

# ATS SATVOICE

## How satellite voice services are transforming life for ANSPs

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Digitalization and modernization of air traffic control systems are needed, and a growing number of safety mandates and demand for next-generation air traffic management practices are adding to the challenge.

Voice communication services are becoming increasingly critical to this aim, remaining a fundamental component of the air traffic control toolkit. Seamless and reliable voice communications with aircraft are required for Air Navigation Service Providers (ANSPs) to function effectively all over the globe. The ATS SATVOICE service is set to deliver this transformative capability.

### WHAT IS ATS SATVOICE?

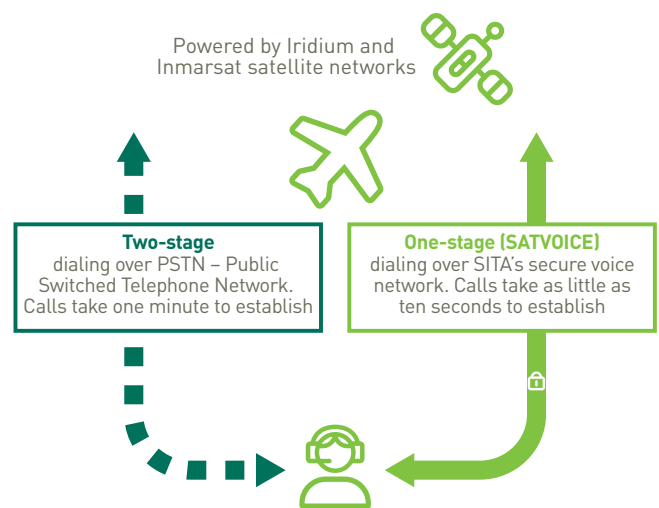
The SITA satellite voice service for ATS communications – ATS SATVOICE – enables seamless ground-to-air voice communications via Inmarsat and Iridium global satellite networks that keep air traffic controllers and pilots in clear contact at every stage of the flight. ATS SATVOICE is also fleet agnostic, capable of working across all airframe types and flexible to be integrated within ANSP’s Voice Communication Systems using standard Voice over IP (VoIP) interfaces.

### WHAT BENEFITS WILL THE SATVOICE SERVICES BRING TO ANSPs?

The main advantage of SATVOICE is the ability to provide global coverage of superior quality to traditional High Frequency (HF) or Very High Frequency (VHF) voice coverage, which delivers major safety benefits. Thanks to partnerships with the likes of Inmarsat and Iridium, it is possible to provide coverage for aircraft flying over oceans or remote regions, where HF and VHF coverage has been hard to implement or poor in quality.

Importantly, satellite voice calls are seamlessly managed by SITA’s proprietary Enhanced Ground-to-Air Voice Platform with built-in redundancy via its private VoIP network in the most secure manner. SATVOICE function can be integrated within ANSP’s Voice Communication Systems, allowing a significant reduction in controller workload by automating call setup procedures that would otherwise be done manually. If air traffic control (ATC) needs to communicate with the aircraft, it is for an important reason. Pilots need to understand ATC instructions quickly and clearly, making the high-quality satellite voice line absolutely essential.

In addition, ATS SATVOICE logs can be used to evaluate and monitor Direct Controller-Pilot Communication performance parameters. When combined with a quick and direct line of communication, this can help ANSPs reduce separation between aircraft in oceanic or remote airspace.



**Figure 1:** Maintaining the ground-to-air connectivity required from air traffic controllers and pilots with options for one- or two-stage dialing.



## THE POINT-TO-POINT NATURE OF THE CONNECTION IS ALSO SECURE, AS UNLIKE VHF OR HF CHANNELS, IT IS NOT POSSIBLE FOR ANY THIRD PARTIES TO LISTEN IN.

### THE ADVANTAGE OF ONE-STAGE DIALING

Thanks to one-stage dialing, SITA's satellite voice offering also makes it easy and quick for air traffic controllers to establish voice communication links with the aircraft, with the pilot able to immediately respond to requests and information.

Traditionally, ground-to-air calling involves two-stage dialing over public switched telephone networks (PSTN). To set up a call, the ground user will dial an access number, then enter a PIN code and aircraft earth station ID. Because of these multiple authentication stages, calls can take well over a minute to establish.

Thanks to faster and secure private ground networks, ATS SATVOICE offers one-stage dialing, whereby calls are routed directly through a private IP network, with pre-set identifications and automatic authentication processes that bypass the need for a second authentication stage.

This simplicity means that a ground-to-air call can be setup in a matter of seconds.

### WHY SITA IS BEST POSITIONED TO DELIVER THE FUTURE OF ATC VOICE COMMUNICATION

Thanks to SITA's position as the air transport industry's trusted connected service expert – and its ongoing work to develop digital transformation enablement for the air transport industry – it is ideally placed to help make the transition to satellite voice services.

SITA develops, operates, and maintains its ground-to-air-voice platform, ensuring an expert quality of service and space to develop additional value-added services and features on top of the platform. Continuous service monitoring and 24-hour, seven-day-per-week, year-round multi-lingual support ensure that issues are proactively managed and resolved quickly.

Moreover, SITA, as a member of the ICAO Communication Panel, participate in the SATVOICE Project Team, developing a new Required Communication Performance (RCP) specification for DCPC SATVOICE while ensuring SITA's satellite voice solution meets any upcoming industry requirements.

ANSPs around the world are already benefiting from the transformative potential offered by satellite voice services. Canada's ANSP, NAV CANADA, is already seeing positive results from ATS SATVOICE. As Fred Cosgrove of NAV CANADA explains: "The system is working extremely well, and we are receiving many positive reports from air traffic control officers. Calls are crystal clear and connected very quickly."

The SITA satellite voice solution is high-quality, truly global, reliable, and simple to use. What's more, it is proven and in use around the world, and when an ANSP selects SITA for a satellite voice solution, they get the best possible service and a reliable, simple, innovative, and future-proofed solution.

SITA FOR AIRCRAFT's **Unified Aircraft Communications (UAC)** solutions provide aircraft connectivity as-a-service. Our global, end-to-end managed, fault-resilient connectivity services support multiple technology and connectivity options. They also give airlines and Air Navigation Service Providers (ANSPs) the flexibility to choose the solution that best fits their needs and those of their stakeholders.

Whether your focus is unlocking significant cost savings and efficiencies with both data and voice services, enhancing air traffic control (ATC) procedures with complete integration from ATC to cockpit, or facilitating secure, real-time aircraft data exchange, our UAC solutions offer the complete package, straight from the industry's experts in the field. The world's state-of-the-art aircraft and ATC communications ecosystem. Reliability, flexibility and innovation, simply delivered.

**Unlock possibilities today.**

## SITA AT A GLANCE

### Easy and safe travel every step of the way.

- Through information and communications technology, we help to make the end-to-end journey easier for passengers – from pre-travel, check-in and baggage processing, to boarding, border control and inflight connectivity.
- We work with over 400 air transport industry members and 2,500 customers in over 200 countries and territories. Almost every airline and airport in the world does business with SITA.
- Our customers include airlines, airports, ground handlers, aircraft, air navigation service providers, and governments.
- Created and owned 100% by air transport, SITA is the community's dedicated partner for IT and communications, uniquely able to respond to community needs and issues.
- We innovate and develop collaboratively with our air transport customers, industry bodies and partners. Our portfolio and strategic direction are driven by the community, through the SITA Board and Council, comprising air transport industry members the world over.
- We provide services over the world's most extensive communications network. It's the vital asset that keeps the global air transport industry connected.
- With a customer service team of over 2,000 people around the world, we invest significantly in achieving best-in-class customer service, providing 24/7 integrated local and global support for our services.
- Our annual Air Transport and Passenger IT Insights reports for airlines, airports and passengers are industry-renowned, as is our Baggage IT Insights report.

For further information, please visit [www.sita.aero](http://www.sita.aero)



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