



canso

Fit for the future
Sustainability



CANSO is the global voice of air traffic management (ATM), an industry that plays a vital role in helping the aviation industry reduce its emissions. New ATM technologies and improved operations and procedures are helping increase capacity, improve efficiency and enhance performance. Together, airlines, airports and the ATM industry are working with States and regulators to improve the sustainability of aviation worldwide.

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

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.**

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