U.A.E's GCAA Selects Snowflake Software's Laminar Data Platform for Ground Breaking SWIM Gateway

The Laminar Data Platform will provide end-to-end flight data management for GCAA's SWIM Gateway: sharing authoritative flight information across the UAE region

It was announced at the World ATM Congress 2017 in Madrid that Snowflake Software, a provider of cloud and on-premise software solutions for the aviation industry, is working with the United Arab Emirates General Civil Aviation Authority (GCAA) to pursue a vision of sharing consolidated and authoritative flight information across the United Arab Emirates Flight Information Region (FIR) and its neighbours.

Snowflake will deploy the Laminar Data Platform to manage flight data in compliance with the System Wide Information Management (SWIM) concept for the GCAA SWIM Gateway. Scheduled to be operational in 2018, the SWIM Gateway will receive, validate and publish the most up-to-date flight planning and strategic tactical flow management data, which will provide a platform for information exchange amongst all stakeholders in the region.

The SWIM Gateway will provide the Sheikh Zayed Air Navigation Centre with consolidated information for all planned and active flights in the UAE. Detailed information, such as estimated landing times and controlled take-off times will be made accessible to all stakeholders including airline operators and airports. Stakeholders will be able to receive high quality flight information in real-time through open interfaces with their decision making applications and to share information back, after the data is validated by the platform. As such, the SWIM Gateway will transform the collaborative decision making processes in the region. Built using an open modular architecture, the SWIM Gateway supports advanced configuration of additional business logic as an enabler for a next generation Air Traffic Management (ATM) System including Globally Interoperable Systems and Data – Flight and Flow Information for Collaborative Environment (FF-ICE, ICAO ASBU B2-25).

His Excellency Saif Al Suwaidi, the Director General of UAE GCAA stated that "The SWIM Gateway will be one of the many developments that will place the UAE aviation industry in the global arena of seamless Air Traffic Management". His Excellency emphasised on the importance of information sharing in a secure and timely manner to ensure the allocation of sufficient amount of resources to maintain sustainability. His Excellency added that these initiatives are to fulfil the UAE GCAA vision of a leading, safe, secure and sustainable civil aviation system with a clear responsibility to future generations by effective management of available resources today.

Visiting Snowflake's stand to mark the announcement, Ahmed Al Jallaf, Assistant Director General, GCAA commented, "With the development of the SWIM Gateway, the GCAA is at the forefront of implementing the vision for SWIM services across the UAE. Our airline and airport stakeholders will be empowered to make effective decisions based on high quality flight information. As a proven innovator in deploying data exchange platforms, we are pleased to be working with the Snowflake team to realise our vision for the region,"

The Laminar Data Platform provides the data management functionality for SWIM Gateway by sourcing, fusing and managing real-time flight data from multiple data providers such as EUROCONTROL, NMB2B, the Federal Aviation Administration, and local automation and airline flight planning systems.

Greeting Ahmed Al Jallaf at the stand, Ian Painter, CEO of Snowflake Software said, "We are dedicated to achieving a single, unified view of a flight across airlines, airports and ANSPs because we believe that real time access to this fused and harmonised data improves collaborative decision making in strategic and tactical ATM services. We are delighted that the Laminar Data Platform will serve the GCAA and its stakeholders in the region as they take the lead in global system interoperability via SWIM," Sheikh Zayed Air Navigation Centre is the most advanced air traffic control facility in the Middle East handling more than 2500 air traffic movements a day. The centre was opened in June 2009 with six Area Control Sectors. Since the opening the centre has added 5 additional sectors to cater for the annual growth of 7%. The growth is predicted to continue through 2030 and the centre is capable of handling 2 million air traffic movements per year. The Centre is the Gateway for ATS messages to UAE and the implementation of the SWIM Gateway will ensure single version of any flight information for the UAE.