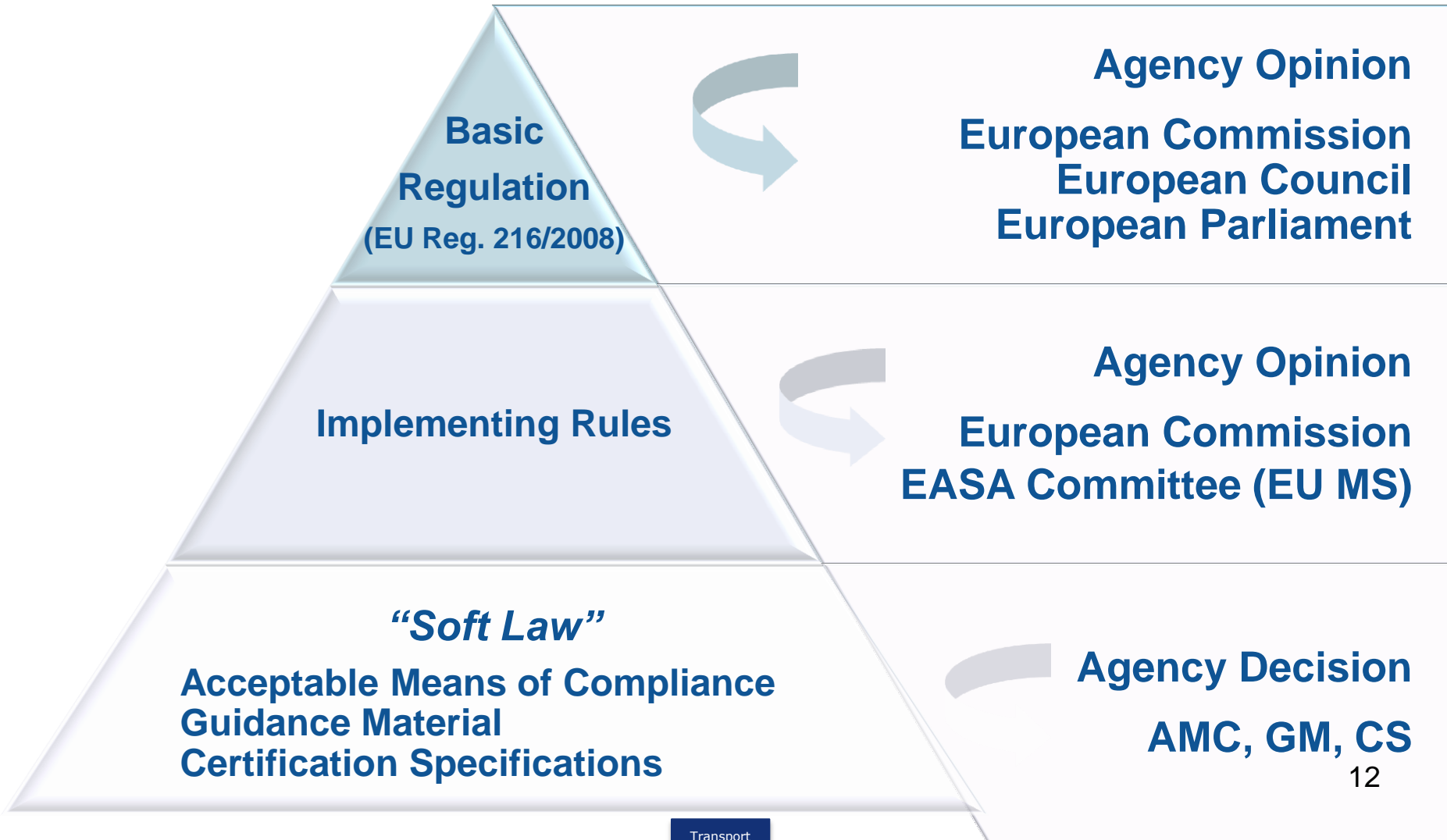
## Performance requirements

- JARUS prepares global approach
- EASA issues opinions
- Commission adopts implementing rules

## Industry standards

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

# The Drone Regulatory Framework - architecture



# The legislative function of EASA

## CS

Certification  
Specifications

Technical  
standards to be  
used in the  
certification /  
approval  
process

**“Building  
blocks” for the  
certification  
basis**

## AMC

Acceptable Means of  
Compliance

Technical /  
procedural  
material

One means to  
comply with the  
rule – but not  
the only one

**Presumption of  
compliance**

## GM

Guidance Material

Interpretative /  
explanatory  
material

Provides  
guidance on  
how the rules  
should be  
understood