



| ICAO



# ICAO EMERGING SURVEILLANCE TECHNOLOGIES SYMPOSIUM

5 — 7 SEPTEMBER 2022 IN TUNIS, TUNISIA

# Concept Note

## **EVENT OBJECTIVE**

The objective of the ICAO Emerging Surveillance Technologies Symposium & Exhibition is to provide a forum where States and aviation stakeholders can meet to explore the state-of-the-art Surveillance technologies and the operational requirements; share best practices; identify implementation challenges; address the issues related to automatic dependent surveillance — broadcast (ADS-B) and consider the regulatory aspects, in order to promote optimized surveillance architecture.

## **BACKGROUND**

The determination of aircraft position is essential for air traffic control. The Aeronautical Surveillance has been evolving continuously over the years. The Surveillance System consist of a series of technologies that use various ground, satellite and on-board emitter sensors (e.g., Primary Surveillance Radar (PSR), Secondary Surveillance Radar (SSR), ADS-B, multilateration technologies) together with data-merging systems at the air Traffic Control Centre (ATCC).

The steadily increasing air traffic and the expected doubling of capacity requires accurate, consistent and timely surveillance information. Emerging surveillance technologies are designed to modernize the air transportation system and manage safely the alarming levels and complexity of air traffic.

Two aeronautical surveillance technologies; multilateration and ADS-B, have emerged during the past few years and now emerge to be possible alternatives to traditional primary and secondary surveillance radar systems. ADS-B is intended to transform Air Traffic Control by providing more accurate and reliable gate to gate tracking.

To pave the way for the transformation of the surveillance infrastructure towards the less costly and more spectrum efficient ADS-B technology, several States have mandated the carriage of ADS-B worldwide.

Multilateration can be used for both aerodrome and air traffic surveillance. MLAT sensors can be sited within the airport boundaries for ground surveillance, at an d near an airport for monitoring arrival and departure traffic or over an extended area, where conventional radar is not practical or possible, for monitoring en-route traffic.

## **DATE & VENUE**

The ICAO Emerging Surveillance Technologies Symposium will be conducted jointly between the ICAO EUR/NAT and MID Regional Offices and the International Federation of Air Traffic Safety Electronics Associations (IFATSEA) - MENA. The Symposium will be held from 5 to 7 September 2022 in Tunis, Tunisia. The theme of the Symposium is: "TOWARDS OPTIMIZED SURVEILLANCE ARCHITECTURE".

## **FORMAT**

The format of the Symposium will be a face-to-face event. The ICAO Emerging Surveillance Technologies Symposium will be structured in panel discussions with top-notch experts from States, organizations, and aviation industries. The symposium will offer a great chance for exchanging knowledge and experiences as well as asking questions to the experts in this domain.

## **EXHIBITION**

The Symposium will be supplemented with an Exhibition. The Exhibition at the Emerging Surveillance Technologies Symposium will serve as an influential platform for professionals and industry experts to come together, share information and build long-lasting business relationships. It presents a great opportunity to the ANS industry to showcase cutting edge innovations, products and services.