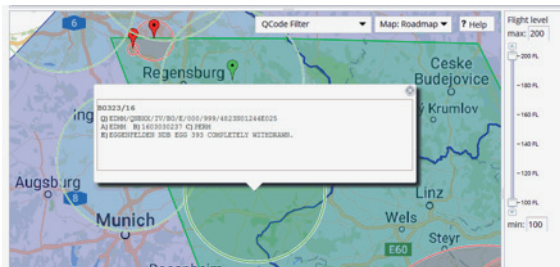# NOTAM management

To successfully provide NOTAM management, there are five criteria that need to be met. Every NOTAM office operator requires the following:

1) System-aided management of NOTAMs
2) Visualisation of relevant NOTAMs on a map to ensure the accuracy of coordinates provided in the announcement
3) Interfaces with external meteorological weather providers
4) NOTAM distribution and processing
5) Statistics and reports

Having the right information at hand is crucial for every pilot in a safety-first environment such as the aeronautical domain. NOTAM management is at the centre of this requirement.

The challenge

Processing of worldwide incoming NOTAMs at a sustainable pace and communication of national aeronautical and cultural infrastructure changes to the intended users are only two of the safety-critical tasks that need to be performed by the NOTAM office operator. The ultimate goal of the operator is to provide all relevant information in a timely manner to every airspace user.

The solution

Providing the necessary information to airspace users is the basis for safe flight operations. There are five key criteria that need to be met to support this requirement.

System-aided management of NOTAMs: Management of new and incoming NOTAMs is only possible with sophisticated automation steps and manual intervention where necessary to relief the operators.

Visualisation of relevant NOTAMs on a map: A picture is worth a thousand words – the same is true for NOTAMs. The accuracy of the coordinates of a NOTAM need to be confirmed and this is why all NOTAMs need to be displayed with the relevant static data on a map.

Interfaces with external meteorological weather providers: Up-to-date weather information from your trusted weather information provider can be integrated from an external service into the distributed briefing information.

NOTAM distribution and processing: Worldwide NOTAMs are received and processed while newly created NOTAMs are distributed via an AFTN and/ or AMHS network.

Statistics and reports: To fully comply with national, regional or international regulatory constraints. One example is a European law that is focused on ADQ (Aeronautical Data Quality). Statistics and reports about NOTAM management are also provided to validate compliance.

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FOR A SAFER WORLD
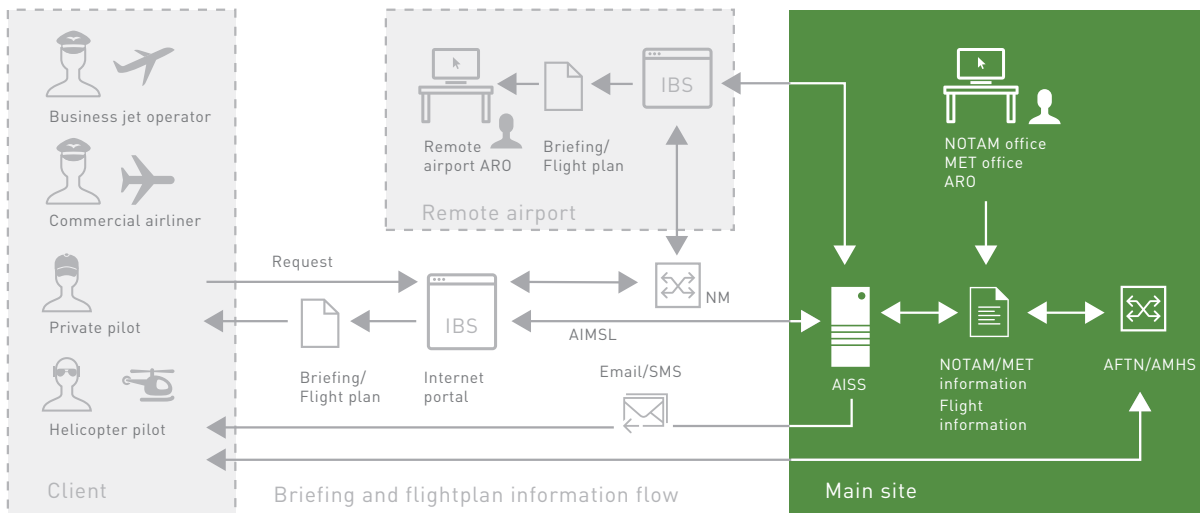
ARO: ATS Reporting Office, IBS: Internet Briefing System, AISS: Aeronautical Information Services Database System, AFTN: Aeronautical Telecommunications Network
AMHS: Aeronautical Message Handling System, AIMSL: AIM Service Layer, NM: Eurocontrol Network Manager

Frequentis has been providing the European AIS Database (EAD) – the world's largest Aeronautical Information System (AIS) – for two decades. In addition to AIXM data and flight plan management, NOTAM management is one of the core functionalities and field proven across many users. The Frequentis AIM solution for local ANSPs allows autonomous operation or integration with EAD.

The Frequentis NOTAM Office system in place (e.g. at EAD) processes more than 1.3 million ICAO text NOTAMs with an annual increase of around 10-15% Without system-aided management this increasing amount of data would not be possible to support[1].

The NOTAM Office operators are supported with an integrated map for safety reasons to assure the NOTAM addresses the affected area.

The pre-flight information bulletins are enriched with weather information so that pilots have everything at hand in one view to be ready for the upcoming flight.

Digital NOTAM – be prepared for the future

With Digital NOTAM on the horizon, the Frequentis NOTAM Office system supports more and more D-NOTAM event categories depending on your individual use cases.

Advantages of Digital NOTAM:

- Use and distribute the most current data across the entire system globally

- Machine readable – no human interpretation needed by the pilot

Example Digital NOTAM use cases

- On-demand ad-hoc airspace restrictions – Special Area Activation (SAA): Imagine a VIP like the president of your country needs to spontaneously fly to Brussels and no other airspace users are allowed to fly nearby.

In the past such flights where close to impossible to manage for ATC controllers without closing the entire FIR or large areas of it for an extended period. Digital NOTAM enables ATC controllers and ANSPs to precisely define on an ad-hoc basis where and for how long such restricted corridors are available. This is beneficial for other airspace users, as they get immediate feedback on where they can fly during the pre-flight preparation phase as D-NOTAM data is machine readable and immediately available.

[1] https://www.ead.eurocontrol.int/cms-eadbasic/opencms/en/ead-operations/performance-statistics/yoy-evolution/

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