



DBAIS Systems

NOTAM Data Bank

NOTAM DATA BANK

The NOTAM Data Bank System manages the access to an AMHS network through its direct connection to the MTA using the X.400 P3 it is also accessible from an AFTN network through the AFTN/AMHS Gateway. The system is comprised of redundant servers, consult terminals and an administration terminal.

The functionality of the NOTAM Data Bank responds to the operational requirements, activities, tasks and obligations which are the responsibility of an office that offer Air Navigation Services and are carried out by the following offices:

- AIS/ARO Aeronautical Information Office.
- Meteorological Forecasts Office

The system administers the following types of information:

- NOTAM, AHSTAM, SNOWTAM, messages.
- OPMET AND MET messages.
- Airspace information (Statistical Data).

The capabilities related to message management include; reception, identification, routing, search, repetition as well as well queue management.

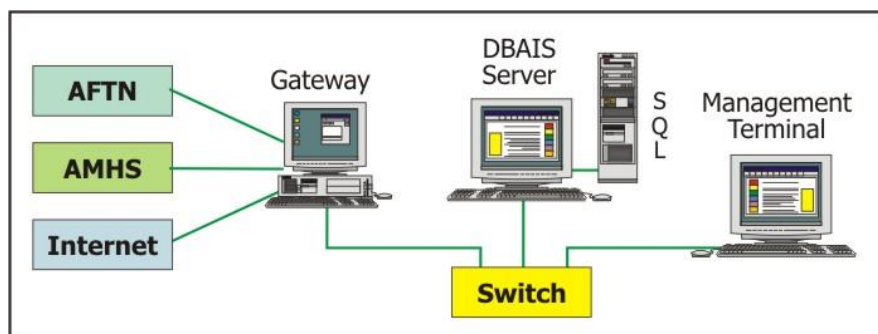
Message writing can be in free form text or by using templates (pro-forma), as a follow up to an incoming or outgoing message or through RQN, RQL formats.

The messages can then be sent to those included in a distribution list, an AMHS address, an AFTN address, a fax, an email.

The system enables authorized users to define and administrate predefined tasks that shall be executed by the system in accordance with a set program.

The system will manage a description of the Airspace through a static data bank that supports the validation process of the dynamic data (NOTAM, OPMET, MET) and the use of standard formats (e.g. ARINC-424).

The system allows authorized users to modify the Static Data Base, to block records to prevent modification and maintain a Historic Record of the modifications.



Basic AIS LAN

NOTAM Message Management

- a) Each NOTAM that is stored in the Data Bank has status information associated to it.
- b) The system provides preset forms for: NOTAM, proposed NOTAM, predefined NOTAM, SNOWTAM. The fields and functions that will enable users to complete a SNOWTAM, ASHTAM are like those of the AMHS user terminal.
- c) The system enables the creation of a NOTAM message in any of the following formats: based on NOTAM, SNOWTAM, ASHTAM template or using existing NOTAM as a model, using a predetermined format.
- d) The Facilities to fill out, complete and validate a new NOTAM, as well as the assistance mechanisms and automatic completion are like those on an AMHS user terminal.
- e) The consistency of the NOTAM/SNOWTAM/ASHTAM is checked, based on the established syntactic rules for the creation and distribution of domestic or international NOTAM.
- f) The system identifies errors and provides the user with clear information related to these.
- g) All messages that have not been managed automatically, due to errors or have manual validation configuration are placed in a queue for treatment, and visualization by authorized users.
- h) Administra automáticamente las listas de chequeo recibidas de las oficinas NOTAM de otros Estados y detecta los NOTAM faltantes o expirados y genera las acciones pertinentes.
- i) Assembles / disassembles NOTAM with multiple parts, detects missing parts and duplicate parts, if any.
- j) It stores all messages in a Data Bank and it enables search, cancellation and delete criteria.
- k) For NOTAM that are to be transmitted to a NOTAM office in another state, the system can automatically create a distribution list base on message content.
- l) The system generates monthly or periodic reports and stores then in a file format for common access. They can be printed out by authorized users.
- m) It enables Primary NOTAM tracking (and their distribution in the A and C Series) as well as having a Historic record of each Primary Notam sent by each station.
- n) The control register of the NOTAM (number, series, location) be it of received NOTAM and those that are expecting distribution will change automatically at the end of each year.

Search Function

- a) The System meets information requirements from various sources: operation terminals, AFTN subscribers, AMHS subscribers and internal to the system.
- b) It manages ICAO (SPR, FAB, AER) and RQN, RQL requirements.
- c) The information requirements are placed in a dedicated queue when the syntax is incorrect, when the author of the requirement is not authorized, or when the requirement received requires a manual response.

Data Bank Administration

- a) All types of data managed by the System are archived: Data files, configuration files, log files; Basic and Static Data; Dynamic Data.
- b) The archived data is initially stored in specific directories and dedicated to disk, allowing quick and easy access to stored information. Subsequently, it is possible to store all data in removable drives.
- c) The System provides complete statistical reports, which may be daily, monthly, annual, or for specific time periods determined by the user.
- d) The System provides the following statistical reports: total number and per channel of messages received and sent, number of characters sent per channel.
- e) The System provides complete statistics related to NOTAMs.
- f) The System provides statistics of the MET and OPMET messages.

Data Bank Software Specifics

- a) It is easy to use, with a graphical interface and online help.
- b) Use standardized database software.
- c) It has protection mechanisms against operating errors and unauthorized access.
- d) It delivers partial and summarized statistics of traffic and generates reports.
- e) Provide permanent information on alarms and rejected messages.
- f) It has a user interface in Spanish and English.
- g) It handles TCP / IP, asynchronous, FTP, SMTP and Fax communications protocols.



The Data Bank has connections with independent AMHS protocol and format.

Functions of the Administration Terminal and Operation Terminals are dependent on the rights assigned to each respective user.

All the hardware is COTS (Commercial Off the Shelf).

The Data Bank Server is designed for continuous use and high availability technic.

Dot matrix printers are installed (one for each Operation Terminal), as well as a separate printer for server alarms and a laser printer for reports and statistics.

Printing of complete, non-mutilated messages on A4 sheets and continuous forms can be carried out. For messages longer than one page, a header / footer will be added indicating the message header and page numbering.