

ATM INTEGRATION CHALLENGES

ATM High Level Characteristics



- Safety first for ATM
- ATM Vision: a high-performance ATM (increase in capacity, improve safety, cut ATM costs, reduce environmental impact)
- Global interoperability as a goal
- Bring benefits for all members of ATM community
- Challenge : Traffic growth even without RPAS

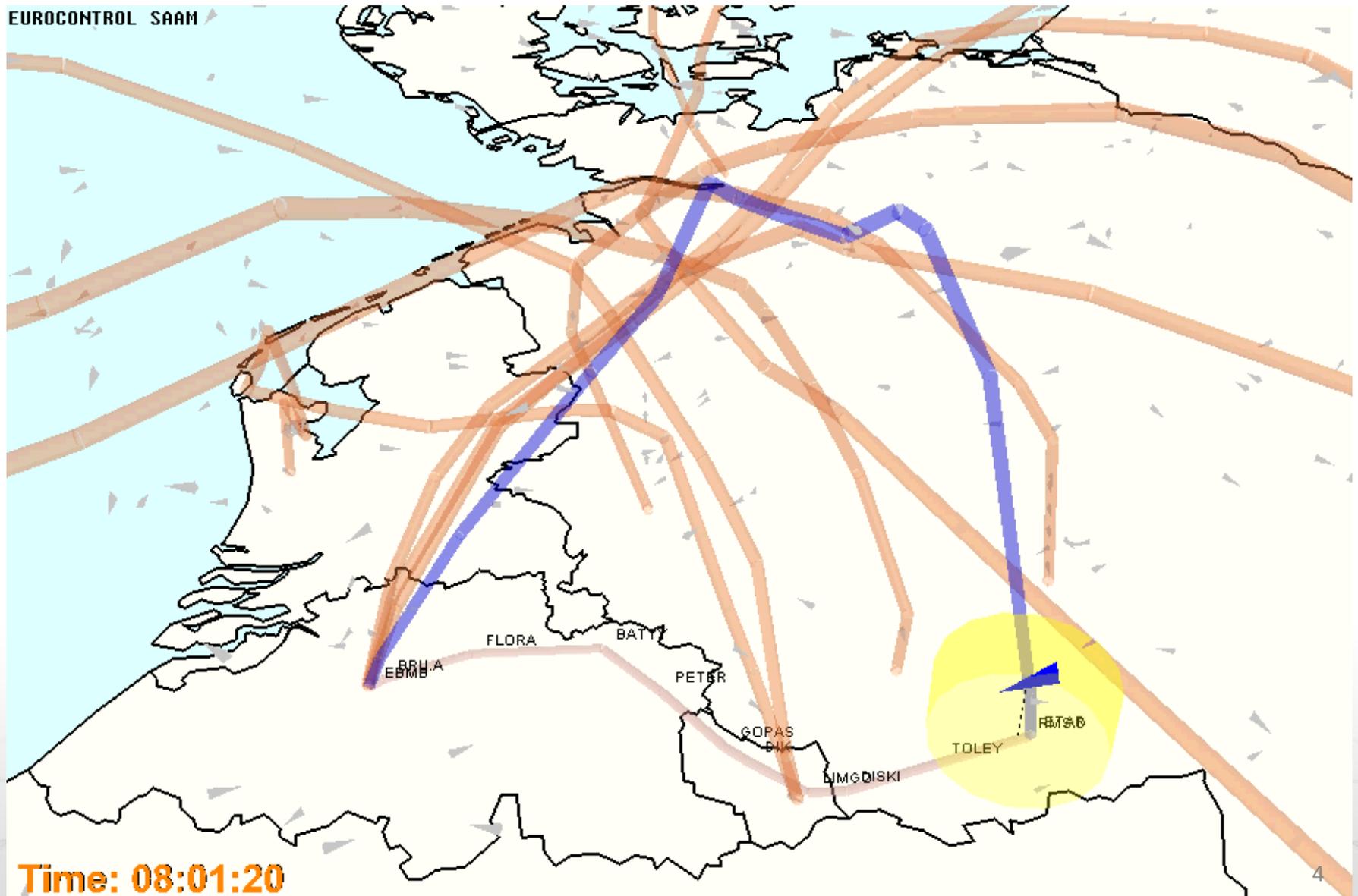


Main ATM Integration Issues

- Detect and avoid (1)
 - System based on rules of the air
 - integrity
 - Interoperability
- C2 link (2)
 - Required performance
 - Spectrum
 - C2 link failure
- Aircraft Performance (3)
 - Climb and descent performance
 - Turn performance
 - Speed
- Contingency Procedures (4)
 - Harmonised
 - predictable



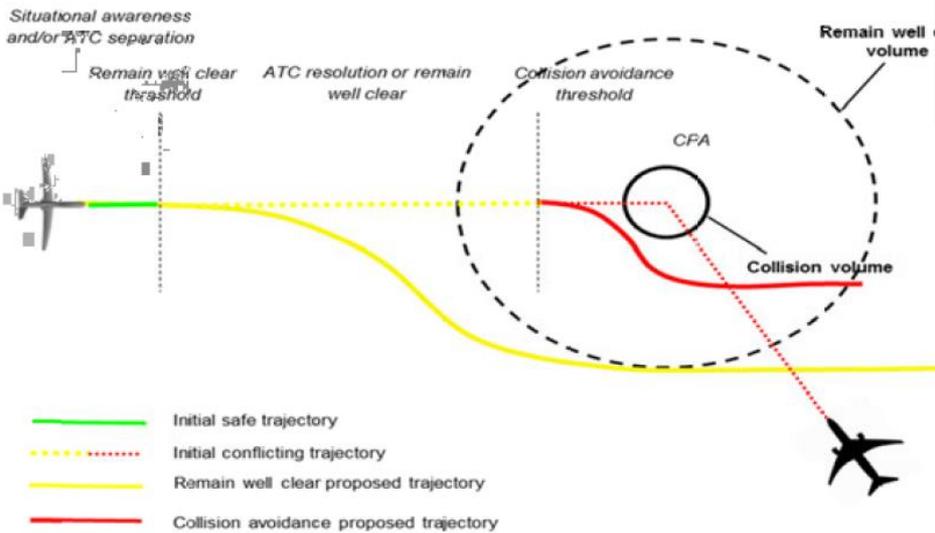
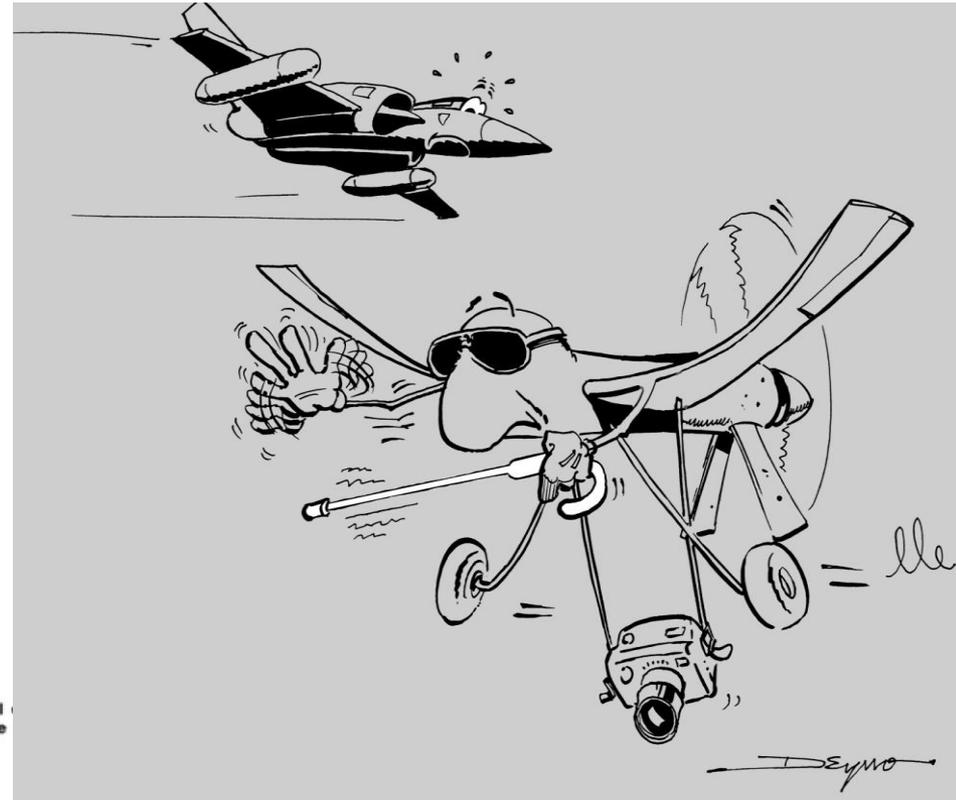
What are we doing now?



Integration Challenges (1/4)

Detect and Avoid

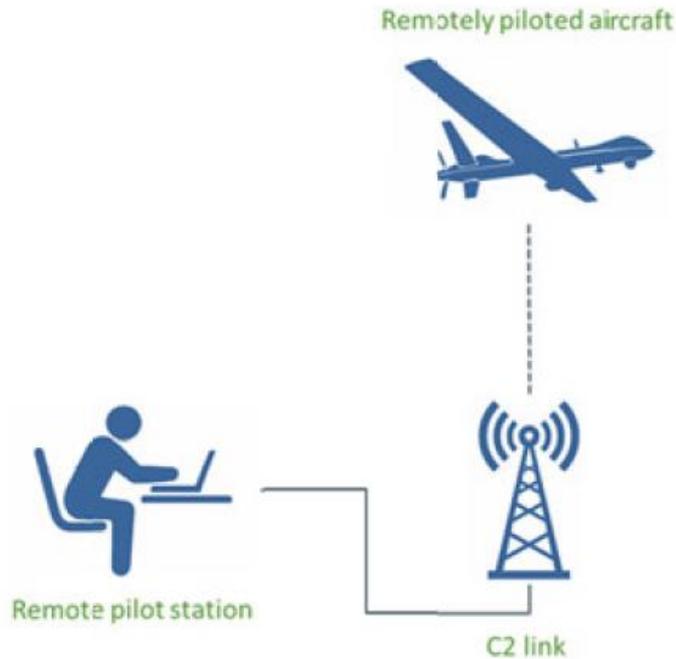
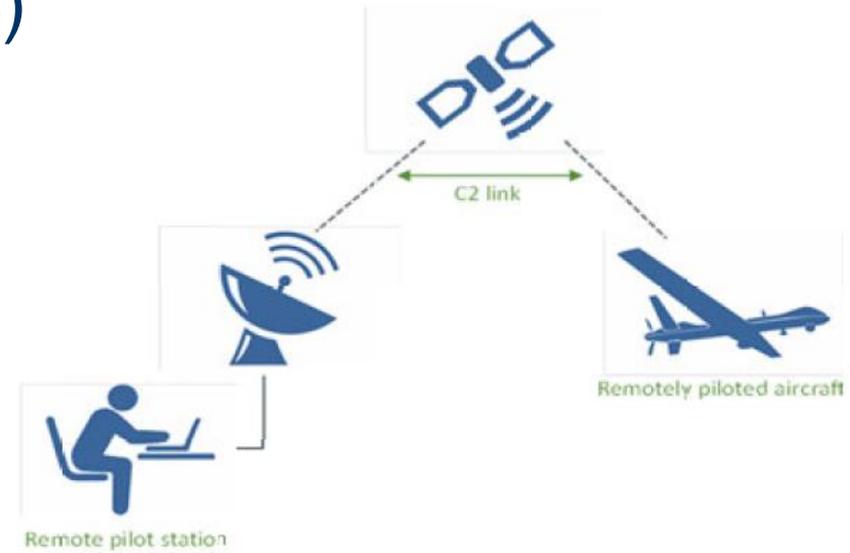
- Quantification into system requirements
- Match See and Avoid
- Automated response during lost C2 link



Integration Challenges (2/4)

C2 DATA LINK

- SPECTRUM
- RLP
- Latency



Integration Challenges (3/4)

Performance

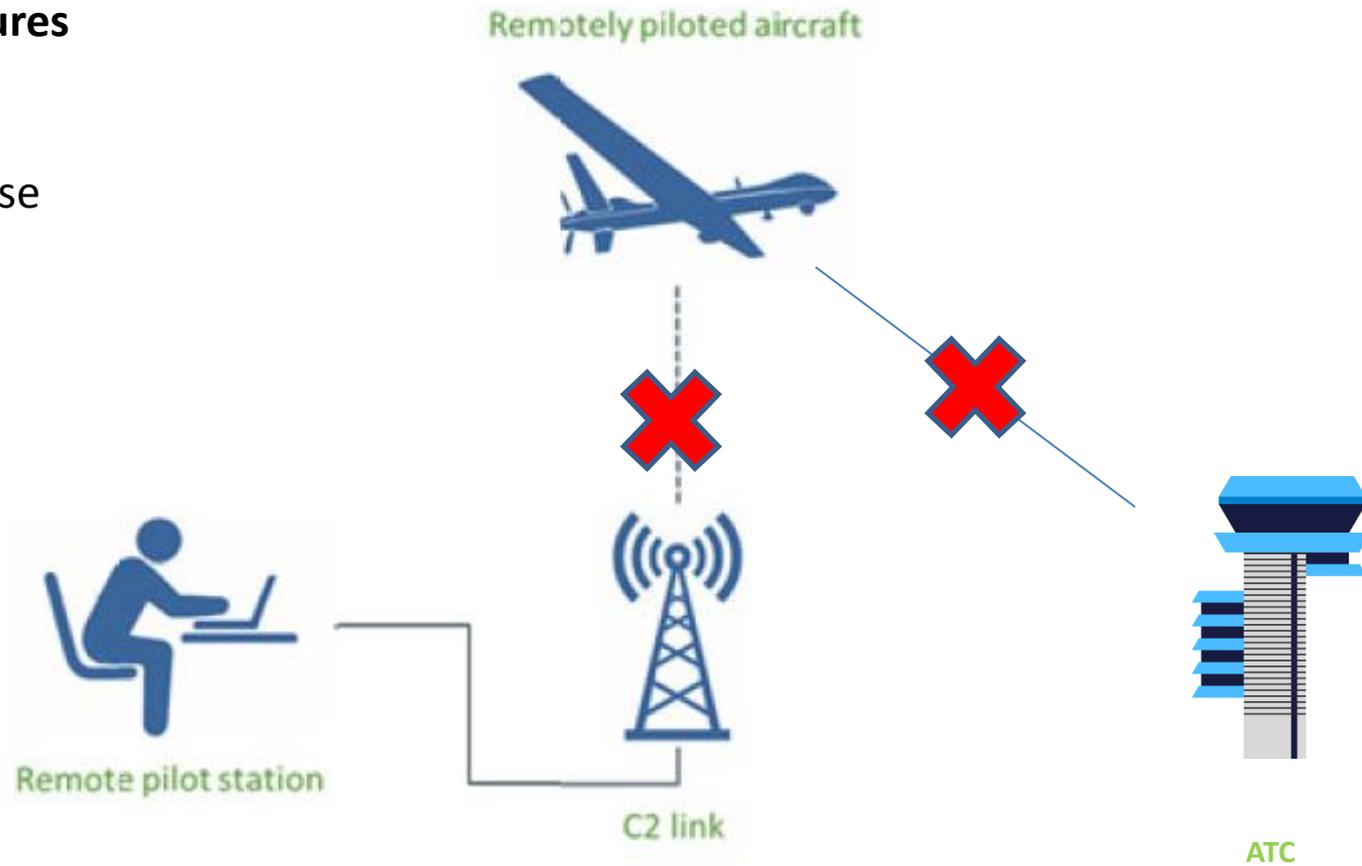
- Turn
- Climb/descent
- speed



Integration Challenges (4/4)

Contingency Procedures

- Harmonised
- Predictable
- Automatic response
- Published



So what's happening

- SARPS and guidance documents development 2023
- Draft contingency procedures
- Lessons learned and best practices
- Development standards
- Create level playing field
- Better understanding on challenges
- RPASP progress – Inter Panel coordination
- This Symposium

THANK YOU

