

AIRPORT TOWER SYSTEMS

MAINTAINING AND ENHANCING AIR NAVIGATION SERVICES SAFETY AND EFFICIENCY

The use of datalink contributes towards maintaining and enhancing air navigation services safety and efficiency during all flight phases. The SITA ATS AIRCOM En Route System solutions provide turnkey systems that enable ANSPs to provide one or more of the following en route services to gain these benefits: Future Air Navigation System (FANS) Automatic Dependent Surveillance (ADS)-Contract and/or Controller-Pilot Datalink Communications (CPDLC) and/or Aeronautical Telecommunication Network (ATN) CPDLC.

ISSUES

ICAO datalink endorsement

The International Civil Aviation Organization (ICAO) has endorsed ANSP use of air-to-ground datalink as a key enabler to deliver benefits in the performance-based global air traffic management system.

Voice operations and procedures shortcomings

Datalink can assist in addressing operational shortcomings associated with the use of voice operations and procedures, such as:

- Excessive controller and pilot workload
- Controller-pilot misunderstandings
- Transcription errors
- Non-standard phraseology
- Frequency congestion

SOLUTION

The ATS AIRCOM system solutions listed below are turnkey airport tower systems that enable ANSPs to provide d-ATIS and/or d-VOLMET, and/or Departure Clearance (DCL):

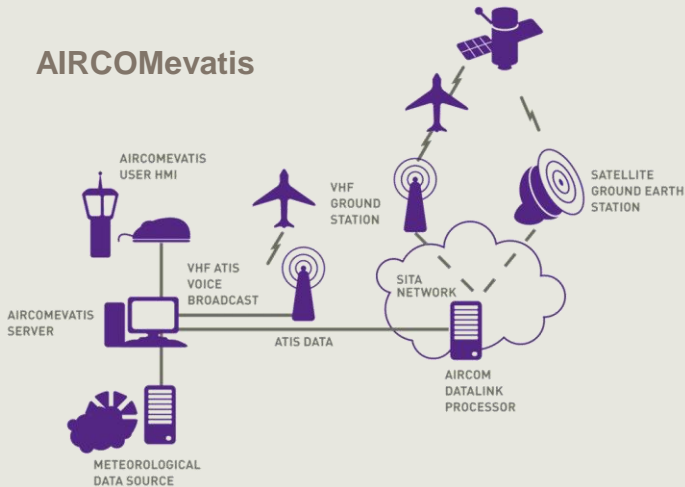
- AIRCOMevatis: d-ATIS solutions
- AIRCOMevamet: d-VOLMET solutions
- AIRCOM Centralized ATS Server (CATS) supporting d-ATIS and/or d-VOLMET for multiple airports
- AIRCOMclever: DCL solution

BENEFITS

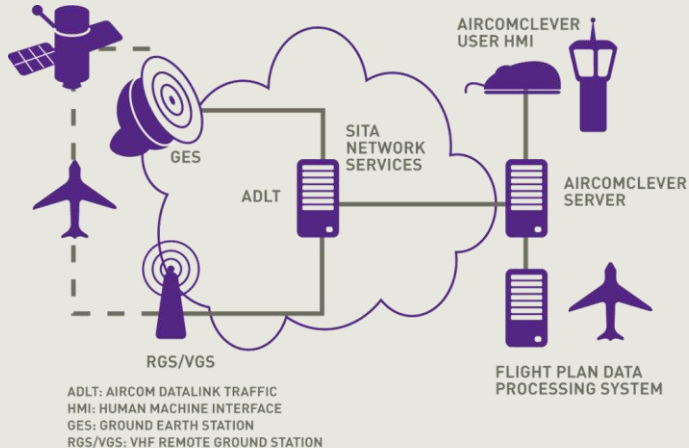
- The use of datalink contributes to maintaining and enhancing air navigation services safety and efficiency during all flight phases. For example, datalink can assist in addressing operational shortcomings such as controller-pilot misunderstandings, transcription errors, non-standard phraseology and frequency congestion, which are typically associated with the use of voice operations and procedures.
- d-ATIS, d-VOLMET and DCL reduce controller and pilot workload, and improve reliability.
- In addition, d-ATIS and d-VOLMET enable enhanced accessibility.
- DCL also results in reduced VHF frequency congestion

HOW DOES IT WORK?

AIRCOMevatis



AIRCOMclever



SOLUTION COMPONENTS

1. System elements

- ATS end system hardware and software
- Software license
- Hardware and software warranty
- External system standard interface(s)
- Additional system elements supporting AIRCOMevatis may include
 - Text to speech
 - VHF voice broadcast equipment
 - AIRCOMcats including hardware, if necessary, and software license

2. System implementation support elements

- Project management
- Factory Acceptance Test
- Shipment
- Installation-ATS end system and any required local area network at destination
- Integration and any required customization
- Site Acceptance Test
- Spares
- Documentation
- Training

CASE STUDY

SITA has been providing pre-FANS services since the 1990s and has extensive pre-FANS experience through its ATS AIRCOM System solutions product development. SITA has many pre-FANS customers worldwide and has contributed to the pre-FANS standards.

For example, DECEA Brazil has chosen the SITA ATS AIRCOM AIRCOMevatis, AIRCOMevamet, AIRCOMcats, and AIRCOMclever system solutions.

Many other ANSPs have chosen one or more of these system solutions.

For more information please contact us at info@sita.aero