Message from Simon Hocquard

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The task of air traffic management (ATM) is to ensure that airspace users can fly from point A to point B, safely, efficiently, consistently, cost effectively, using optimal route and altitude and without delays. If ATM can achieve this, aircraft will emit the lowest possible amount of carbon emissions for any given route.

All the operational improvements made by CANSO's air navigation service provider (ANSP) Members improve flight efficiency, reduce costs for airlines as well as reduce emissions. Here are some of the operational measures being taken by ATM to reduce emissions.

Performance-based navigation (PBN) allows aircraft to follow optimised, more direct routes with greater accuracy, saving airlines time, fuel and carbon emissions.

Rather than flying traditional fixed routes, **free route airspace** (FRA) allows aircraft to plan more efficient, more direct routes with stable trajectories, saving flying time and reducing emissions.

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

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

Continuous descent and climb operations enable aircraft to avoid using additional engine power to level off at multiple altitudes during these departure and arrival phases of flight.

Space-based surveillance allows tracking of aircraft in oceanic and remote areas not previously covered, enabling planes to fly optimal altitudes and routes based on fuel load and wind.

Artificial intelligence and **automation** are helping planes to safely reduce separation distances between aircraft, thus improving capacity.

WHAT IS CANSO ASKING STATES TO DO?

Modernising ATM to cater for growing traffic is vital if airspace users are to avoid congestion, fragmentation and delays. CANSO is asking States to facilitate and promote investment in modernising ATM infrastructure, as this will improve the efficiency of the entire aviation system, reduce emissions and cater for future growth. We are also asking States to continue to drive implementation of the Aviation System Block Upgrades (ASBUs), which help States modernise ATM.

We are working with States to harmonise airspace, so that a plane can fly using the most efficient operational route, thus saving emissions. Aviation transcends national boundaries, so airspace needs to be organised, and air navigation services delivered, in line with the operational requirement of airspace users rather than according to national borders. This requires States to cooperate, adopting a network-based approach over a larger area. States can also help by freeing up military airspace for civil use when not required by the military.

In conclusion, the air traffic management industry is working hard to reduce emissions through operational measures, new technologies and more effective use of airspace. We look to States to play their part by investing in ATM infrastructure and working with each other to harmonise airspace.