

AI in Aviation – Our Experience

21 June 2022

NATS

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CSO Digital Towers

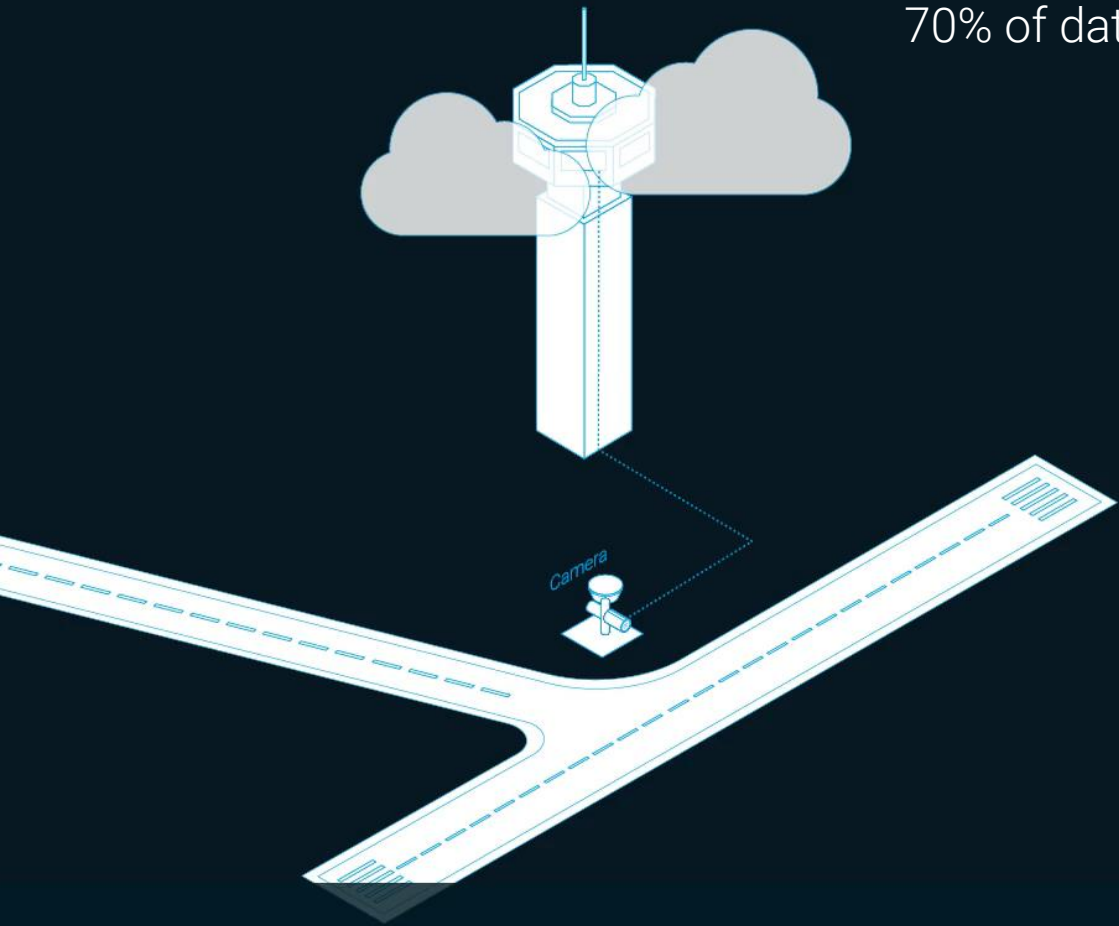
andy.taylor@nats.co.uk

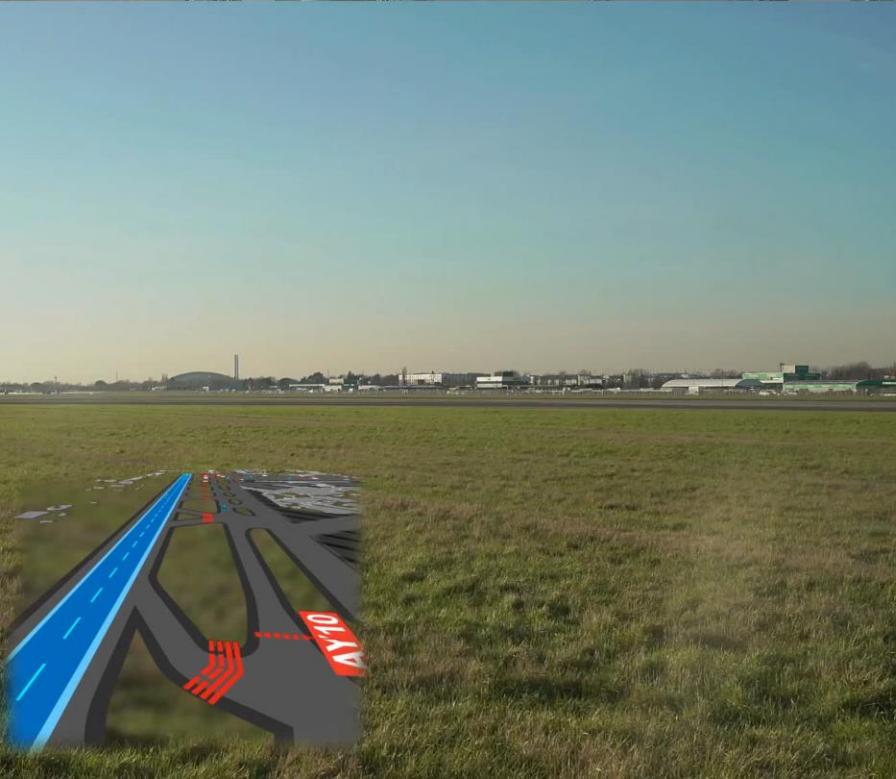
Using AI to improve operations in reduced visibility

NATS

SEARIDGE
TECHNOLOGIES

70% of data is visually acquired, integrated and processed by the Tower ATCO





Using AI to improve EVERY Operation



SEARIDGE
TECHNOLOGIES

NATS

- ✓ Integrating data from cameras, radar, CDM / PDS systems
- ✓ Adding greater fidelity to exiting data sources
- ✓ Up to 25x faster
- ✓ Task focussed and faster than traditional programmed algorithms
- ✓ Voice Recognition – of both PILOT broadcast and ATCO / Other OPS centres
- ✓ Digital Towers provide the unique link between ATC and Airport users on which to deploy

Smart Stand Demo

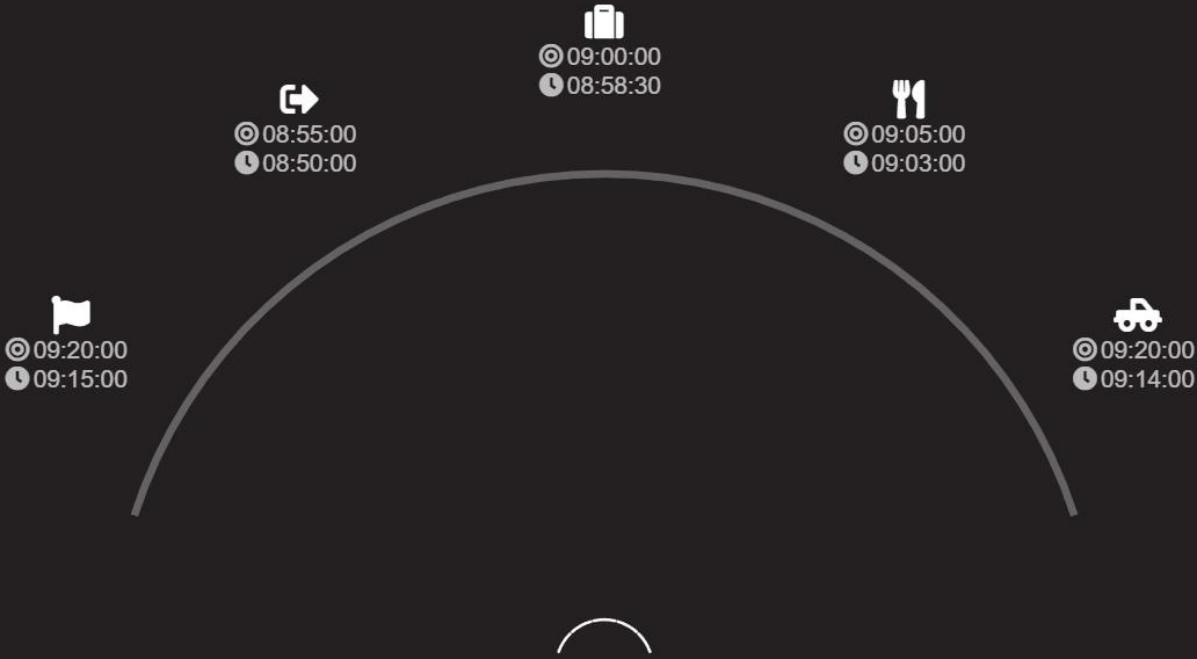
E4



FZ658

ASM → DXB

03:40:00
SEQUENCE STARTING



- **Human Limitations**
 - Overload of Controller
 - Underload of Controller
 - Simultaneous 360° scanning
 - Enabling a higher number of outcome parameters to be balanced Including:
 - Reduced taxi time, wait time and
 - Airborne holding
- **Improving Efficiency** of Infrastructure – Runway Capacity and Stand, Taxiway and general CDM on airport – Possible to reduce pre-set tolerances??
- **Improved Resilience** and Predictability
- **Enhancing Safety**

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find out more at
www.nats.aero
or see us on Stand

