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Thales UK Drone Activity

Drone Industry Action Group (DIAG)

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Neil Watson
Strategy & Marketing
Thales UK

OPEN

Thales in the UK

SCOTLAND (700 JOBS)
130 year old Optronics Business, producing world class systems for air, naval and land defence assets

GLASGOW

NORTH (750 JOBS)
Transport and Underwater Systems Businesses. Projects include the Manchester Metrolink Expansion

BELFAST

NORTHERN IRELAND (500 JOBS)
Advanced Weapon Systems business designing and manufacturing missile technology for the MoD and global export market. Space Electric Propulsion Integration Centre

CHEADLE HEATH

DONCASTER

CAMBRIDGE

READING

SOUTH WEST (1100 JOBS)
Thales UK Underwater Systems business, manufacturing world-leading sonar technology for the Royal Navy and export markets, QEC aircraft carriers. Thales Alenia Space.

BRISTOL
TEMPLECOMBE

LONDON

CRAWLEY

SOUTH EAST/LONDON (3600 JOBS)
Company HQ, Thales Transport HQ, Military and Civil Avionics, Thales Training and Simulation, Thales Research and Technology, Thales Cyber Security & Consulting, Air Traffic Management

WE EMPLOY AROUND **65,000** PEOPLE ACROSS **56** COUNTRIES WITH ANNUAL REVENUES OF OVER **£14BN**.

Watchkeeper Unmanned Air System

In the UK, Thales employs over **6,500** people, including **4,500** highly-skilled engineers, across **10** key sites.

We make a significant contribution to the UK economy exporting over **£560m** in 2017.

Each year we invest over **£575m** in our UK supply chain, working with more than **2,000** UK companies.

The economic value add of the Thales UK workforce is approximately **three times higher than the UK average**.

AEROSPACE

DEFENCE

TRANSPORT

DIGITAL SECURITY

SPACE

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2020 Project & Infrastructure Development

Future Flight Challenge (Airspace of the Future) collaborative systems-of-systems project to enable routine drone services in a safe integrated environment on a regional and national basis validated by business cases, simulation, demonstration & stakeholder engagement
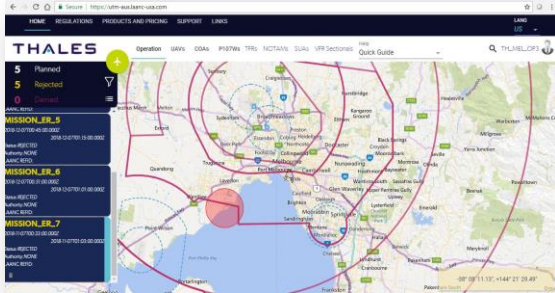
ESA Navigation Innovation and Support Programme (NAVISP) a Thales led collaborative research project to determine if non space based (GNSS) assets can deliver accurate Position, Navigation and Timing (PNT) enabling autonomous BVLOS & certifiable drone ops.

National BVLOS Experimentation Centre (NBEC) established under CAA Innovation Sandbox as scalable & configurable airspace with ground infrastructure extending 16km from Cranfield ATZ into proximate airspace, includes conventional ATC & novel drone surveillance capabilities

Digital Aviation Research and Technology Centre (DARTeC) CWE opens in late 2020; focus on five aviation research challenges including drone airspace integration and connected systems research (ground wireless connectivity and satellite comms)
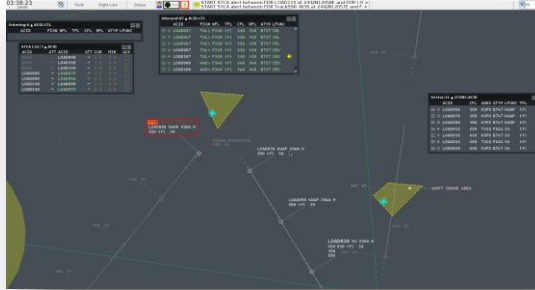
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Thales UK Drone Initiatives – Examples

**Thales ECOSystem UTM
(UK Channel)**

Digital cloud-based platform incorporating services for low altitude airspace management and efficient operations
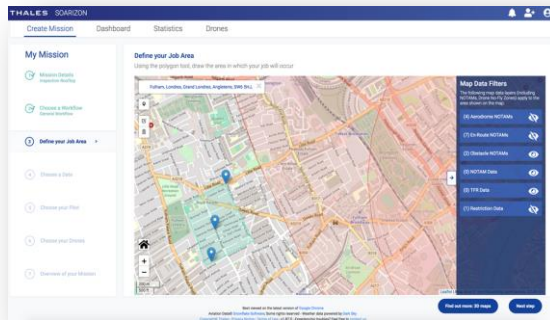
Airspace Access: providing automated flight notification /authorisation to drone users

Airspace Monitoring: monitoring the presence of drone in the low altitude airspace and ensuring there are no conflicts with other airspace users

Airspace Management: setting up flight paths for drones

TopSky-ATC
Integration of drone operations into traditional controlled airspace/systems

SOARIZON
Mission & fleet management tools to efficiently plan, assure and deliver, drone missions

Aveillant Gamekeeper 3D Radar
**Drone Traffic Management & C-UAS
Machine learning for discrimination**

Drone Secure Communications Module
Secure connectivity – encrypted signature; GPS Rx; IoT Module & embedded e-SIM

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