INDUSTRY
Defense

VIASAT SERVICES
Link 16 Software, Link 16 Network Management, and Comprehensive Training

CASE STUDY

Viasat's Link 16 Software Tool Enables Real-Time Frequency Clearance Agreement (FCA) Compliance Monitoring for the German Air Force

With an increasing number of countries allowing Link 16 operations within their borders, this robust tactical data link is becoming a ubiquitous situational awareness and command and control tool that delivers both theater and localized data to all military stakeholders.

This growing Link 16 adoption means countries must establish operating restrictions (or Frequency Clearance Agreements) so Link 16 systems do not interfere with civilian navigational aids operating in the same frequency band.

Germany in particular has one of the most complicated Link 16 environments in operation today. In Uedem, where the German Air Operations Centre is located, the German Air Force operates 24 hours a day, 365 days a year to ensure the safety and security of the German air space.

The Challenge

The German Air Force is responsible for monitoring all Link 16 activity in the airspace, including at the borders where close collaboration with its nine neighboring countries is required on a daily basis.
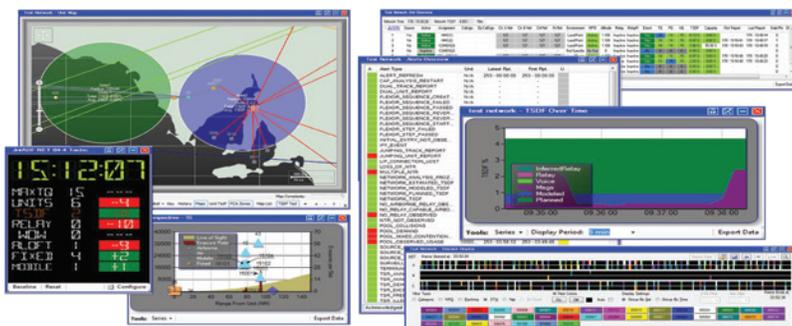
As a result, the Air Force required a system that was optimized for seamless integration of multiple networks. With hundreds of Link 16 activities taking place on a daily basis, a framework that would allow for proper planning, modifying, and troubleshooting over Germany's wide geographical area was essential for successful operations.

Viasat

The Solution

From the German Air Operations Centre facility in Uedem, the German Air Force uses Viasat's Amalgamated Remote Management System (ARMS) to monitor, manage, troubleshoot and record all Link 16 activity across the German airspace.

ARMS delivers a multi-viewpoint solution to network management that enables a common operational picture. ARMS software runs over a wide geographical area and accepts Link 16 data from each terminal node. This data is then integrated and analyzed in real time to detect and identify anomalies. By comparing the observed operational network usage to the planned usage, the software can immediately identify incorrectly initialized platforms, thereby ensuring optimal network connectivity.

With an increasingly complex Link 16 environment, Viasat continues to work closely with the German Air Force on evolving and emerging requirements to ensure the continued safety and security of the German air space, and continuously improves ARMS to meet the challenges of congested air spaces.

Benefits

With support from Viasat, the German Air Force has successfully deployed a comprehensive network management capability that has resulted in:

› Distributed data collection by implementing a multi-site monitoring system

› Coordinated network analysis (including discrepancies/ anomalies) from multiple viewpoints

› Real-time Frequency Clearance Agreement compliance monitoring

› Increased network integrity in a high-density environment

› Automated reporting

› Post-mission analysis

"Link 16 is the core capability of air operations today and tomorrow because it delivers an essential element of situational awareness. The understanding, assessment, and real-time analysis of the battlespace that Link 16 provides is the greatest enabler of situational awareness in the history of military conflict."

—Colonel (GS) Gerhard Roubal
German Air Force, Air Operations Command

CONTACT

6155 El Camino Real, Carlsbad, CA 92009-1699, USA

U.S. SALES
TEL 760 795 6334
EMAIL mids.us@viasat.com

INTERNATIONAL SALES
TEL +1 760 476 2675
EMAIL mids.international@viasat.com

TECHNICAL SUPPORT
TEL 866 496 1584
EMAIL tdl-techsupport@viasat.com

Viasat