Airline AIS
Pre- and In-Flight Briefing

Airline NOTAM Briefing

Airlines and military airlift operating agencies are putting a lot of effort into presenting tailor made NOTAM Pre-Flight Information Bulletins (PIB) for their pilots and dispatchers. The two main objectives are to cover all necessary information for the flight and to minimise the length of the PIB. The wording of NOTAM on PIB needs to be in a abbreviate harmonised way independent of the source of the NOTAM.

The Avitech Airline AIS (A-AIS) product has been designed to give fully automated assistance to airlines for NOTAM reception, validation and PIB generation.

Airline AIS can be seamlessly integrated into existing airline dispatcher and flight planning systems and enhance the quality of airline briefings. The product is based on experience gathered in building NOTAM and briefing systems for CAAs and Air Navigation Services Providers during the last decade.

Airline AIS Features

The Airline AIS provides the following integrated and harmonised functions for complete NOTAM management, airline briefing and briefing distribution:

- International, Domestic and Company NOTAM Management
- Enhanced Briefing
- Trajectory Briefing

NOTAM Management

Airline AIS provides functions to operators to harmonise all worldwide NOTAM formats to one valued added NOTAM format which especially support narrow route, polygon and trajectory briefings. Processed NOTAM formats include:

- ICAO System NOTAM Format
- Eurocontrol OPADD Format
- US FAA FDC and Domestic Formats
- US FAA International Format
- US DoD M NOTAM Format
- Canadian Domestic Format (English & French)

Enhanced Briefing

The Airline AIS enables dispatchers and pilots to generate a pre-flight information bulletin containing NOTAM, SNOWTAM, ASHTAM, and Company NOTAM in the following versions:

- Aerodrome Specific
- FIR Specific
- Narrow Route Specific
- Polygon and Circle Specific

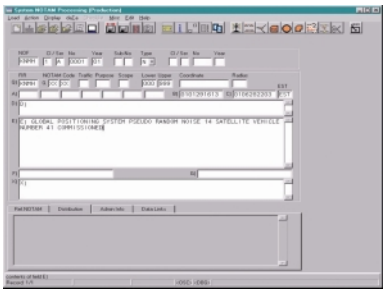
In addition to the geographical description for a briefing the flight profile, the flight rules, the ETD and ETA are further parameters to reduce information to a manageable level.

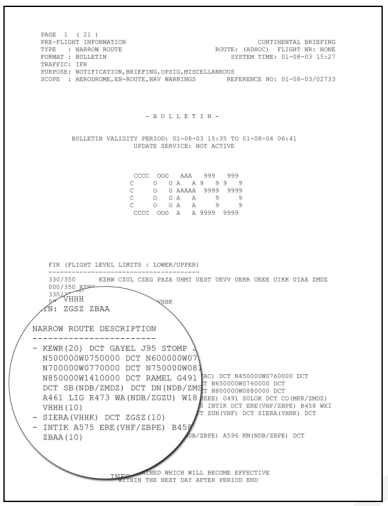
Trajectory Briefing

In addition to the enhanced briefing retrieval the Airline AIS product provides the user with trajectory briefing. The trajectory is defined by 3D-polylines and a radius around the polylines.

Briefing Update

Briefings for pilots and dispatchers can be kept up-to-date by requesting automatic updates if NOTAMs are stored after PIB requests. The same criteria applies for update as for the initial retrieval. Updates can be generated until ETD for e.g. pilot/crew or stations managers or until ETA for e.g. dispatchers at flight following. Updates can be automatically directed to any output device (printer, a system, AFTN, SITA, ACARS gateway or others).





Human Machine Interface

The HMI for Airline AIS at airline NOTAM operation centres is provided by a user-friendly purpose built Graphical User Interface (GUI) either running under Windows or HTTP. A dispatcher GUI for retrieving PIBs is also available for integration into existing dispatcher working positions. Alternatively an XML based Aeronautical Data Exchange Layer (AXL) is available for interfacing the retrieval application by customer built HMI.

Systems Integration & Interfaces

The Airline AIS database and application is built to be integrated into an existing airline IT infrastructure. A separate server can be introduced for the database and application if necessary. The interfaces to the existing infrastructure are:

- Message Communication Interface (AFTN, AMHS, CIDIN, IATA Type-B, ACARS)
- AXL (XML based) to existing briefing applications
- AXL (XML based) to customer built dispatcher HMI
- ARINC 424 Data Loading Interface

A Message-oriented Middleware is used to interface external systems (clients).

Options

An ICAO ATC Flight Plan filing and validating application can be used optionally together with the Airline AIS product. It allows the user to file flight plans in ICAO and domestic formats. To ensure a "legal recording" for further evaluation each flight plan is stored in the Airline AIS database. Airline AIS validates all flight plans against ICAO, regional and national rules. Once a flight plan has been validated and addressed by assistance of the Airline AIS it is forwarded to the relevant ATC flight plan processing system.

A full automated message exchange interface to the Eurocontrol Integrated Initial Flight Plan Processing (IFPS) and the Central Flow Management Unit (CFMU) Tactical System (TACT) is also available. It implements the required workflow for messages and automates the message exchange between airline systems and IFPS & CFMU/TACT.

System Requirements

The minimum system requirements are:

- General:
  Client: nothing specific
  Server: Oracle 9.0.1,
- Operating System:
  Client: Windows NT, 2000
  Server: all Oracle 9I supported platforms
- Hardware:
  Client: Pentium III, 128 MB RAM, 400 MB disc space
  Server: Pentium III 880 Mhz or RISC 450 MHz, 256 MB RAM, 20GB disc space

Conformance Statement

The Airline AIS is designed to assist the pre- and in-flight briefing for airlines and military airlift agencies according to ICAO Annex 6 and Preparation of an Operations Manual (Doc 9376). It ensures and assists the airline interface to ATC according to ICAO Annex 15 (NOTAM) and ICAO PANS RAC-Doc 4444 (Flight Plan).

The implementation of the requirements of the Eurocontrol IFPS and CFMU/TACT are also supported.

Avitech AG
Bahnhofplatz 1
88045 Friedrichshafen / Germany
Phone: +49 (0) 75 41/ 282-0
Fax: +49 (0) 75 41/ 282-199
marketing@avitech-ag.com
www.avitech-ag.com