Integrated flight plan management increases efficiency and awareness

Frequentis' integrated flight plan management enables the most efficient and effective process across different stakeholders and external dependencies while the following criteria must be met:

- Flight plan proposal handling

- Flight plan and follow-up message management

- Interface to Eurocontrol

- Flight plan processing and distribution service (IFPS) via Network Manager (NM)

- Graphical flight planning and visualisation of route proposals

- PIB based on flight plan

The challenge for reliable and efficient flight planning

Reliable and fast flight planning workflow with shared situational awareness of operators and pilots is crucial for safe flight operation.

Pilots and small-airline dispatchers may struggle to create flight plans and get related notifications in a fast and efficient way.

On the other hand, processing, sorting, prioritising and forwarding worldwide incoming flight plans and associated messages via different sources (AFTN, AHMS, internet, fax, paper) within a limited timeframe leads to a safety-critical challenge in flight operations.

The solution

Flight plan proposal handling:

Pre-flight preparation and flight planning software needs a solution that allows registered users to create FPL proposals and track their status in respect to acceptance, changes and slot allocations.

Flight plan follow-up and slot messages management:

Using a briefing facility, where received FPL proposals and associated messages are processed while newly created FPLs are distributed via AFTN and/or AMHS network (also to IFPS) according to ICAO Doc 4444 and IFPS Users Manual.

Information about ORM (Operational Reply Messages) from the IFPS, are delivered to the user that submitted an FPL proposal.

Interface to Eurocontrol IFPS (Flight Plan Processing and Distribution Service) via Network Manager (NM):

Route proposal can be retrieved via this service for I/Z/Y flight plans to allow an efficient and easy route planning.

FPLs within the IFPS-zone need to be forwarded and validated by EC IFPS, which is a sophisticated and automated part of the system.

Graphical flight planning and visualisation of route proposals:

Increasing situational awareness of pilots and ARO operators, graphical representation of planned route and/or route proposal are part of the system.
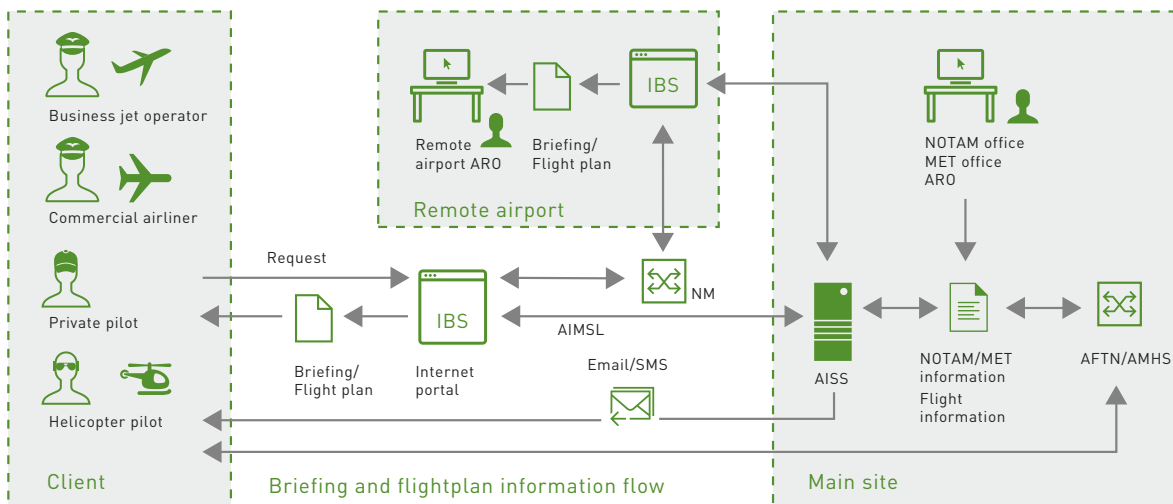
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ARO: ATS Reporting Office, IBS: Internet Briefing System, AISS: Aeronautical Information Services Database System, AFTN: Aeronautical Telecommunications Network
AMHS: Aeronautical Message Handling System, AIMSL: AIM Service Layer, NM: Eurocontrol Network Manager

For almost two decades, Frequentis provides the European AIS Database (EAD) – the world's largest Aeronautical Information System (AIS).

One of its core functionalities is flight plan management, in addition to AIXM data and NOTAM management which are all field-proven.

Frequentis' AIM solution for local ANSPs allows integrated operation with EAD or autonomously.

We provide a well-established and accepted Internet Briefing System, where pilots can conduct their pre-flight preparation and flight plan proposals for ANSPs worldwide.

Our flight planning management solution uses Aeronautical Static Data, which is maintained by Eurocontrol.

PIB based on flight plan:

Based on a flight plan, the ARO operator or pilot can easily create a pre-flight bulletin, which contains NOTAM and weather information of the respective area and timeframe.

Shared situational awareness:

The seamless integrated solutions for pilots and operators increases situational awareness during pre-flight preparation and post-flight activities (e.g. closing a Flight Plan).

Flight plan creation:

Our solution enables fast, efficient and safe flight planning by validating the flight plan according to ICAO DOC 4444 and IFPS User Manual using the consolidated world-wide minimum static data set of the European AIS database.

Client and distribution list management:

The streamlined functionalities for increased efficiency and reduction of errors in daily work is achieved through a simplification of the client and distribution list as well as automatic addressing for recurring customers.

Notifications:

Reducing operationally stressful systems through several notification features, which are part of our integrated solution to retrieve updates and warnings on time.

Integrated briefings and flight planning:

Flight planning and briefing is integrated to easily switch between both views for a harmonised overall information picture.

Filtering for reduced operators´ workload:

Our advanced filtering capabilities allows the operators to optimise their workflow significantly.

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