



# **DISRUPTIVE TECHNOLOGIES IN ATM**

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**Maurizio Castelletti**  
**European Commission**

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# Disruptive technology: definition.

- "an innovation that creates a new market (and value network) and eventually disrupts an existing market (and value network)" (\*)
- Not all innovations are disruptive'



(\*) wikipedia

# Aviation current challenges

- New competitors and emerging markets
- Lack of level playing field
- Persisting capacity constraints
- Lack of competition
- Air connectivity unevenly distributed
- Enhanced environmental performance

# ATM specific challenges

- ATM traditionally reluctant to innovation
- Few innovative solutions implemented  
Following evolutionary models (far from breakthrough)
- Safety reasons and "comfortable monopolistic positions" (both from offer and supply side) drive the choice of these models

# Disruptive technologies in ATM

- Virtualisation and remote towers
- Technologies enabling Common Support Services
- Drones and its technology transfer to ATM
- More integrated airport management
- Increased automation
- Flight centric operations



# Way forward

- Need to consider:
  - Business model aspect and the incentive of stakeholders
  - Smart regulatory enablers
  - Other sectors "fresh new ideas"
- So the question is...

# What steps to take for ATM evolve it into a more open and competitive market?

