ARTAS Product & Services

EUROCONTROL’s ATM surveillance tracker and server

Multi-sensor data fusion with highly-configurable track services (PSR, SSR, Mode S, ADS-B, ADS-C, MLAT)

The Solution

Frequentis Comsoft is a turnkey supplier of EUROCONTROL’s ATM Surveillance Tracker and Server, ARTAS – one of the most advanced and successful surveillance data processing systems world-wide.

ARTAS integrates all kinds of surveillance data sources and establishes a coherent and accurate Air Situation Picture for downstream systems.

User Benefits

Based on PSR, SSR, elementary and enhanced Mode S, ADS-B, ADS-C and Wide Area Multilateration (WAM) surveillance sources, ARTAS uses the latest tracking technologies to deliver an outstanding level of accuracy and reliability in data output.

ARTAS enables an efficient integration of ADS-B and Multilateration into existing surveillance infrastructures – minimising transition and maintenance risks and reducing costs. ARTAS tracking will be ready for Surface Movement Surveillance (SMS).

A key to the success of ARTAS is the Centralised ARTAS Maintenance and Support Service (CAMOS) for which Frequentis Comsoft is EUROCONTROL’s industrial Partner.
**Key Features**

**Supported surveillance data sources**: ARTAS processes PSR, SSR, CMB, Mode-S Elementary & Enhanced, 3D radar, ADS-B (1090 ES, VDL Mode 4, UAT), ADS-C feeds and Multilateration data.

**Supported track services**: ARTAS provides periodic and radar-synchronised track services, as well as asynchronous complementary track services and immediate update feeds.

**Data formats**: ARTAS employs ASTERIX as universal I/O format (categories 01, 02, 48, 34, 21, 23, 20, 19, 30, 31, 32, 62, 63, 65, 221, 252).

**System platforms**: ARTAS runs on LINUX platforms and standard servers, defined and validated by CAMOS.

**Applications**: ARTAS is intended for En-Route, TMA and approach control. ARTAS will also be enabled for Surface Movement Surveillance.

**Scalable**: ARTAS supports up to 255 surveillance data sources, 20+ simultaneous track services, up to 32000 concurrent tracks.

**Tracking technology**: Multiple Sensor Variable Update Tracker, EKF, JPDA, IMM, MHT, MSEA, DAP processing

**ARTAS service portfolio**: Frequentis Comsoft is EUROCONTROL’s Industrial Partner for CAMOS, and offers in addition turnkey ARTAS installations, ARTAS Trainings and Tracker Tuning.

**References**