Aviation of the Future

Martin Rolfe, CEO

The aviation industry has been at the heart of our success as a nation
for the last half a century

Aviation of the Future

- More types of air vehicles
- Greater range of activities
- All sharing the same airspace

Technology Challenges

- SAFE – knowing where everyone is

- OPTIMISED – getting everyone there on time

- SUSTAINABLE – getting to net zero carbon
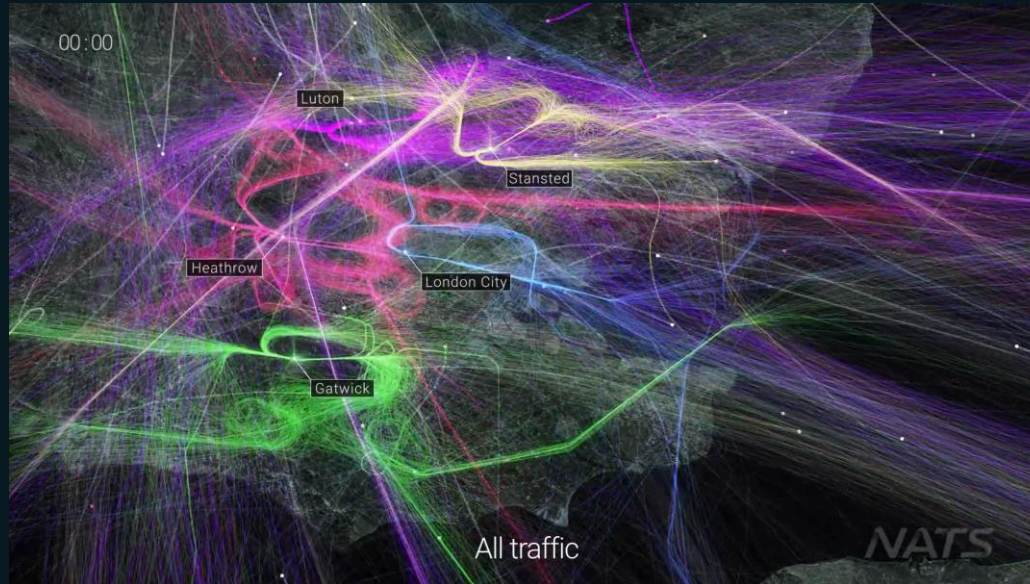
SAFE – knowing where everyone is

OPTIMISED – getting everyone there on time

- Making best use of existing assets

- Intelligent Approach aims to safely optimise arrival spacing to:

  - maximise runway capacity

  - maintain operational resilience

  - provide better on-time performance

- Developing AI to:

  - Compliment human expertise

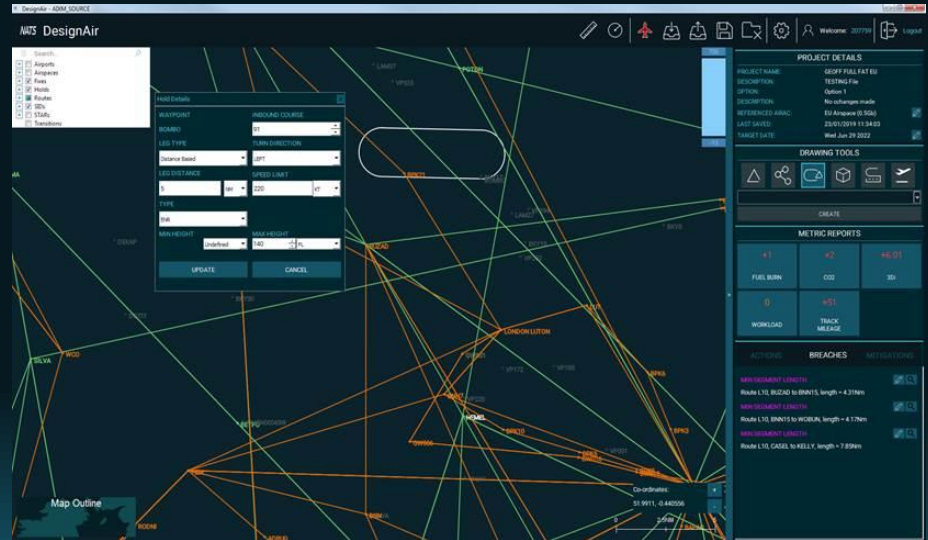 - Improve operations in low visibility

The Comparison

Distance wake vortex categories

Landing rate
40–45
Aircraft per hour

Landing rate
32–38
Aircraft per hour

TBS wake vortex categories

Landing rate
40–45
Aircraft per hour

Landing rate
36–40
Aircraft per hour

*Separation distance reduces only in moderate to strong headwinds

eTBS Phase 1: RECAT-EU + Optimised Runway Delivery

Landing rate
41–46
Aircraft per hour

Landing rate
37–41
Aircraft per hour

Sustainable – getting to net zero carbon

Modernising UK Airspace

- Delivering fuel efficient routes

- Delivering noise efficient routes

- Maximising access for all airspace users

- Continuing to deliver connectivity and capacity

Thank you