Integrated AMAN/DMAN
Synchronising traffic for maximised ATM and airport performance

The Integrated AMAN/DMAN (IAD) integrates our proven Arrival and Departure Management (AMAN/DMAN) products to enhance air traffic controllers' decision-making processes, particularly for mixed-mode and dependent runway operations. It improves Air Traffic Management (ATM) and airport performance by harmonising inbound and outbound traffic, increasing runway throughput, flight efficiency, and reducing the carbon footprint. Moreover, its capability to forecast traffic loads improves predictability and increases situational awareness for Air Traffic Controllers (ATCOs).

Key features

Automated arrival and departure planning

Fully compliant with the ICAO Aviation System Block Upgrades and the European Common Project One (CP1) regulation, the Frequentis IAD is the market-leading product to optimise traffic flows at airports, taking account of both arrivals and departures, and ensuring continuous high performance by the Air Navigation Service Provider.

Coordination between tower and approach

IAD allows for an early identification and management of demand capacity imbalances. Enabled by real-time predictions and common planning capabilities for tower and approach, IAD supports controllers to jointly assess the traffic situation and identify and implement the most efficient measures, such as the proper adjustment of arrival and departure rates.

Seamless integration

IAD leverages over two decades of experience in integrating AMAN and DMAN into different operational and technical environments, such as various ATM and airport systems. IAD provides interfaces with Air Traffic Flow Management and Airport CDM systems, e.g. to achieve an extended planning horizon.

IAD at a glance

- World's first Integrated AMAN/DMAN, operationally deployed for CAA Singapore
- Successfully validated within the Single European Sky ATM Research (SESAR) programme
- Leveraging two decades of experience in deploying our AMAN and DMAN products globally
- Harmonising arrival and departure traffic flows based on performance-driven optimisation
- User-friendly and common HMIs to enable joint planning by tower and approach
- Runway management support functions to optimise ATM and airport operations efficiency

FREQUENTIS
FOR A SAFER WORLD
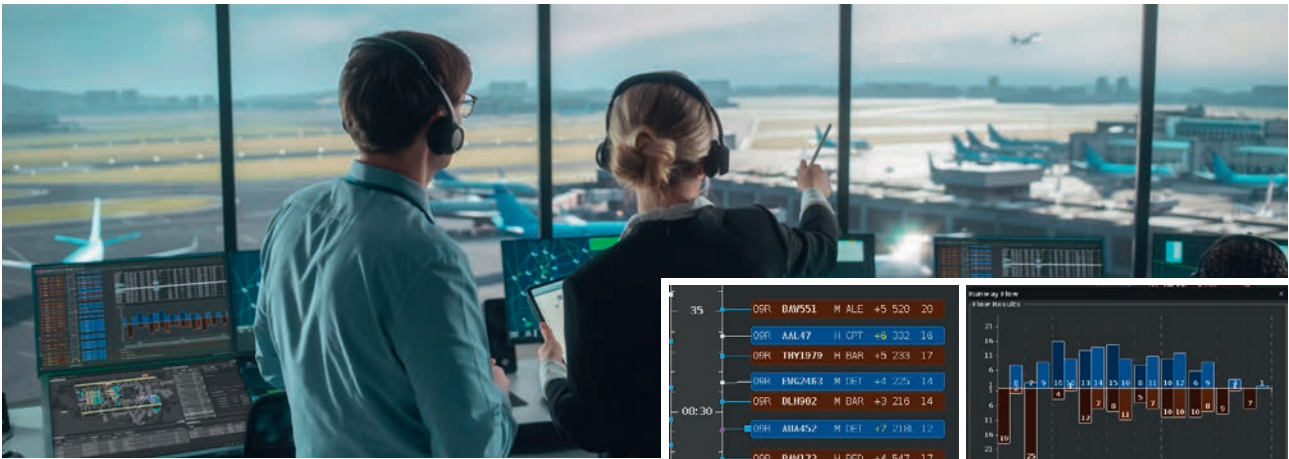
Benefits

Predictable arrival and departure traffic flows

IAD provides more accurate landing and take-off time predictions, enabling higher runway sequence efficiency and the ability to forecast and improve airport performance.

Enabling information sharing and collaboration

IAD supports tower and approach ATCOs with a common HMI and joint planning functions, and it enables automated data sharing of real-time predictions with other airport stakeholders.

Improved productivity for ATC operations

IAD enhances decision-making processes for mixed-mode or dependent runway operations and allows for a systemised approach on how arrival and departure traffic flows are organised.

Maximised airport and TMA capacity utilisation

IAD ensures a better and more balanced utilisation of the available runway resources, enabling efficient air traffic movements to and from the airport and leading to reduced delays.

Efficient flight profiles and reduced operating costs

IAD enables airspace users to fly more efficiently and to reduce taxi times, leading to significant fuel savings and reduced operating costs for the airlines.

Sustainable operations and reduced environmental footprint

IAD translates to a reduction in airborne and ground holding, leading to reduced emissions and improved sustainability. With it, IAD is a key contributor to GreenATM.

Facts & figures

2+ decades of experience since first AMAN deployment

Sustainability Award
CANSO World ATM 2021

Compliant with
ICAO ASBU and **SESAR**
requirements for AMAN/DMAN integration

20+ international airports globally

CO_2 AMAN saved in excess of **1M** tons of CO_2 emissions within its >20 years of operations

550 NM AMAN horizon for London pioneering extended planning horizons