Common situational awareness

Enhancing the sharing of data is bringing significant benefits to airspace users in the Latin America and Caribbean region.

Geography dictates that the Latin America and Caribbean region is reliant on aviation for global tourism and trade.

In the past, however, the air navigation service providers (ANSPs) in the region only cooperated in an informal manner. Air traffic flow management (ATFM) communication and collaborative decision making (CDM) were very limited, for example.

Exacerbating this lack of interaction are the severe tropical weather events that necessitate real-time collaborative communication procedures and capabilities between ANSPs and stakeholders.

To address the growing need for better collaboration and effective ATFM/CDM, the CANSO Latin America and Caribbean CEO Committee established the CANSO ATFM Data Exchange Network for the Americas (CADENA) Regional Implementation Group.

CADENA basically allows partners throughout the aviation value chain to share vital data and common situational awareness, and the introduction of the CADENA Operational Information System (OIS) in August 2017 has proven to be a game-changing tool.

The Regional Implementation Group initiated improved communication through a Letter of Agreement, weekly CADENA planning web conferences and ad hoc planning web conferences to address hurricane and other urgent ATFM issues, such as equipment failures, route changes, and cross-border ATFM delays.

During a recent surveillance outage in Bogota, for example, CADENA was able to effectively manage the flow of information and identify solutions to maintain efficient traffic flow. This saved 184,800kg of fuel, 536,880kg of CO₂ emissions, and USD192,000 for airborne operations and offered valuable insight for improving day-to-day operations.

Through the procedures, tools, and communication practices developed and established by CADENA, ANSPs in the Latin

American Airlines has praised the enhancements engendered by CADENA: "The CADENA OIS is considered a notable success at American Airlines and has won rapid praise by ATC coordinators, dispatchers and operations managers across the system," it noted in a statement. "ATC and traffic management initiative details throughout much of the Americas has dramatically improved thanks to the CADENA OIS."

America and Caribbean region have moved ATFM from a talking point to an operational reality.

CADENA offers each participant ANSP and stakeholder the opportunity to have a voice and play a central role in improving the safety, efficiency, cost-effectiveness and environmental sustainability of ATFM.

Most importantly, CADENA is providing leadership and a practical example of what can be achieved in numerous areas of operations. Such is its success that it is being discussed globally as a model that might be appropriate for other regions. \checkmark

For further examples, see: www.canso.org/regional-coordinationand-collaboration-are-key-managing-air-traffic-latin-america-andcaribbean