ANNEX

Air Traffic Management Concepts for Collaboration Between CAAS, SANS and NERA

Time-Based Flow Management

Time-Based Flow Management (TBFM) is a decision support tool for time-based management in enroute and terminal airspace. It helps to efficiently manage incoming flights and make the best use of available runway and airspace capacity. As traffic is metered by time, TBFM enables the merging of traffic flows, minimising the need for coordination and reducing enroute holding or vectoring.

Air Traffic Flow Management

Air Traffic Flow Management (ATFM) optimises available airport and airspace capacity and enables more efficient and effective air traffic management without compromising safety. Together with timely and effective coordination and collaboration with all affected stakeholders, ATFM uses a range of interventions such as ground delays, rerouting and flow restrictions to regulate the movement of traffic.

System Wide Information Management

System Wide Information Management (SWIM) establishes a standardised and interoperable approach to the exchange and sharing of aviation data across air traffic management systems. Through common services and data models, it facilitates the delivery of aeronautical, flight and meteorological information, ensuring that different systems and stakeholders have access to consistent and timely data. Rather than functioning as a standalone system, SWIM is realised through a network of interconnected systems and services that together form a cohesive, network-enabled information environment.

Flight and Flow Information for a Collaborative Environment

The Flight and Flow Information for a Collaborative Environment (FF-ICE) concept introduces a more dynamic and information-rich approach to the sharing and management of flight and flow data among aviation stakeholders. Going beyond the limitations of traditional flight plans, it enables the exchange of richer flight information and supports better coordination across flight planning, flow management and trajectory optimisation. A key feature of FF-ICE is its ability to accommodate continuous updates to flight intent, facilitating stakeholder coordination both before and during flight.