ASD

Air Situation Display

A high-performance, flexible and configurable HMI providing seamless air/ground awareness for Air Traffic Controllers and Aerodrome Flight Information Service Officers.

The Solution

Safe and efficient management of flights around aerodromes and en-route are dependent on real-time air traffic picture. The ASD consists of the main traffic window, enabling the controllers to stay focused on the traffic in the assigned area. Additional support sub-windows provide the right information at the right time, to significantly reduce controller's workload.
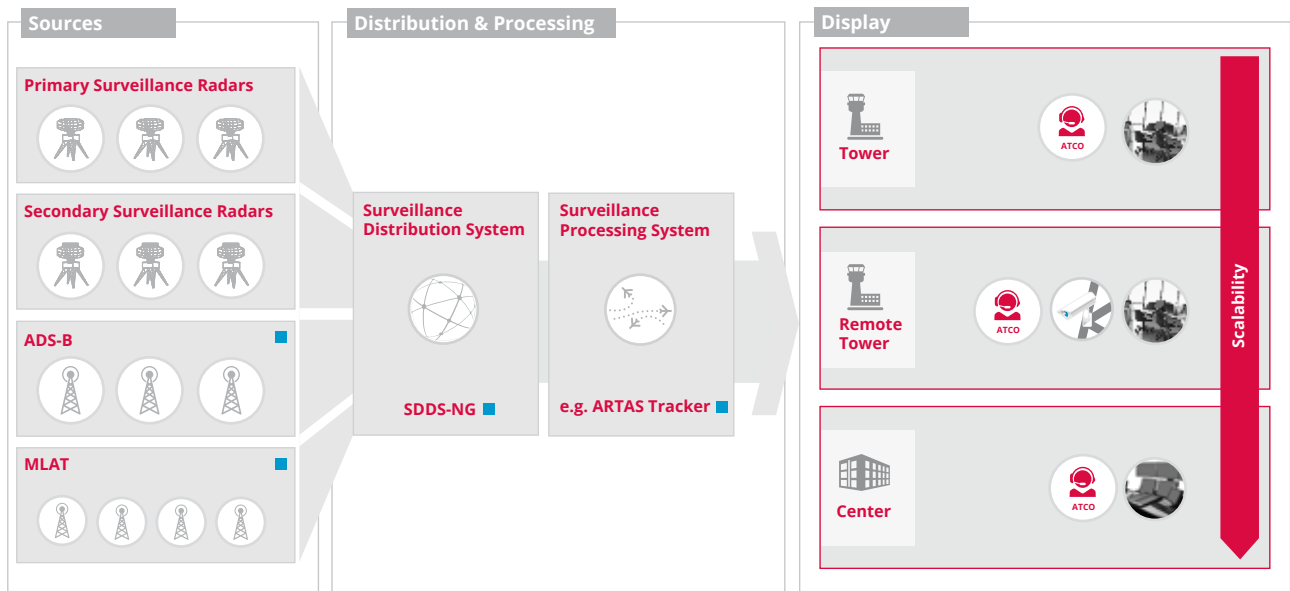
User Benefits

The optimised design of the head-up only display reduces the controller's work load. It is designed by controllers for controllers, driven by ATC operational experts. Considering both civil and military applications the ASD has also extended its range of open, flexible software modules like Safety Nets and Flight Data Processing. This enables scalability from the tower via approach to centre control applications. Tools available within the ASD allow the calculation and display of intercept vectors, and rulers to be drawn between several reference points or targets.

The built-in flight plan support allows operators to create, edit and save flight plans into an internal or external database.

Highlights

- Plug & Play installation (early operational readiness)
- Based on extensive experience in advanced air traffic automation systems
- Fully expandable and modular system design to add functionality (Buy-as-you-grow)
- Flexible configuration for tower-, approach- and en-route applications

FREQUENTIS
COMSOFT

Sources · Distribution & Processing · Display

- **Primary Surveillance Radars**
- **Secondary Surveillance Radars**
- **ADS-B**
- **MLAT**

Surveillance Distribution System
SDDS-NG

Surveillance Processing System
e.g. ARTAS Tracker

- **Tower** — ATCO
- **Remote Tower** — ATCO
- **Center** — ATCO

Scalability

■ Further FREQUENTIS COMSOFT systems

Key Features

Modular system design: The modular system design enables optional functionality such as Short Term Conflict Alerts (STCA), Area Proximity Warnings (APW) and Minimum Safe Altitude Warnings (MSAW) to be added according to our buy-as-you grow strategy.

SafetyNets: The SafetyNets module displays a prominent visual warning on the screen, for acknowledgement by the operator, as well as a graphical representation of the conflicts while they persist.

Flight Plan Database: If a connection to the flight plan database is available data are matched against current aircraft tracks, using their call sign, Mode S address or Mode 3/A code. Additional information can be displayed in the label of the corresponding track.

Tools and applications: The ASD can be used for TWR, APP and ACC applications and contains numerous control support tools like contextual filtering.

Support information: Permanent display of critical and important information, intuitive access to ancillary information when required, highly customisable display (air situation display, labels, Flight Data display, flight lists), multiple ASD views: zoomed-in, tracking, are also available.

Selected References

Armasuisse, Switzerland: Supply of ASR and PSR display system for approach control system at military airfields at Emmen, Locarno, Meiringen, Payerne and Sion. Integrating working positions into the existing ATC and recording environment (R2D2).

GCAA, Abu Dhabi: ATC automation system at Sheikh Zayed Centre, Abu Dhabi. Pairing of surveillance data with up-to-date flight plans and presentation as integrated information to the ATCO. Includes Arrival Management (AMAN), Departure Flow Management and SafetyNets. First operational AMAN in the Middle East region.

LVNL, The Netherlands: Supply of ASD, CFEP (4x working positions per location) at Maastricht and Groningen. Major Upgrades: Mode-S integration.

AirNav, Indonesia: Backup System at Jakarta. Pairing of surveillance data with up-to-date flight plans and presentation as integrated information to the ATCO. Including Control & Monitoring, ARTAS Tracker and SafetyNets.