Inmarsat Global Xpress

for Maritime
GX for Maritime

Global Xpress is Inmarsat’s new generation network of global, high capacity satellites operating in the Ka-band and serving as a perfect compliment to the existing range of Inmarsat services provided in the L-band.

Maritime crews must be prepared to go anywhere, at a moment’s notice. To conduct their missions, military forces at sea, Coast Guard operations, special operations vessels and other maritime units depend upon consistent satellite performance that is unaffected by geographic changes.

From its very beginning in 1979, Inmarsat has sought to improve communications at sea. That’s why the company is strongly positioned to support today’s vessels.

These ships often head into adverse weather environments, which means they require a dependable failover system should a powerful storm prove disruptive, or even if a signal gets blocked by a part of the ship. Thanks to Inmarsat, crews stay connected regardless of conditions.

Built from the ground up as a worldwide satellite service, Global Xpress provides the best coverage in the industry. This allows government customers to quickly and cost-effectively augment the WGS system whenever and wherever needed, through Inmarsat’s leased or subscription service.

Using Global Xpress’ high-capacity, steerable spot beams, vessels on the move pass beam-to-beam completely seamlessly, establishing continuous connections during mission-critical maritime operations. Additionally, only a minimal amount of time is required for satellite-to-satellite handoff.

Users access Global Xpress using a variety of existing and planned government and commercial maritime SATCOM terminals, including WGS terminals that can take advantage of the service immediately. This gives government customers the flexibility of having a broad selection of terminals.

Ka-band is especially well-suited for optimal coverage and consistent performance along heavily travelled sea routes. Inmarsat’s Global Xpress Ka-band service is backed up by FleetBroadband L-band over the Inmarsat-4 (I-4) satellite constellation, further guaranteeing global portability and consistent performance with high throughput and the industry’s leading all-weather availability.

The redundancy introduced into Inmarsat’s ground infrastructure ensures robust terrestrial links to support government communications. Global Xpress network infrastructure is built to the highest security standards, meeting the U.S. Mission Assurance Category (MAC) level III and correlating National Institute of Standards and Technology (NIST) accreditation standards, with secure gateways and encrypted satellite commanding. Our value-added partners make available further enhancements up to MAC level 1. Inmarsat employs a dedicated cyber security team; lands and routes traffic only through allied countries; and encrypts data and signaling to the highest standards.
GX Managed Services

Maritime Global Xpress Managed Services are designed and managed by Inmarsat to provide consistent global coverage for mission critical and welfare applications. The reliability of service is critical for the government customer who needs to operate worldwide, over a diverse, fully redundant network.

GSS subscriptions have either regional or global coverage providing full mobility throughout the subscription plan area. It offers intra-satellite, seamless beam to beam handover and sub-minute, inter-satellite handover for mobile platforms.

Global Xpress complements the existing Inmarsat L-band network by providing:

- Far higher capacity services
- Simplicity
- Global reach
- Inmarsat quality

The Maritime GX Government Offer is particularly suited to bandwidth-intensive, government maritime operations including:

- Mission critical maritime operations
- Surveillance and reconnaissance
- Telemedicine
- Research vessels
- Special operations and expeditionary forces
- Live full-motion video
- Intelligence
- Command and control

But it is not just about faster downloads. GX also enables service performance previously deemed incompatible with maritime satellite networks, as well as being the facilitator of new applications within a maritime environment, such as:

- High-speed file transfer
- High-speed broadband internet access
- VPN
- Video surveillance
- ISR
- Mission critical maritime operations
- Surveillance and reconnaissance
- Telemedicine
- Research vessels
- Special operations and expeditionary forces
- Live full-motion video
- Intelligence
- Command and control

Benefits

- Worldwide coverage
- No need to build and manage your own ground infrastructure
- Services are delivered via Inmarsat SAS sites
- Dual SAS configuration mitigates rain fade risk
- Dual carrier MPLS Backbone with fully redundant network paths to each site
- Ease of use

Key Terms

**GX Government Subscription Services (GSS)** - uplink and downlink data rates assigned to a single terminal. Charged as a fixed monthly subscription.

**Committed Information Rate (CIR):** Guaranteed minimum data rate against an uncontended service, upon which an SLA is provided.

**Maximum Information Rate (MIR):** Defines the maximum burst rate to which the terminal will have access to (subject to clear sky conditions and no congestion)

**No volume based charging:** Users can utilise their CIR within the monthly subscription, without any Fair Access Policy (FAP) throttling. MIR is offered subject to available capacity within the beam.
The Global Xpress Maritime service will be managed by a state of the art Service Enablement Platform made up of:

- The high performance Access Network with an integrated Services Delivery Platform
- Inmarsat Gateway, providing user friendly portals offering control and self-care for all customer type
- A rich application environment offering the tools for developers to rapidly develop and deploy applications
Components and Architecture

Coverage

Three geostationary Ka-band satellites will provide full coverage of all visible land mass (except for extreme polar regions) for the Global Xpress network. The three orbital locations are over the Indian Ocean, Atlantic Ocean and Pacific Ocean.
How to buy

Inmarsat products and services are available through select Inmarsat distribution partners and service providers.

Visit our website to find the right partner for you.

inmarsat.com/search-for-partner

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