THE COMPLETE CONNECTED AIRCRAFT IS FLYING
BRING IT ON

inmarsat aviation
PUSHING THE POSSIBILITIES
For today’s airlines to deliver a truly rewarding inflight experience, they need a reliable high quality broadband connection with the capacity to service more routes as passenger demands increase.

With Inmarsat’s global communications infrastructure, the Complete Connected Aircraft is now a reality. Our scalable solutions provide airlines with a prime opportunity to offer inflight connectivity that increases passenger satisfaction, grows loyalty, and adds valuable revenue streams to their operations.

**INFLIGHT INTERNET ANYWHERE**

Being a global network means just that, providing a reliable high-speed broadband connection wherever and whenever passengers want it. And today, the demand for inflight Wi-Fi cannot be underestimated – when asked, more passengers would choose Internet connectivity over an inflight meal, telling us Wi-Fi is set to play a vital role in the flying experience.*

Fulfilling inflight connectivity demands will mean the difference between customers returning, or passengers switching to an alternative carrier (in a recent Inmarsat survey 83% of passengers would prefer to fly with an airline that offers Wi-Fi on board*). With Inmarsat delivering the Complete Connected Aircraft, airlines can offer unrivalled inflight services that will position them as the airline of choice for connected travellers.

*Inmarsat Inflight Connectivity Survey, 2015-16. 9,000 passengers interviewed across 27 countries.

THE DEMAND FOR RELIABLE HIGH-SPEED BROADBAND INFLIGHT HAS NEVER BEEN HIGHER
Offering reliable inflight Wi-Fi gives passengers more freedom to decide how they occupy their airborne time. And just like Internet cafés on the ground, passengers are willing to pay to do more. Like accessing personalised entertainment offers with content curated to their tastes, keeping up-to-date with their social streams and staying in constant contact with others.

The connected aircraft also helps airlines get to know their passengers better than ever. Branded gateway apps will open up new levels of engagement, using personalisation to push tailored content. Inflight sales and magazine content will expand into the digital world, providing added value content for passengers, and additional sponsorship and advertising revenue for airlines. And, airlines can deliver important information to passengers about their journey, based on their travel data – such as flight connections and passport control delays.
FAST FLIGHT-DECK DATA

For flight operations, reliable high-speed broadband connections deliver regular up-to-the-minute information. Pilots can receive weather information plus route updates in real time and take action to help reduce fuel burn costs. Updates to Electronic Flight Bag information can now happen in the air, rather than pre-downloaded before flight. Plus once on the ground, Own Ship Positioning helps pilots navigate to the gates at unfamiliar airports.

Broadband in the sky also benefits those on the ground. Airline operations are able to track aircraft health in near real time and analyse data to update predictive maintenance schedules. This information is invaluable for airlines looking to avoid expenses relating to delays, cancellations and unexpected maintenance costs.

MANY SERVICES, ONE CONNECTION

In this age of always-on connectivity and sophisticated applications, airlines need a platform with the bandwidth to handle data-hungry cockpit and cabin devices. Other networks may claim to provide complete connectivity, but only Inmarsat has the experience, infrastructure and investment strategy to deliver the Complete Connected Aircraft.

Our network is wholly owned and operated by us – no patchwork platforms, or long list of suppliers. This means we’re accountable for everything we do. It also guarantees our technology is capable of delivering benefits for passengers, aircraft safety and ground operations across our dedicated cabin and cockpit services.

BEYOND BROADBAND

Delivering global high-speed broadband is only part of Inmarsat’s connectivity solution. We can manage the complete end-to-end service, installing, integrating and maintaining the equipment on board.

We can handle ISP access and payment options for airlines, making it easy for passengers to sign up. We can offer white label service platforms, like passenger portals and applications, designed through our Gateway developers’ community. Our analytics platforms can capture passenger data and record behaviour for better-targeted communications. And, we can help airlines aggregate content from their retail partners, advertisers and sponsors to ensure passengers are met with timely offers.

If our airline partners prefer to self-manage their solution, we help with that too, providing the plug-in elements needed to deliver the Complete Connected Aircraft their way. This flexible delivery of services helps our airline partners realise the possibilities that reliable inflight connectivity brings to the skies.

FUELLING SMARTER MARKETING WITH REAL-TIME DATA
Inmarsat has provided proven and trusted global connectivity to commercial airlines for over 25 years. Currently, over 200 airlines rely on Inmarsat services for reliable cockpit communications. This quality of service is also reflected in our cabin networks and ground operations, which have been designed to advance aviation. Our vision of installing dedicated services to a connected aircraft delivers high-speed broadband, while maintaining certified safety services on secure bandwidth for the cockpit – no other service provider offers this level of fit-for-purpose connectivity.
AIRLINE SHAPED BROADBAND

Wherever aircraft travel to in the world, our high-speed broadband experience will be there. The Inmarsat global network has been designed as part of our unique airline-shaped strategy with our new Global Xpress network at its heart. Designed expressly for mobile services, GX Aviation delivers seamless coverage through highly efficient spot beams, providing a foundation layer of high-speed connectivity.

On busy flight routes and airport hubs where airline demand is high, Global Xpress has additional steerable beams that can be positioned to increase capacity – based on set-time of day and geographic location.

With this new generation of advanced Wi-Fi connectivity airlines will be able to offer a superior inflight passenger experience anywhere in the world.
SwiftBroadband-Safety, our next-generation cockpit connectivity network is setting new standards for flight-deck voice and data communications. There is no other system like it for global coverage or resilience – SwiftBroadband-Safety has 99.9% network availability even in high demand areas.

With higher bandwidth availability, SwiftBroadband-Safety delivers rich data faster and has the flexibility to split IP channels. Having a dedicated flight-deck channel enables critical cockpit information to be transmitted securely, separate from the impact of passenger usage. Improved speed and volume of data is also transforming flight tracking by enabling a greater frequency of positional reporting. More aircraft will be able to occupy the same airspace – answering the global demand for air traffic expansion and preparing for the future of 4D trajectory tracking.
DIAGNOSING DISTRESS DATA

In the near future, the International Civil Aviation Organisation will launch the Global Aeronautical Distress and Safety System (GADSS), a flight-tracking concept that will be mandated on all new aircraft. Working closely with ICAO, Inmarsat’s SwiftBroadband-Safety will help airlines lay the foundation for GADSS. The concept implements a process where Autonomous Distress Tracking and Flight Data Streaming to a black box in the cloud will provide critical information leading up to an event.

OPENING UP EUROPEAN SKIES

Scheduled to enter commercial service in 2017, the European Aviation Network is the world’s first integrated connectivity solution, designed specifically for busy European airspace. Combining Inmarsat satellite communications with a complementary Deutsche Telekom air-to-ground network, it will offer a uniquely scalable, high capacity, cost effective solution for European aviation.
The connected world moves fast, for airlines to keep up with the transformation of inflight connectivity, they need a partner focused on investing in tomorrow’s broadband technology and global infrastructure.
Inmarsat has unrivalled global broadband coverage and we’re committed to future satellite launches to deliver greater capacity, flexibility, and value in our services. More than US$2 billion has already been spent on our latest generation of networks to realise seamless Inflight connectivity. We continue to invest in innovative satellite and air-to-ground networks to ensure reliable data communications. And, we’re working closely with equipment and hardware manufacturers to make communication components smaller, lighter and more operationally efficient for airlines.

As our capacity increases and services grow to meet demand, we will provide continued improvement in performance and bandwidth economics. For our airline partners around the world, this will offer new opportunities to develop the services and applications that will set them apart in the future.

**THE BACKBONE FOR BROADBAND**

Broadband services and Wi-Fi connectivity will be the single most important influencer in the future flying experience for passengers and crew alike. Inmarsat has the scalable solutions to make the complete connected aircraft possible.

**GX AVIATION**

- The only truly global high-speed broadband service from a single provider
- Ka-band technology with steerable spot beams
- Uninterrupted high-speed Wi-Fi worldwide
- Owner-operated, fully-managed network
- Airline-shaped broadband for a mobile audience

**SWIFTBROADBAND-SAFETY**

- Safety and operations service built for the digital age
- 99.9% network availability rate
- Flight deck benefits from real-time data
- Enables secure safety and high data rate services
- Readies airlines for future GADSS concept

**EUROPEAN AVIATION NETWORK**

- Specifically designed for Europe’s busy skies
- First of its kind worldwide
- High capacity even in busy traffic areas
- Built for cost-effective expansion
- Boosts competitiveness for Europe’s aviation industry

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These maps depict Inmarsat’s expectations of coverage, but do not represent a guarantee of service. The availability of service at the edge of coverage areas fluctuates depending on various conditions.
Our Global representatives are ready to help. For further information on Inmarsat’s innovation, please visit our website or get in touch with our team.

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