DFS Deutsche Flugsicherung

DFS-Deutsche Flugsicherung
– moves to the EAD Cloud

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Processing more than 400,000 flight plan requests per year becomes more manageable with EAD Cloud Services

DFS is the first major European air navigation service provider (ANSP) to deploy the central European AIS Database (EAD) for its pre-flight information service. The EAD Service is provided by EUROCONTROL on behalf of its member states and enables the seamless exchange of aeronautical data between ANSPs, airspace users and the EUROCONTROL Network Manager.

DFS is using EAD Functions for flight plan management, the publication of national NOTAM and for the preparation of Pre-Flight Information Bulletins for pilots. In the past, DFS used a Thales system for managing NOTAMS, flight plans and offering briefings. The changeover to the EAD Service delivers savings and efficiency benefits while reducing the reliance on internal system management staff. The user experience of the EAD system fulfills the high demands on usability and efficiency of an ANSP which handles the most complex and highest traffic volume in Europe.

Customer profile

DFS Deutsche Flugsicherung GmbH, the German air navigation service provider, is a State-owned company under private law with 5,400 employees. Air traffic controllers guide more than three million flight movements every year. Headquartered in Langen, DFS operates four control centres and the control towers at the sixteen international airports in Germany. Its subsidiary DFS Aviation Services provides services worldwide and air traffic control at nine regional airports in Germany and at London Gatwick and Edinburgh Airport in the UK.

Business situation

The previously used Thales system supported a large number of daily requests for pre-flight information. However, the Thales system became increasingly outdated and needed to be replaced.

Solution

Using the pre-flight information component of the European AIS Database (EAD) - the world's largest AIM cloud-based service – was seen as a cost-effective solution. This centralised information system is a source of quality-assured worldwide aeronautical information and a fully integrated, highly efficient and modern AIM solution.

Impact

→ Efficient pre-flight processes
→ Cloud-based support of pre-flight information
→ Cost reduction
→ Leverage already established EAD functionality

"By using the EAD Service and Functions, DFS will benefit from European developments and cost savings as a result of the European system standardisation and cost-sharing between all Member States. Using these synergies is much more economical than developing and maintaining our own ARO system."

Pierre Hermann,
Director Aeronautical Information Management, DFS

Aeronautical Information Management

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Over the last few years, DFS has been cooperating with EUROCONTROL, Frequentis and other EAD users on the further enhancement of the EAD system. The results are new or extended functionalities and optimised performance. The EAD Service received its Single European Sky certification from the European Aviation Safety Agency (EASA) in December 2016, which was a decisive factor leading DFS to deploy it in March 2018. The change-over project will conclude in September.

Solution

EAD is providing global quality-assured aeronautical static data to be used to validate NOTAM, flight plans and briefings. DFS operators utilise industry standard working positions which connect to the EAD service via highly secure and reliable remote network connections. No local EAD server hardware is needed to be operated and maintained on the DFS premises. In order to meet the demanding requirements of DFS, EAD was significantly upgraded. This included upgraded performance to provide necessary efficiencies when handling a large number of NOTAMs and flight plans. For DFS this is more than 400,000 per year. In addition, modern customer relationship management capabilities and unified messaging components help to streamline communications between DFS and its customers while providing a great customer experience.

Usability

The EAD NOTAM management, flight plan management and briefing components are sophisticated tools designed for operational experts. The DFS experts had very specific requirements for usability and operational efficiency, which go beyond the needs of general IT end-users. Every click counts, potentially costing time and money. The right degree of automation ensures the highest levels of safety while relieving the experts of tedious manual tasks and always leaving the operator in control.

Quality

Only by applying professional development processes following safety standards such as ED-153 / SWAL-3 (Software Assurance Level), is it possible to ensure that operators can fully rely on automation solutions. The business rules and sophisticated automatic data validation capabilities in EAD applications ensure a high level of data quality.

Cost savings

In addition to operational and safety benefits, DFS' migration to the EAD Service also achieves significant cost savings through the avoidance of:

- Hardware investments, upgrades and ongoing maintenance
- System mid-life upgrades
- System and software maintenance required to ensure compliance with safety and security standards and new international regulations
- Data centre costs for IT administration staff, server rooms, power and cooling, redundancy, security compliance, network hardware and software (intrusion detection / prevention systems, firewalls routers etc.), software on-time licenses and service desk support.

The industry leading migration to the EAD Service positions DFS as a role model for other ANSPs looking to move toward a more efficient and cost saving way of supporting ARO requirements; while still maintaining the highest level of safety and quality for its users.

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