Inmarsat –
Powering Aviation Connectivity
Real broadband... in the skies

Wherever you travel, you expect to be connected at all times... so do your passengers.

Imagine the scene. You’re streaming a video and making a dinner reservation online when your partner messages you to ask what time you’ll be home — while you’re flying through the skies at 35,000 feet. And you experience the same high-quality data speed and clarity as you get on the ground.

High-speed, consistent, global airborne connectivity is now a reality thanks to Inmarsat.

Offering a superior passenger experience, our world-leading technology is also making flying safer and more efficient. A broadband service to the flight deck means that operational information, such as weather and aircraft maintenance data, can be conveyed to and from the cockpit in real time. With global flight tracking via ADS-C¹, we can provide situational awareness on an unprecedented scale. And with Inmarsat equipment installed on over 90% of trans-oceanic aircraft, real-time aircraft tracking is simple and available today.
Delivering cabin and cockpit solutions

We have built our reputation on delivering a quality of service and level of reliability that is trusted by the world’s airlines and we’re now bringing this same approach to passenger connectivity.

From certified safety communications (air traffic management) to high-speed broadband in the cabin, only Inmarsat provides connectivity for the whole aircraft.

Our portfolio includes:

- GX Aviation — the next generation of global high-speed broadband connectivity
- SwiftBroadband — for global voice and data communications
- Classic Aero and SwiftBroadband-Safety Services — certified for aviation safety services
- European Aviation Network — high-speed S-band satellite and a complementary aviation ground component across Europe
We own and manage our global satellite constellations with two fully redundant networks (the I-3 and I-4s) and a third (the I-5 series) which entered global service in 2015. Instead of a patchwork stitched together from different operators, our network is wholly-owned and completely integrated. We offer a continuous, uninterrupted service as traffic is handed seamlessly from one beam to another as aircraft fly across time zones, delivering the best possible experience for passengers.

Our satellite and ground networks are designed and built specifically for mobile platforms, such as aircraft. This means we can provide capacity wherever you need it.

A seamless service... wherever you fly

The need for speed

Our new GX Aviation service provides the first truly global high-speed broadband in the skies – with up to 50Mbps (megabits per second). So you can expect similar download speeds, data rates and bandwidth cruising at 35,000ft as you do on the ground. With reliable connectivity and seamless global coverage, Inmarsat delivers a true broadband experience.

GX Aviation uses the latest highly efficient Ka-band technology, with steerable spot beams which enable greater capacity to be delivered exactly where and when it is needed. This means more affordable in-flight connectivity for aircraft operators.

Furthermore, our European Aviation Network, built in partnership with Deutsche Telekom, will deliver speeds of up to 70Mbps. The hybrid network will provide a seamless connection between our S-band satellite and 300 LTE sites.
Inmarsat – the industry leader

First for reliability
As the most experienced mobile satellite communications operator in the industry, we have delivered reliable global connectivity and safety services to aviation for over 20 years with more than 15,000 aircraft currently equipped with our technology.

Airlines trust us to provide exceptional safety and operational services to the flight deck and we are now extending this experience to our cabin connectivity offering. With Inmarsat’s world-leading solutions, our customers can have peace of mind that a quality service is always available.

Following the launch of the third Global Xpress satellite, we will have a fleet of 12 satellites operating across three networks. This worldwide network coverage allows us to offer complementary services for the cockpit and the cabin – from passenger connectivity through to voice and data communications for the crew.

And our worldwide network of partners can provide timely, reliable, round-the-clock maintenance and IT support.

Continuous innovation
We have a strong track record in innovation and aviation firsts, including the world’s first satellite-based safety services and global IP data connectivity (SwiftBroadband).

We invest continuously in infrastructure, products and, with our partners, equipment to meet the needs of airlines and passengers, today and into the future.

We continue to push the boundaries with innovations across all of our networks, including:

- More than US$2 billion of investment in networks to deliver a new generation of services, including GX and the European Aviation Network
- Full channel streaming at up to 650Kbps with our new SwiftBroadband High Data Rate service
- Development of enhanced safety communications with SwiftBroadband-Safety Services
- The first rotor transparent antenna solution – leading to SwiftBroadband for the helicopter market
- Continuous antenna and other hardware improvements to increase efficiency, reduce costs and enhance airline capabilities
- New app developments with our partners, such as news and sports streaming services and telemedicine

Inmarsat’s new connectivity solutions enable data-rich applications that deliver operational benefits for airlines, allowing real-time weather updates, crew scheduling and inventory changes.

Furthermore, we’re always keeping an eye on the future. As mobile devices become ever more sophisticated and interactive, and customer demand for airborne connectivity increases, greater bandwidth will inevitably be needed. With constantly evolving technology solutions, our services will grow to meet your ever-changing requirements.
Fit-for-purpose, scalable solutions

In aviation, there is no such thing as a one-size-fits-all solution. That’s why we work with a network of trusted providers to deliver scalable connectivity solutions for the whole aircraft.

Our equipment partners are constantly delivering innovations to reduce the cost, weight and size of equipment, with technologies that can be line- or retro-fitted. We work with a network of trusted partners to create competitive, flexible solutions, reflecting the individual needs of each airline.

And because we own and operate the satellites and ground networks, we can increase capacity to meet surges in demand for additional bandwidth.

Our services are available in complementary bundles to meet your specific requirements:

- **L-band network**
  - **SwiftBroadband** provides global IP data services with up to 432 Kbps (kilobits per second) through the I-4 satellite constellation. This service can simultaneously deliver cockpit, cabin and passenger services, with separation to provide security. It continues to evolve to include safety and High Data Rate services, which will almost double data speeds.
  - **Swift64** provides high-quality voice communications and ISDN data services over the I-3 constellation. Up to four channels can be bonded together, providing 256 Kbps to the user. With acceleration and compression technologies, this can be increased significantly.
- **Classic**: our Classic Aero Services have been in operation for more than 20 years. They provide the ideal connectivity, in terms of both capability and price, for cockpit voice and data services. The portfolio, which is certified for aviation safety services, provides consistent global coverage along with both SwiftBroadband and GX Aviation.

- **Ka-band network**
  - GX Aviation offers high-speed broadband in the skies, up to 50 Mbps to the aircraft. The service allows us to deliver seamless global connectivity and the highest standard quality of service for passengers. GX Aviation, delivered over our new generation of I-5 satellites entered service in 2015.

**European Aviation Network**

Our new S-Band mobile satellite and hybrid ground network will deliver the world’s fastest mobile broadband service to the skies above Europe. The European Aviation Network will complement Inmarsat’s other global satellite services with high-throughput broadband over busy regional air traffic routes. This innovative hybrid solution will be available in 2017.
Contact us

Are you ready for the in-flight connectivity revolution? For further information, please visit our website or get in touch with our team.

**Americas**  
neal.meehan@inmarsat.com

**Asia Pacific**  
bill.peitola@inmarsat.com

**Europe**  
david.coiley@inmarsat.com

**Middle-East and Africa**  
ben.griffin@inmarsat.com

**Safety and Operational Services**  
mary.mcmillan@inmarsat.com

[linkedin.com/company/inmarsat-aviation](https://www.linkedin.com/company/inmarsat-aviation)  
[facebook.com/InmarsatGlobal](https://www.facebook.com/InmarsatGlobal)  
[@InmarsatGlobal](https://twitter.com/InmarsatGlobal)