The French RPAS Regulation

ICAO RPAS SYMPOSIUM,
MARCH 23RD 2015

Fabien Guillotin – DGAC
Table of contents

1. Previous Situation and Approach
2. The RPAS Regulation and its effects
3. Towards a new regulation
4. Challenges and International context
Existing Unmanned Aircraft regulation but only applicable to Model Aircraft

No regulatory framework for professional use of RPAS

RPAS R&D and operations were authorized on a case-by-case basis:
- No possibility of business development
- Administrative burden

Illegal activities and possible risks to aviation and public safety
REGULATORY OBJECTIVES

To preserve safety
To foster the development of the activity
To guarantee fair access to airspace, aerodromes, ... to all users

A SAFETY AND PERFORMANCE BASED APPROACH

Avoiding prescriptive rules
Adapted to safety risks:
  - light and simple requirement for light and simple operations
  - more stringent requirements for heavier RPAS used for complex types of operations
Table of Contents

1. Previous Situation and Approach
2. The RPAS Regulation and its effects
3. Towards a new regulation
4. Challenges and International context
Some simple principles

- **Aerial work**: 4 operational scenarios

### VLOS

**SCENARIO 1**
Non-populated area
- Mass < 25 kg
- Height < 150 m

**SCENARIO 3**
Populated area
- Mass < 4 kg
- Height < 50 m
- Safety perimeter

### BVLOS

**SCENARIO 2**
Non-populated area
- D < 1 km
- Mass < 25 kg
- Height < 50 m

**SCENARIO 4**
Non-populated area
- Mass < 2 kg
- Mass < 25 kg
- Above third parties

- Prior authorization required in **controlled airspace, populated or restricted areas**
- **Away from aerodromes**
The RPAS Regulation and its effects

A GROWING SECTOR

The Rise of the activity

Registered Operators


- Advertising and Media
- Surveillance and security
- Structure and building monitoring
- Mines, quarries
- Agriculture
- Others

1387 Operators
2240 Light RPAS
+72% Number of operators growth over the past 6 months

349 Distinct manufacturers, of which 25 supply 68% of the fleet
< 4Kg 86% of the domestic RPAS fleet

1245 € HT Average daily rate for an aerial photo report

More than 60 Training centers
Table of contents

- Previous Situation and Approach
- The RPAS Regulation and its effects
- Towards a new regulation
- Challenges and International context
Towards a new regulation

A new RPAS regulatory framework in 2015:
- **Extension** of authorized RPAS operations
- Review of **remote pilot requirements**
- **Improvement** of the administrative process
- **Clarifications** of requirements
Objectives:

- Develop the RPAS market
- Identify technical and regulatory challenges and solve them
Table of contents

- Previous Situation and Approach
- The RPAS Regulation and its effects
- Towards a new regulation
- Challenges and International context
• Illegal RPAS flights over cities or restricted areas in France

• The difficulty resides in seizing/identifying non-compliant RPAS

• Need of technological solutions to
  – detect and identify RPAS in case of non-compliant acts
  – detect and destroy RPAS in case of malicious acts

• Solutions must be assessed in terms of costs and benefits with the involvement of the industry

• Promote responsible use of model aircraft - A “Do’s and Don’ts” leaflet was issued by DGAC
THE FRENCH CIVIL AVIATION AUTHORITY IS INVOLVED IN:

ICAO RPAS Panel –
International Navigation of RPAS

Harmonization and collaborative work for developing RPAS regulation

Europe ATM Integration

EU CHALLENGES TO DEVELOP A COMMON RPAS REGULATION:

• Defining the **adapted boundary** between national and European competencies;
• Building on the **existing**;
• Remaining **safety-based**, simple and flexible;
• **Avoiding direct transposition** from the manned aviation world.
Thank you

Contact: fabien.guillotin@aviation-civile.gouv.fr
More information on DGAC website:
http://www.developpement-durable.gouv.fr/-Secteur-Aerien,1633-.html