Fit for the future
Sustainability
Championing operations

**Performance-based navigation (PBN)** allows aircraft to follow optimised routes, saving airlines time, fuel and CO₂ emissions and increasing airspace capacity.

**Free route airspace (FRA)** allows aircraft to plan more efficient, direct routes with stable trajectories, reducing flying time and fuel consumption.

**Collaborative decision-making (CDM)** enables airports, ANSPs, and airlines to work together to optimise flights by sharing information on potential inefficiencies and delays.

**Air traffic flow management (ATFM)** regulates the flow of air traffic to ensure available capacity is used efficiently, easing congestion and delays and reducing CO₂ emissions.

**Continuous descent and climb** operations reduce engine power required to level off at multiple altitudes, saving fuel and reducing emissions.

By introducing continuous descent techniques across 15 airports in the United Kingdom, airlines were able to **cut CO₂ emissions by 20,000 tonnes in nine years.**

Embracing new technologies

**Artificial intelligence and automation** are helping to safely reduce separation distances between aircraft, increasing capacity and efficiency.

**Digitisation** is allowing safe remote air traffic control at low traffic airports improving operational efficiency and connectivity.

**Space-based surveillance** allows tracking of aircraft in oceanic and remote areas, enabling planes to fly optimal altitudes and routes.

**Data analytics** is helping improve operational efficiency based on actual performance.

Fit for the future

Continuing to modernise ATM is vital to providing an efficient, effective and sustainable service for all airspace users and ensuring that aviation is fit for the future. To do this, the ATM industry needs to work with ICAO, States and industry partners to:

- Help States modernise ATM and embrace the latest technologies
- Secure long term investment and available resources for ATM development
- Develop more agile, performance-driven ANSP structures
- Reduce fragmentation and create seamless skies
- Create smarter, performance-based regulation
- Harmonise global standards and ensure global interoperability
- Improve sustainability while providing an efficient and safe service

To find out more or join CANSO get in touch with the team at [canso.org](http://canso.org)