

Supporting  
European  
Aviation



# INAIR 2019

## International Conference on Air Transport

Ensuring Safety and Security in Aviation

**TOWARDS A SAFE AND SECURE  
EUROPEAN DIGITAL ATM**

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EUROCONTROL

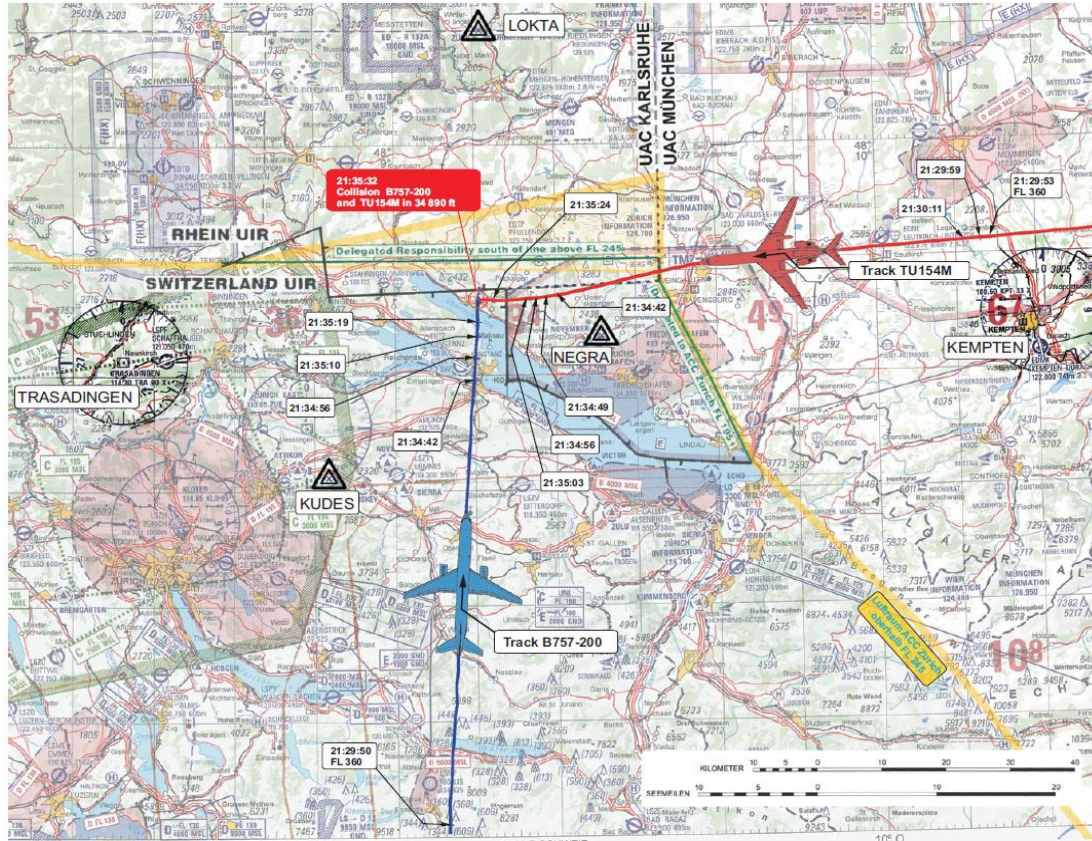
12 November 2019



NETWORK  
MANAGER



# 2002 : The Überlingen Mid-Air Collision at 35,000 Feet

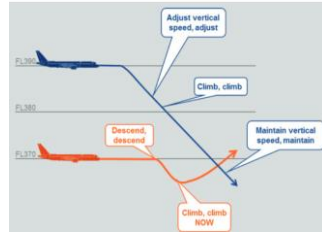


<https://www.youtube.com/watch?v=rycXgXPuDWU>

# ATM Top 5 Operational Safety Priorities - Today



Blind spot



TCAS not followed



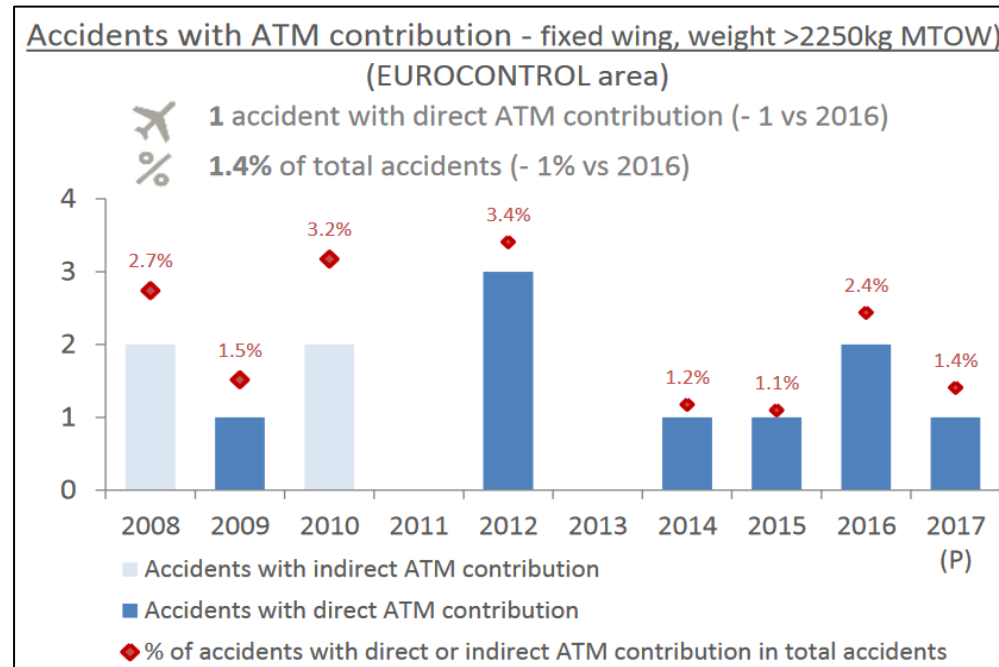
High energy runway conflict



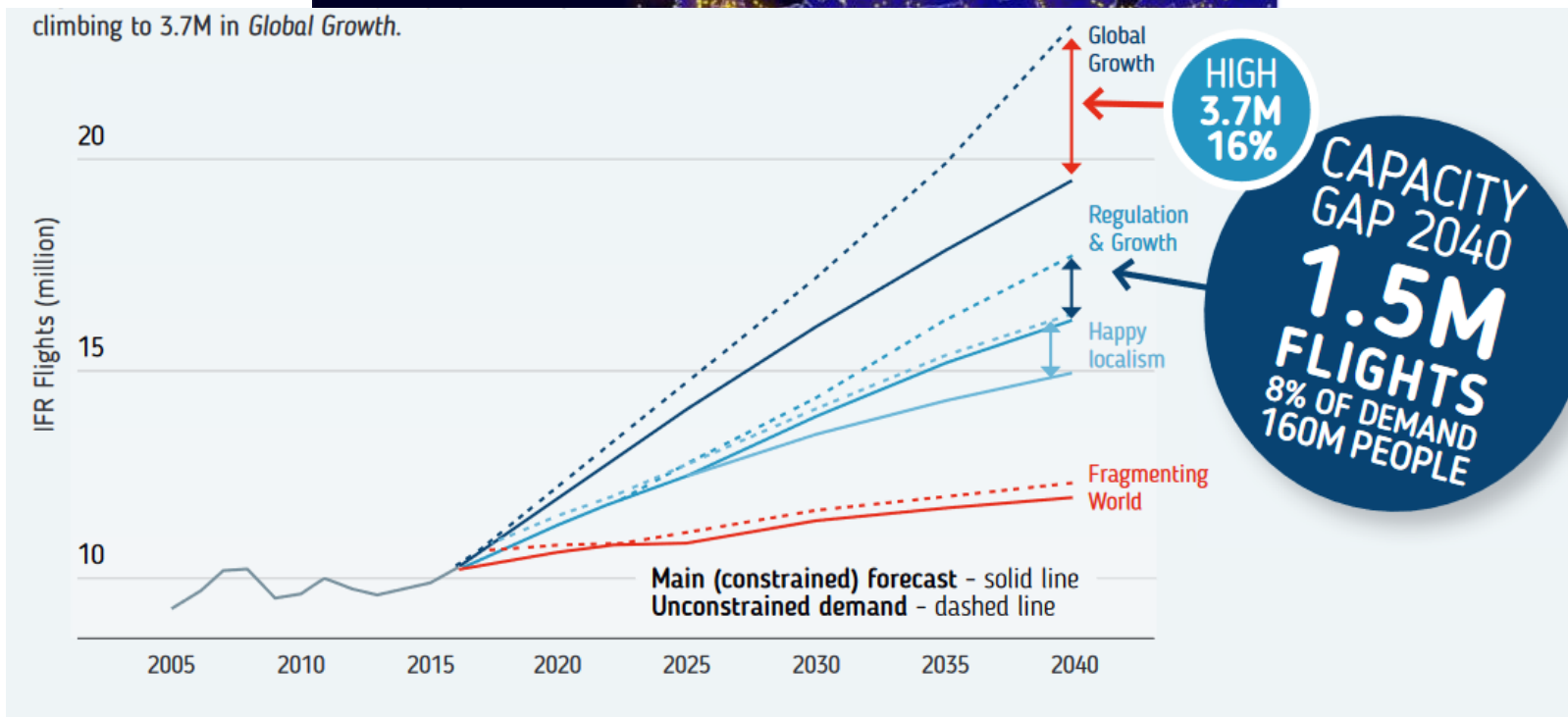
Detected potential runway conflict



No or dysfunctional transponder



# TRAFFIC GROWTH



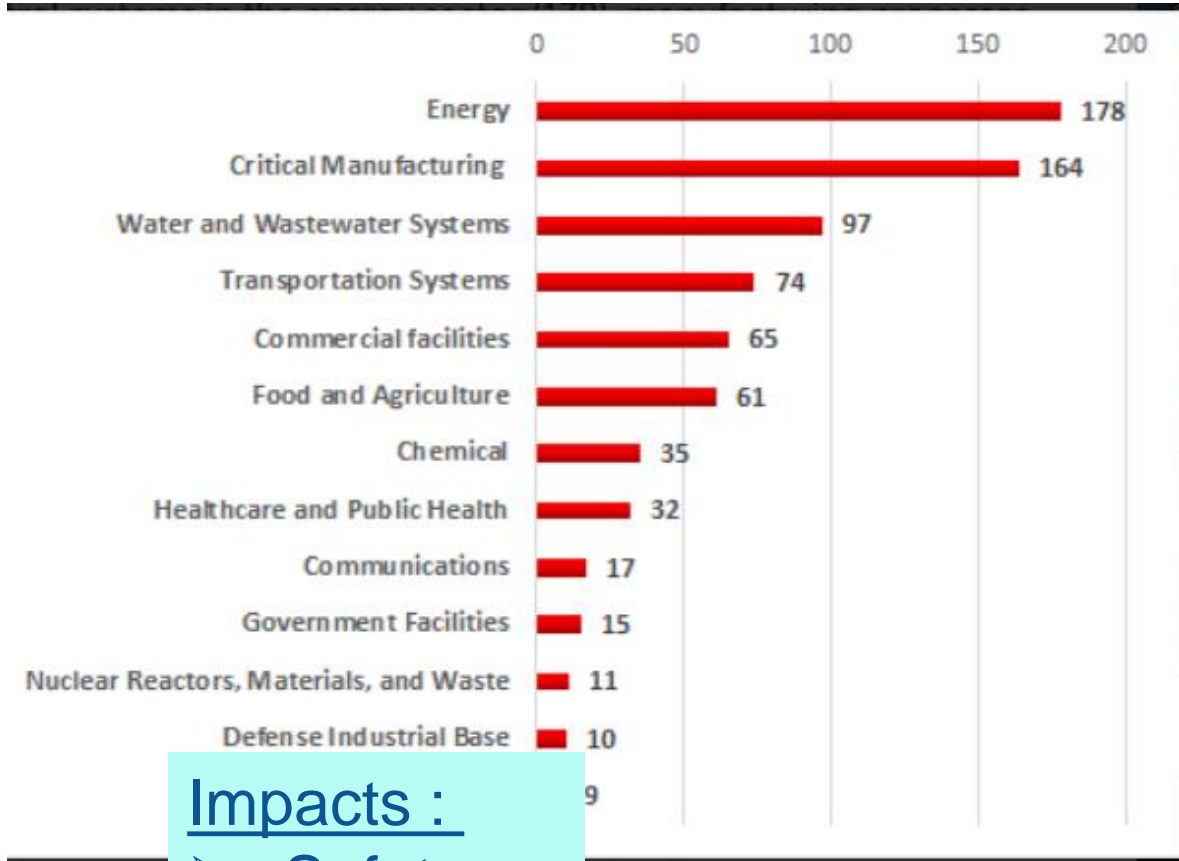


# Towards a fully digital sky

with higher traffic density & complexity levels



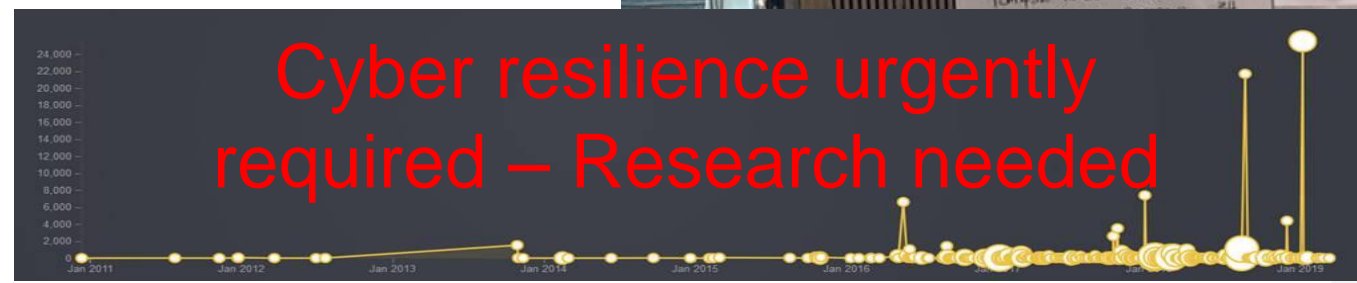
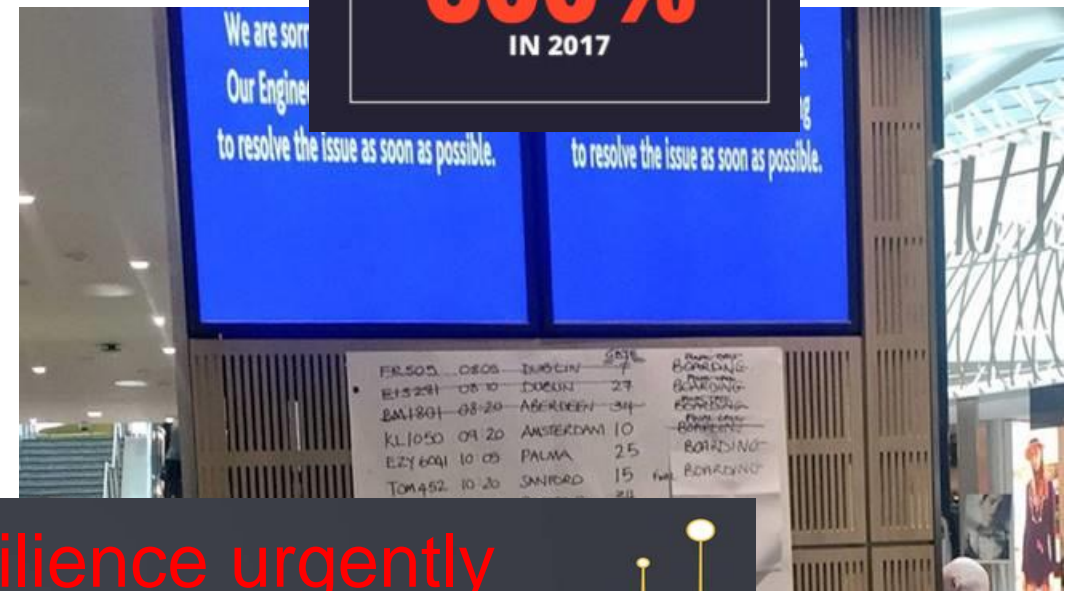
# Cyber: Top 1 future risk



- Impacts :
- Safety
  - Security
  - Business



IoT attacks were up  
**600%**  
IN 2017



# Artificial Intelligence an opportunity for Safety and Security

## Analytic tools

- *Safety/security risk detection & assessment*
- *Predictions*
- *Training & human performance*
- *Cyberthreat detection*
- *....*

## Based on

- *New human & machine partnership*
- *The respect of ethics and privacy*
- *Clear legal liability*
- *New validation tools & methods for safety and (cyber)security*
- *DATA & SKILLS*



# Thank you !

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