

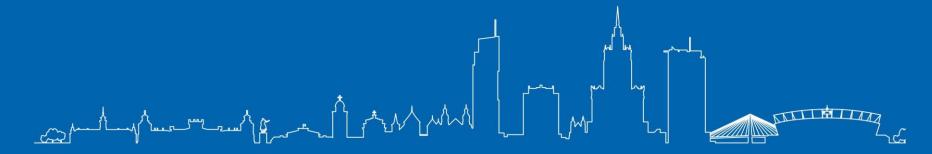


# "Drones as a leverage for jobs and new business opportunities"

23-24 November, Warsaw, Poland









# EUROPEAN COMMISSIONER FOR TRANSPORT VIOLETA BULC

# Creating an EU Drone Ecosystem by 2019

Drones Conference, Warsaw 23 November 2016





#### **STATE OF PLAY**

## The Riga Declaration

- Simple & performance-based rules
- Harmonised rules at global level
- Timely delivery of rules
- Adequate investment
- ⊗ Public acceptance → much more to do.



### **A Drone Ecosystem**



- Full automation: air traffic controller & piloting functions
- Creating conditions for a domestic market
- New business opportunities and models
- New and innovative services

## **Drone Services Market**

DRONE MANUFACTURERS

CORE BUSINESS



Drone manufacturers

POTENTIAL by 2020:

€200 million to several billion

DRONE SERVICE PROVIDERS







DIRECT IMPACT



Exploration



Precision farming



Security



Media

INDIRECT IMPACT

VIDER EU MARKET

Aerial inspection



Energy exploration



Just in time deliver



Oil rig delivery





#### What are the challenges?

- 1. Full automation of pilot-flying and air traffic controller at the same time
- 2. Denser air traffic environment
- 3. Single operator for multiple drones
- 4. Safety & privacy concerns from citizens
- 5. Fast developing technology meaning legislation must be future-proofed



## Creating an EU Drone Ecosystem

3 Pillars of action

- 1. Drones & Drone operations Operation Centric
- 2. Airspace dimension
- 3. U-Space



#### **EU DRONES ECOSYSTEM**

#### The U-Space

- > 3 types of Airspace
  - ➤ Space, Civil airspace, Lower.
- Cornerstone for safety & privacy
- Concrete plan to organise U-Space within 6 months
- ➤ Work with all stakeholders → 2019 Delivery



#### **EU DRONES ECOSYSTEM**

## **Funding**

#### 1. Grants through SESAR:

- > €9m: Exploratory Research
- > €30m: Industrial R+D
- > €5m: Large Demonstrators
- Crucial: timing to deliver the ecosystem











#### **EU DRONES ECOSYSTEM**

## **Funding**

- 2. Inducement Prizes
- 3. Innovative Financial Mechanisms such as:
  - **EFSI**
  - **Blending**



#### **A DRONES ECOSYSTEM**

## **Coordination & Cooperation**

- > So far, so good: EASA, SJU, EDA, JARUS, ICAO, US-FAA.
- **≻**Task Force
  - > To coordinate with industry
  - > To monitor developments & deployment





#### **A DRONES ECOSYSTEM**

#### Where to from here?





- > Innovative financing of demonstrators
- Enhance coordination
- Drones start to be part of our daily lives by 2019?





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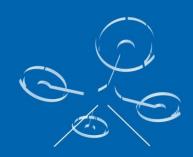
# Thank you! Dziękuję Ci bardzo!

Drones Conference, Warsaw 23 November 2016



## **Challenges v Solutions**

	Challenges	Drones & Drone operations	Airspace	U-space
	Full automation	X	X	
	Dense Traffic		X	
	Single Operator		X	
	Citizens Concerns	X		
@Bulo	Legislation	X Mobilin		





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