

A NEW PATH FOR ATM

As CANSO's director general Simon Hocquard marks his first year in post, he explores how the air traffic management industry is shifting and shaping to meet a dynamic air traffic picture

The air traffic management industry has seen some pivotal milestones over the past year. From record highs last summer to record lows this spring. As the industry association for ATM, CANSO is working hard to navigate this volatile situation and help the industry adapt to a new environment. This presents its challenges but there are also opportunities, and from collaboration to innovation the ATM industry is setting a new trajectory for global mobility.

I have been in the aviation industry for over 25 years and I have never experienced a time like this. When I stepped into the role of director general of CANSO in June 2019, the industry was experiencing air traffic demand like never before. Forecasts for growth were continuing to rise exponentially in every region around the globe.

One year later and the situation is very different. Travel restrictions and a significant drop in passenger demand because of the Covid-19 pandemic have reduced traffic by some 80% in spring 2020. And while demand started to rebound in summer, the impact of the pandemic is set to have a lasting effect on our industry.

From financial to operational challenges to health and welfare, aviation has been tested in a way never experienced before. Flights were grounded, airports were empty and for the first time in decades our highways in the sky became quiet. While it was impossible to predict a crisis of this scale, the ATM sector's response has been truly remarkable.

A seamless service

ATM is a vital national infrastructure, providing an essential service to States and citizens worldwide. As such, while many industries paused operations as the Covid-19 pandemic spread, ANSPs were charged with the important role of safeguarding employees while keeping our skies open for the transport of essential goods and services. Most ANSPs shifted to a dynamic service model almost overnight, implementing employee protection and business continuity initiatives such as new hygiene and

distancing measures, dynamic rostering and remote working, remote R&D and remote and restorative maintenance.

With a reduction in flights came a reduction in revenue, necessitating additional cost-containment measures. Ultimately, the industry needed to continue to operate, despite the deferral of payment of some ATC fees and without damaging its capacity and capability to handle both the new normal and resurgence of traffic.

Working in close partnership with States and stakeholders to secure continuity of service was an essential part of continuity efforts, ensuring ATM received the support it needed alongside its industry counterparts. This was tackled on a national, regional and global level and a was a key part of the industry's campaign to safeguard its future.

The power of partnership

Resilience is one thing but ensuring the industry has the tools to handle continuing traffic volatility is another. Just as CANSO helped the ATM community embrace the challenge of a surging air transport market, it is also committed to ensuring a smooth recovery for aviation. Our vision for transforming ATM performance is to offer the industry a platform for collaboration and a hub for innovation - and this is proving its value now more than ever.

Collaboration comes in many forms partnerships within the ATM industry, regional initiatives or global cross-industry coordination. Through collaboration we can learn from each other and share innovation. CANSO established a number of key strategic technology partnerships to share knowledge, data insights and expertise amongst the ATM community. We launched a partnership with Aireon to leverage valuable high-fidelity satellite-based ADS-B data and track global and regional traffic trends, and with Metron Aviation to benefit from their traffic demand prediction tool that matches resources to the ebbs and flows

In support of innovative approaches to training and development, we also partnered with Micro Nav to make their cloud-based ATC simulator platform available to build air traffic controller confidence in dealing with increased traffic after a prolonged period of low traffic levels.

Partnerships between CANSO members have also continued to drive innovation in key technology areas. For example, there is an active workgroup of early adopters for digital towers, which has welcomed collaborations like HungaroControl and Searidge at Liszt Ferenc International Airport. The technology is not only a contingency facility, but also a second full-capacity location for service provision while social distancing measures apply.

On a regional level, CANSO has continued to leverage the power of its regional networks and cross-border collaboration in delivering key operational efficiency measures. Air traffic flow management initiatives, including CADENA in Latin America and the Caribbean and the launch of the Mombasa ATFM Roadmap in Africa, have helped to navigate traffic fluctuations, while our commitments to the Multi-Nodal ATFM Network in Asia Pacific and Single European Sky also illustrate the importance of regional collaboration in driving innovation.

We have also committed to collaborating across the whole aviation ecosystem. From our involvement in ICAO's Council Aviation Recovery Task Force to our participation in key focus groups on enabling and new technologies such as ADS-B and UAS traffic management. We must work together as an industry to find our way through the peaks and troughs of demand and to find collaborative, technological solutions for the new world we find ourselves in.

Looking ahead

With change comes opportunity and as we reshape our industry to adapt to the current climate, I see that the future is both challenging but also full of opportunity. We need to find new ways of generating and approaching investment, new supply chain possibilities and new models for operation. ANSPs need to be more agile, and

INDUSTRY ANALYSIS

performance driven, with the freedom to establish new supplier relationships and shift the outlook from fixed borders and territories, to a more network-focussed approach. We also need to embrace the transformation that technology can bring, from data insights and remote operations and training to more streamlined and efficient processes and procedures. We need to share data across the entire aviation system, fast-track work on SWIM and A-CDM and embrace the flexibility that automation and artificial intelligence can bring.

The pace of change is not slowing for the industry, and we need to be ready for more than just recovery. The proliferation of drones for example – particularly as a means for emergency and critical healthcare support – continues to require safe integration. We must therefore continue to advance cross-industry conversations on this and contribute to the regulatory frameworks that will govern operations.

We must also continue to focus on reducing our environmental impact. While our skies experienced a reprieve in activity, scrutiny and public pressure on our industry to reduce its environmental impact remains. As aviation rebuilds, we must do so in an environmentally sustainable way. Just as in Europe where CANSO took part in an initiative to start trialling 'the perfect flight', and we should be asking ourselves what else we can do to deliver a sustainable future.

As I take stock on a year of change and a future of possibilities, it is clear that the ATM industry is experiencing a defining moment. ATM is an essential service, a critical enabler of mobility. But it must also shift and change with the times and adapt to a new operating environment. Traffic levels may take some time yet to return to the levels of previous years and we must find new ways to work. Cost cutting will be at the forefront of recovery strategies, but we must also make sure we don't compromise development in the longer term. We must continue to strive for safety, efficiency and sustainability by harnessing collaboration and innovation. None of us can do this alone, no organisation, region or sector of aviation.

CANSO is working hard to advocate for the industry, generating support and guidance for members, and providing a forum for dialogue that service providers, suppliers and the industry need. We must all work together to share the wealth of our experience and perspective and deliver much-needed connectivity. Together we will work to foster a new future and set a new path for ATM. ❖

