

# Benefits of space-based ADS-B data

With proven gains in aviation safety, efficiency, and sustainability, Aireon is leading the way toward a smarter, cleaner future.



The answer is our data

[Aireon.com](https://www.aireon.com)

## Methodology

This assessment was carried out by independent third party, Steer, a global consultancy with expertise in aviation and cost-benefit analysis, and commissioned as part of NATS' regulatory requirements. The review took place over 12 months and was shaped by input from a wide range of stakeholders. It followed a two-stage process.

### 1 Setting the framework

A series of workshops — attended by up to 87 participants from airlines, airports, the CAA, IATA and others — agreed how to measure benefits and costs, using 2018 as a baseline for comparison with 2023.

### 2 Analysis and validation

Steer led the independent review and produced the final report, supported by Integra. They assessed the economic, operational and environmental impact of space-based ADS-B. Airline input helped test and refine a fuel burn model used in the analysis.

# 2:1

Aireon customer, NATS, the UK's leading provider of air traffic control services, found that **the benefit-to-cost ratio of employing a space-based ADS-B system is around 2:1** — for every £1 spent, their system delivers £2 in value.



# £19M



in fuel burn savings per year for airlines

Based on 2018 costs

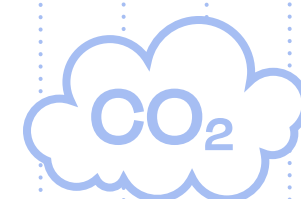


### Greater efficiency & predictability

Aircraft are more likely to receive their requested trajectories, allowing more flights to operate at optimal speeds and cruising altitudes. This improves scheduling and predictability for both airlines and passengers and helps streamline overall operations. Additionally, more aircraft can enter oceanic airspace at preferred entry points, reducing extra miles flown and further cutting fuel use and expenses.

CO<sub>2</sub> reduction each year

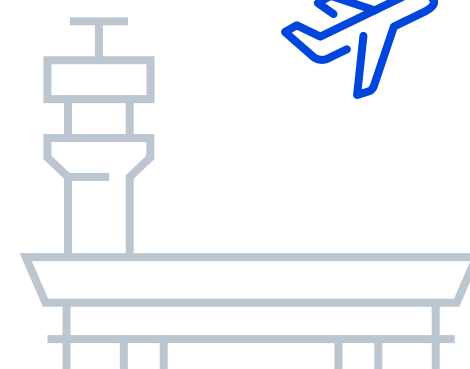
# 45,000t



### Reduced emissions

The improvements to efficiency and predictability also reduce the need for extra fuel reserves, allowing aircraft to fly lighter. The result is lower fuel consumption, fewer emissions, and stronger alignment with international carbon reduction targets — supporting the aviation industry's push toward greater sustainability.

# Safer skies



### Improved safety and efficiency

Precise, real-time tracking gives controllers exact aircraft positions — no longer relying on estimates. This enhanced visibility enables quicker emergency responses, better pilot support, and reduced separation between flights. All without compromising safety.