CMS/XA

Control & Monitoring System – Extented Architecture

Integrated Control and Monitoring System for ATM surveillance environments.

The Solution

It is vital for ATM organisations to ensure that their surveillance systems are working as expected at all times. The CMS/XA system from Frequentis Comsoft provides a fully integrated Control and Monitoring System (CMS) for ATM surveillance environments. An open architecture, high reliability, outstanding performance and cost efficiency form its solid base.

As a unified system, CMS/XA enables the supervision of multiple remote sites simultaneously from one or more control centres, with all data synchronised via surveillance networks. Designed to meet the highest standards in reliability, CMS/XA is appropriate for use in safety-critical environments, and its openness makes it easy to extend.

User Benefits

CMS/XA allows the ANSP to maintain control over a large and heterogeneous set of geographically distributed radar stations, enabling significant reductions in operating and maintenance costs.

It meets the industry's need for flexible distributed availability of monitoring data, powerful event processing and expressive data presentation. The flexibility of the system allows the ANSP to dynamically add new radars or upgrade existing configurations without disruption of the operational service.

Highlights

- Integrated CMS architecture for control centres and remote sites
- Outstanding potential for customisation to different environments
- Open and integrated architecture
- Outstanding performance
- Low network traffic despite of synchronisation
- Wide range of display options
Key Features

**Unified system:** The integrated architecture of CMS/XA covers on-site data acquisition technology, remote communications as well as centre-based processing and visualisation equipment. It is ideally used to supervise a large number of remote sites simultaneously from one or several central locations.

**Open architecture:** Its modular design and openness, with separate components for data acquisition, data communication, data processing and presentation, makes it easy to integrate with existing technologies and to scale to new requirements.

**Scalability:** Built on modern, industry-standard relational databases, presentation layers and network technology, it offers exceptional scalability and caters to a broad range of applications. Architectural distinction between processing and presentation enables multiple different interfaces to run on the same system for different use cases.

**Reliability:** Designed for use in safety-critical ATM environments, CMS/XA prioritises reliability through redundancy for all hardware, software and networking components. It uses existing surveillance data networks but with minimal bandwidth requirements, and can use multiple networks for additional redundancy.

**Ease-of-use:** With an intuitive interface that features user-definable filtering and data abstraction, CMS/XA presents information clearly, concisely and vividly, helping staff focus on the most important and time-sensitive issues.

Selected References

**German Air Force:** MilRADNET provides a nationwide radar data network. The project includes a Deployable Control and Reporting Centre (DCRC), giving the German Air Force a sophisticated mobile command post that can be moved to any location. An important part of the project was the implementation of a control and monitoring system based on CMS/XA but specifically customised for military demands, which monitors eighteen connected radar stations.

**NATS, United Kingdom:** Frequentis Comsoft has been a key technology partner for the UK’s national ERCAMS (En-route Radar Control And Monitoring System) programme for 20 years. CMS/XA is the basis of the solution, monitoring all 24 NATS en-route radar sites across the whole country, while also servicing newly upgraded next-generation radar sites. The programme has seen a number of upgrades and expansions over the years, building additional reliability and future-proofing into a well-established solution.