Datasheet: smartMessenger ATS Message Handling System (AMHS)

ICAO has mandated Air Navigation Service Providers (ANSPs) to migrate from Aeronautical Fixed Telecommunications Network (AFTN) to the Air Traffic Services (ATS) Message Handling System (AMHS) for the exchange of messages pertaining to the safety of air navigation.

AMHS is based on the international X.400 messaging standard which offers enhanced functionality over AFTN such as the possibility to exchange messages with attachments and the use of directory services to enhance interoperability,

smartMessenger was designed to assist the ANSPs with their migration from AFTN to AMHS. It supports both formats and the bi-directional conversion within one fully integrated product, easing the migration process.

Key features

- AMHS Basic and Extended services such as file transfer body part (attachment), directory services
- User Agent supports AFTN, AMHS and Internet Email message formats
- Message conversion between all supported message formats – AMHS to AFTN, AMHS to Email
- Data exchange with EUROCONTROL ATS Messaging Management Center (AMC), European Directory Services (EDS)
- System management application supports configuration and monitoring of all system functionalities via a single GUI.
- Software development kit (SDK) enables user agent message templates to be produced by the customer
- Mailbox sharing among x.400 users



smartMessenger at a glance

- Compliant to ICAO Annex 10, ICAO AMHS SARPS, EUROCONTROL AMHS Community Specifications and EUROCAE ED-153 Guidelines for ANS Software Safety Assurance
- Exceeds minimum performance level of 350 AMHS messages switched per second
- Offer lowest lifecycle costs of any products available on the market
- Can be deployed with a hot contingency system with automatic synchronisation for disaster recovery
- Includes Cybersecurity protection to meet EU regulatory requirements
- Can be configured with Open API (SWIM compliant)





Benefits

smartMessenger was designed and developed using the latest software development tools and technologies resulting in higher performance, availability and flexibility, along with a lower lifecycle cost than any other AMHS products available on the market.

The system is fully scalable supporting a wide range of customer deployments from small systems with a single site to large installations with contingency systems. It can be configured with Open API allowing for X.400 messages to be passed along to other systems using protocols that are readily available and which comply with SWIM specifications.

smartMessenger can also be implemented with additional components that enhance security to meet new customer requirements in response to EU Directive 2016/1148 of the European Parliament.

Technical specifications

Message formats	AMHS, SWIM, AFTN, CIDIN, SITA-B, WMO, Internet Email (RFC-822)
Performance	Minimum of 350 AMHS messages per second
Availability	99.999 %
Addressing	AFTN, AMHS (XF, CAAS)
Protocols supported	AMHS P1, P3 over IPv4 and IPv6 connections; AFTN over IPv4 and asynchronous/ synchronous connections

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