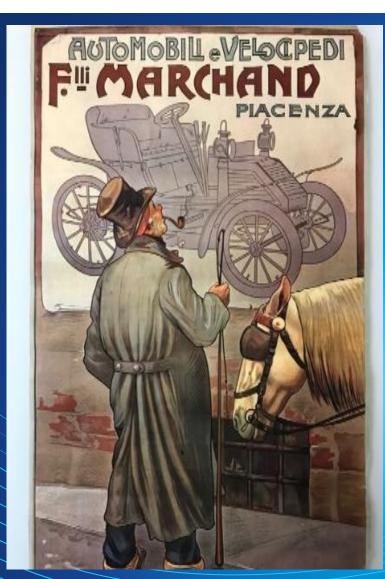# What to regulate – some basics

> Drones = combination of technologies that drive **automation** – especially smart phone features (battery, autopilot, sensors…).

> **Digital** technologies develop **FAST**

U-Space – what's next?

Disruptive

U–Space – what's next?

… and fast

Easter morning 1900: 5th Ave, New York City. Spot the automobile.

Source: US National Archives.

Easter morning 1913: 5th Ave, New York City. Spot the horse.

Source: George Grantham Bain Collection.

European Commission

@Bulc_EU

Mobility and Transport

The regulatory framework

	Drone rules	Drone airspace rules	U-Space
	(Airworthiness, Competence, Operations)	(Types of airspace and modalities)	(Access to airspace)
Principles	EP and Council EASA regulation **11/09/2018**	EP and Council EASA regulation **YES**	EP and Council EASA regulation **YES**
Implementing rules	**Drone operating Regulations May 2019**	Rules of the Air **Mid 2020**	U-Space Regulation **Mid 2020**
Compliance	Standards / AMC	Standards / AMC	Standards / AMC
	Operation Centric Approach	Adapt to local characteristics	Fair access to airspace

Drones extend the aviation scope

- ➢ EU rules reflect "Operation centric approach"

  - ➢ Open category: buy and fly – strict limits

  - ➢ Specific category: assess the risk

  - ➢ Certified category: traditional certifictaion

Mobility and Transport

What's next?
U-Space!

➢ Work towards more complex operations…

➢ Keep operations safe, secure & green

➢ Integrate the urban dimension….

@Bulc_EU

Mobility and Transport

What is the problem?

➢Take a leap:

Now   –   by 2035:

30k flights – 20k flights
in EU   -   over 1 city
per 24 h –   per 1 h

We need a digital system automating air navigation service provision

CREATING A DRONE SERVICES MARKET

What is the solution? U-Space!

A digital system

Providing services

In a designated volume of airspace

To keep operations safe/secure/green/privacy

Objective: create a competitive U-Space services market

Mobility and Transport

CREATING A DRONE SERVICES MARKET

How wants Europe deliver the U-Space?

EC: make policy and adopt rules

EASA: prepare rules

SESAR: learn from R&D projects

EUROCONTROL: build on operational expertise

EU «Family»: together contribute to the European U-Space Demonstrator Network to speed up the drone services market

Mobility and Transport

CREATING A DRONE SERVICES MARKET

Who would be the U-SPACE service providers?

> Incumbent ANSPs?
> Aviation players
> New tech companies

> **U-Space is a big data & privacy issue**

Mobility and Transport

CREATING A DRONE SERVICES MARKET

Concrete next steps? A U-SPACE Regulation

➤ Learn from expertise in EU Network
& demonstrators

➤ Elaborate EASA opinion by end 2019

➤ Adopt a U-Space Regulation in 2020