

Product brief: smartSIS

ATC information system

Air navigation service providers (ANSPs) are looking at solutions that enhance the efficiency of their air traffic controllers. With Frequentis' proprietary SWIM application smartSIS (smart supplementary information system), controllers can quickly access different types of information, allowing them to focus on their key tasks and giving them the ability to effectively manage manned and unmanned flights. The solution acts as the main portal through which controllers access vital operational information, and supports controller operations at air control centre, approach and tower working positions.

Key features

Up-to-date information

smartSIS ensures all relevant information is up-to-date and available to controllers using a graphical map-driven user interface scaling from mobile devices to computer screens and large-scale situation displays.

Efficient productivity

The ability to provide up-to-date airport/airspace and weather information to the pilots during the active phase of the flight, with minimal effort from the controllers, is critical for increasing their productivity.

One display for full situational awareness

smartSIS fuses different formats of airspace information, MET information, NOTAM / SNOWTAM / ASHTAM, and positions received from surveillance. It manages flight plans and UAS operational plans in a single system, displayed on individual HMIs for full situational awareness.

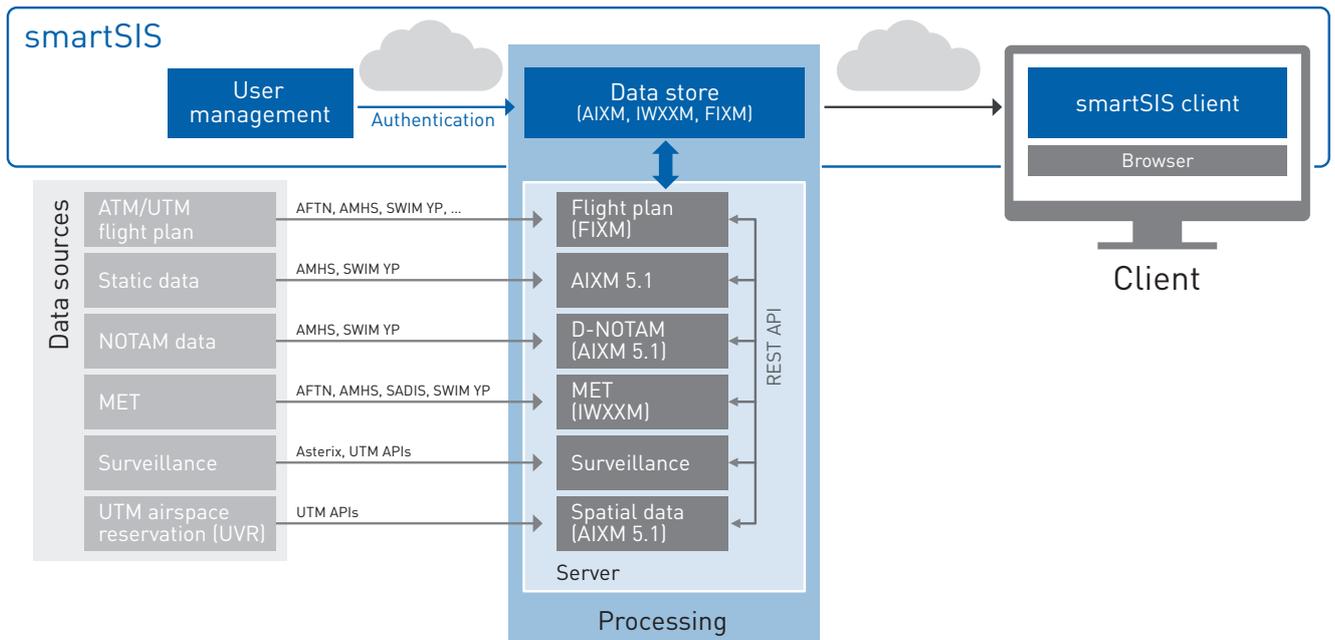
Quick search engine

The solution provides access to stored documents such as AIP, manuals, notes, and special documents, making them easily accessible to controllers.



smartSIS at a glance

- Enhanced air traffic controller productivity
- Full air situational awareness
- User-centric weather and airspace information display
- Easy UAS operational plan approval/rejection and creation of UVR
- Highly modular and configurable
- ATC front-end
- ATM-grade back-end system
- Web application



Benefits

Modular

smartSIS is designed using a micro-services architecture, resulting in a system that is highly modular and flexible, allowing ANSPs to easily accommodate new data types, new functional requirements, and additional users and/or user roles.

Scalable

smartSIS can be deployed on-premise, in the cloud or in a hybrid environment. This enables dynamic scalability to meet peaks in demand and request volume.

Extendable

The solution supports a wide range of options for acquiring data from legacy infrastructure (AMHS, AFTN, etc.) and/or SWIM services.

Technical specification

Data sources	SWIM, AMHS, AFTN, WMO, SADIS, WIFS
Data format	MET: Textual, Binary, IWXXM, LIDAR, Satellite Airspace: AIXM 5.1, ARINC-424 NOTAM: Textual, Digital NOTAM (AIXM 5.1) Flight Plans: Textual, FIXM Surveillance: ADS-B, FLARM
System availability	99,999%