



## The future of Safety and Operational communications

Safety is in Inmarsat's DNA. Airlines the world over trust our range of market-leading, secure and reliable connectivity solutions that set the standard for flight deck communications.

### Inmarsat's safety heritage

We are the trusted provider of satellite communications services to the majority of the world's airlines, providing essential connectivity where it is needed, when it is needed around the globe. For over 25 years we have been delivering industry-leading satellite safety communications services and are building on this heritage to develop the next generation of connectivity solutions for the flight deck. Using cutting-edge satellite technology offering greater efficiency and capacity to the cockpit, our products enable innovative new applications to improve flight safety and operational efficiency today and in the future. With backgrounds in airline operations, air traffic control, safety management, and satellite communications, our team of global leaders can enable you to deliver the future of cockpit connectivity.

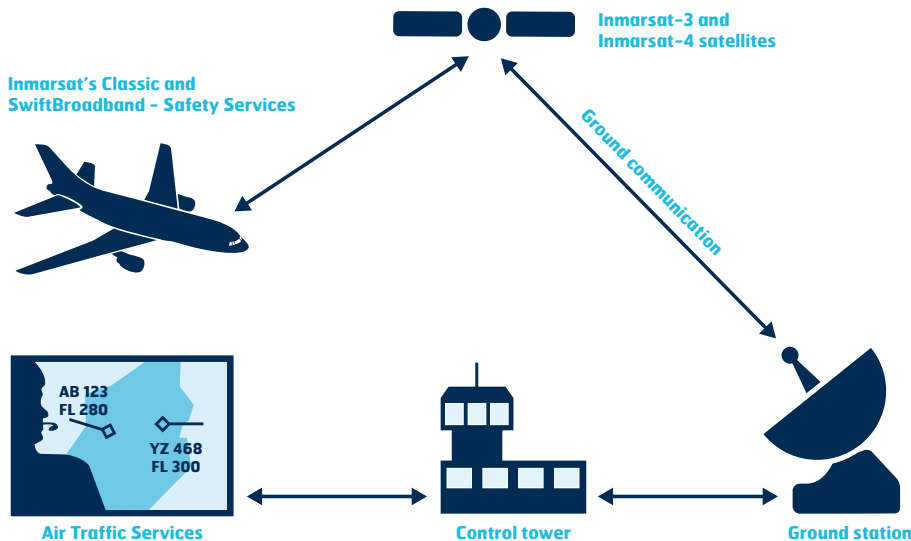


## Why satellite communication?

The building blocks for more efficient and safe flight operations are the requirements found in Communications, Navigation and Surveillance (CNS). Inmarsat provides two components of CNS – communications using Controller-Pilot Data Link Communications (CPDLC) and surveillance using Automatic Dependent Surveillance – Contract (ADS-C):

- > ADS-C is a surveillance technology which provides four dimensional position, altitude, vector and other critical operational information.
- > CPDLC is a datalink communications application that supports the exchange of data messages directly between a controller and a flight crew.

ADS-C and CPDLC are transmitted using the Aircraft Communications Addressing and Reporting System (ACARS), a digital datalink for transmitting short messages between aircraft and ground stations via radio or satellite.



## Inmarsat's Services Classic Aero

Classic Aero is Inmarsat's existing high-quality voice, low-speed data safety service over ACARS, trusted by airlines, corporate jets, government aircraft, and coastguard and defence agencies worldwide. The service offers reliable and secure satellite surveillance and communications that meet International Civil Aviation Organization (ICAO) requirements. Satellite communications such as Classic Aero are used routinely on the world's oceanic air routes and are used to meet ICAO's global flight tracking requirements using ADS-C capability.

## SwiftBroadband - Safety

### Next generation connectivity

SwiftBroadband – Safety (SB-S) is the next generation flight deck communication platform. Utilising the global L-band constellation, SB-S delivers speeds 10 times faster than Classic Aero, providing airlines with cockpit communications fit for the digital age. SB-S enables a new world of flight deck applications, from continuous positional awareness and Electronic Flight Bag (EFB) updates, to Airline Operational Control Centre (AOC) voice and data and beyond.

### Enhanced capabilities

Voice Service – providing two channels of voice to the cockpit, meeting ICAO Standards and Recommended Practices (SARPs) and the ICAO Satellite Voice Guidance Material (SVGM).

Prioritised IP Data Service – providing a prioritised IP link to the cockpit, principally for the AOC. A key enabler for new cockpit applications requiring additional levels of availability and assurance on IP data throughput, it can also support:

- > In-flight data connection to EFB devices in the cockpit, supporting a wide range of EFB applications
- > New cockpit safety and operational applications, both for Air Traffic Services and AOC, demanding high data rates

Position Reporting Service – provided through appending position reports to air-to-ground ACARS messages and link keep-alive messages.

## Improved terminals

SB-S terminals are smaller, easier to install, more capable, more efficient and cost less.

## A solution for today and in the future

SB-S is a secure, high speed connectivity service that sets the standard for flight deck communications, enabling the aviation industry to take full advantage of the possibilities of cockpit connectivity today and in the future.

## How can we help?

Our expert team can provide you with all the advice and support you need. We offer:

- > Support planning for future satellite communications needs
- > Connecting you to experts and our supplier partners
- > Advice on implementing flight tracking requirements
- > Attendance at forums and workshops to assist in building awareness of satellite communications and space-based data
- > Assistance in developing the right relationships to enhance your safety and operational efficiency

Visit [inmarsat.com/service/aviation-safety](https://www.inmarsat.com/service/aviation-safety) to find out more and get in touch

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