INTELSAT General

Simple Connectivity **for Complex Environments**

Deliver All-domain
Border Security With Intelsat

INTELSAT General

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A national defense team requiring remote surveillance of borders in extreme environments. A coastal patrol intercepting a black market weapons drop in the dead of night. A temporary field hospital delivering desperately needed care to asylum seekers. All have one thing in common: they absolutely must have reliable, high-speed broadband connectivity for mission success. What's more, they often need it in the remote and hard-to-reach places terrestrial infrastructure doesn't serve.

Border Security Doesn't Stay on Grid

When moments matter, having a dynamic connectivity solution that supports two-way voice, full-motion video, high-speed data transfers, as well as intelligence, surveillance, and reconnaissance (ISR) applications, is a necessity for border control teams—across land, sea, and air.

- Intelligence Collection
- Search and Rescue
- Weapons and Drugs Seizure
- Humanitarian Aid
- Maritime Protection
- Document Control

01 Meet Multi-domain Challenges **No Exceptions**

Reliable Connectivity Is Mission-critical

While national and agency leaders may consider existing telecommunications networks and infrastructure the default option for supporting their border control teams, these traditional networks often fail to cover vast, unpopulated terrain, and may be vulnerable to hostile attacks. And breaks in comms due to a network failure can cause a logistical bottleneck at best—and prove fatal at worst.

The Future of Border Security

As government and non-government agencies continue to increase their collaboration, robust infrastructure and cybersecurity is required to effectively (and safely) share and catalog vast volumes of data. Further, command-and-control centers will become increasingly vital as more information is processed in real time.

These emerging communications and networking trends are necessitating a tactical cloud with the ability to integrate data from distributed manned and unmanned nodes—ideally resulting in data virtualization. Software-defined networking and application-centric infrastructure solutions will help prioritize data packets for optimal surveillance and monitoring of borders.

Source: Frost & Sullivan

Supporting Teams With a No-fail Network

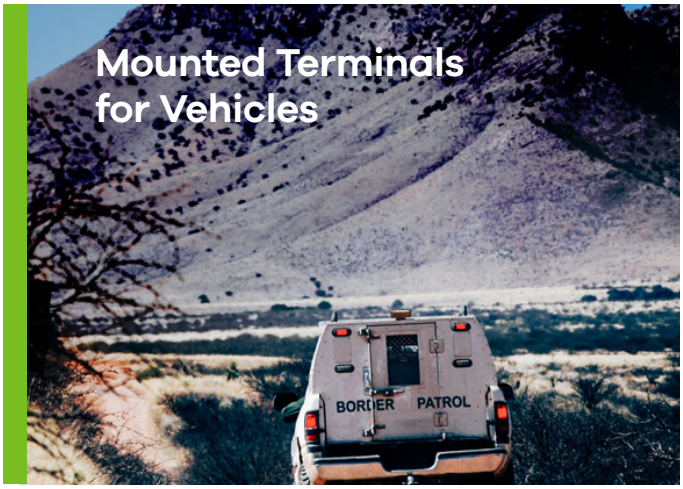
Intelsat delivers easily deployable, purpose-built solutions powered by our integrated, global satellite and ground network. These solutions give border control agencies and humanitarian aid organizations significant operational advantages no matter where they are—be it on land, at sea, or in the air.

Satellite
Our fleet of 50+ satellites, combined with teleport gateways, comprises the most extensive and secure communications network on the planet.

Terrestrial
The IntelsatOne Terrestrial Network operates seamlessly with our satellite technology—enabling true hybrid satellite and fiber connectivity with access to multiple platforms and teleports.

Connectivity That Moves With You

When you leverage a fully managed satellite communications network, the complexity is removed, empowering you to quickly and easily control, provision, and monitor mobile assets anywhere around the world. With proven comms-on-the-move and comms-on-the-pause terminals, along with unrivaled network performance, Intelsat allows you to connect your people and your missions wherever they might be.



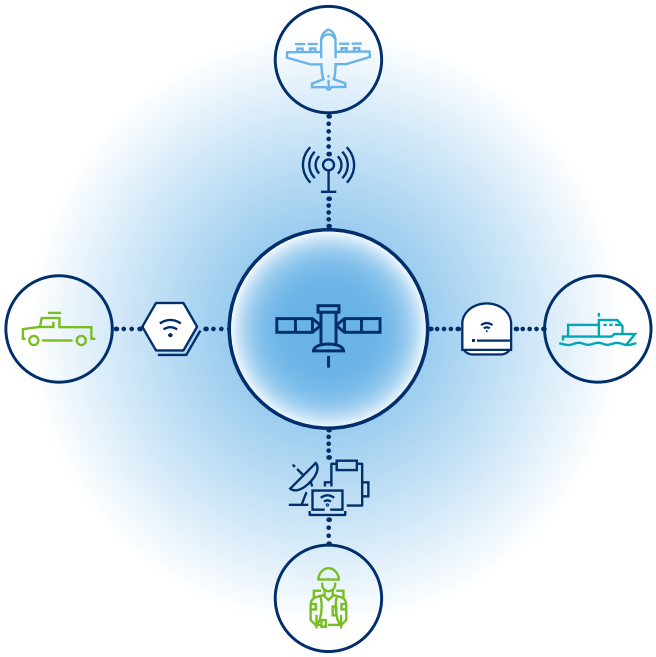
02 Introducing Integrated Border Security **From Intelsat**

FlexAir for Government and FlexMove for Government from Intelsat are complete, end-to-end managed service solutions specifically designed to meet the connectivity needs of teams engaged in land-mobile and littoral operations, as well as airborne operations.

How It Works

To provide decision makers with validated, timely data, a wide range of different sensors and platforms must connect to centers for processing, then to end-user networks for distribution.

Sensor data, full-motion video, and communications traffic is encrypted by end-users and carried on a secure, resilient network, powered by satellite and terrestrial infrastructure. Command/Control and logistics information is then returned to remote teams.



03 Keeping Ground Forces Connected **When Moments Matter**

FlexMove for Government

FlexMove provides seamless and immediate connectivity for land-mobile operations while freeing users from the complexity of securing bandwidth availability, configuring hardware, and managing network assets—similar to a cell phone plan.

Service Implementation
Grab-and-go connectivity terminals with antennas as small as 60cm for easy transport and deployment in minutes.

Flexible Pricing
Affordable and flexible pricing, with pay-as-you-go options, is available to serve the specific needs of teams.

Global Network
High-performing, multi-layered Ku-band network supported by Intelsat's HTS fleet and the world's largest wide-beam satellite constellation—adding the resiliency and reliability needed to ensure network access.

Complete Security
The only satellite provider with third-party Service Organization Control 3 (SOC 3) cybersecurity accreditation to protect against unauthorized access, use, or modification.

USE CASE 1

Land Border Monitoring

As missions move out of typical network reach, or require more persistent monitoring, satellite communications via small satellite terminals offer a complement to terrestrial technology.

- Checking personal identification
- Running checks using facial and iris verification technology
- Shipping documents for confirmation
- Confirming digital identity based on blockchain technology
- Monitoring pattern-of-life activity
- Intercepting smuggled goods
- Offering humanitarian assistance

USE CASE 2

Coastal or Littoral Areas

Border control operations often extend offshore and the same compact, portable antennas used for ground operations can be utilized on small watercraft in the maritime environment.

- Search and rescue
- Maritime law enforcement
- Port security
- Military readiness
- Anti-piracy and drug interdiction

Made for Every Purpose

Comms-on-the-move

Ensure reliable communications while enroute with compact antennas that mount easily to a variety of mobile platforms. Automatic signal acquisition gives teams seamless, always-on, high-speed connectivity across variable terrain.

- Patrol vehicle databases
- Vehicle tracking
- Tactical radio extension
- Bandwidth support for heavy applications like facial recognition

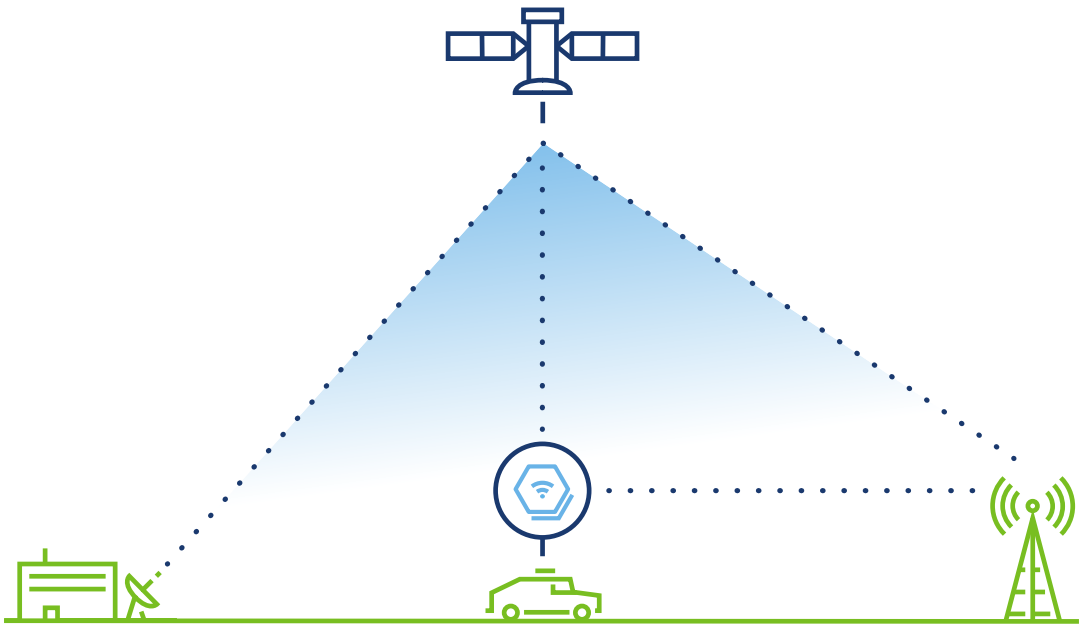
Real-world Scenarios

Operational Efficiency

An agency tracks assets like vehicles for location data, checking for preemptive maintenance.

Real-time Decisioning

A border patrol officer uploads and sends video files from a trail cam to their analysts.



Portable Meets Powerful

Comms-on-the-pause

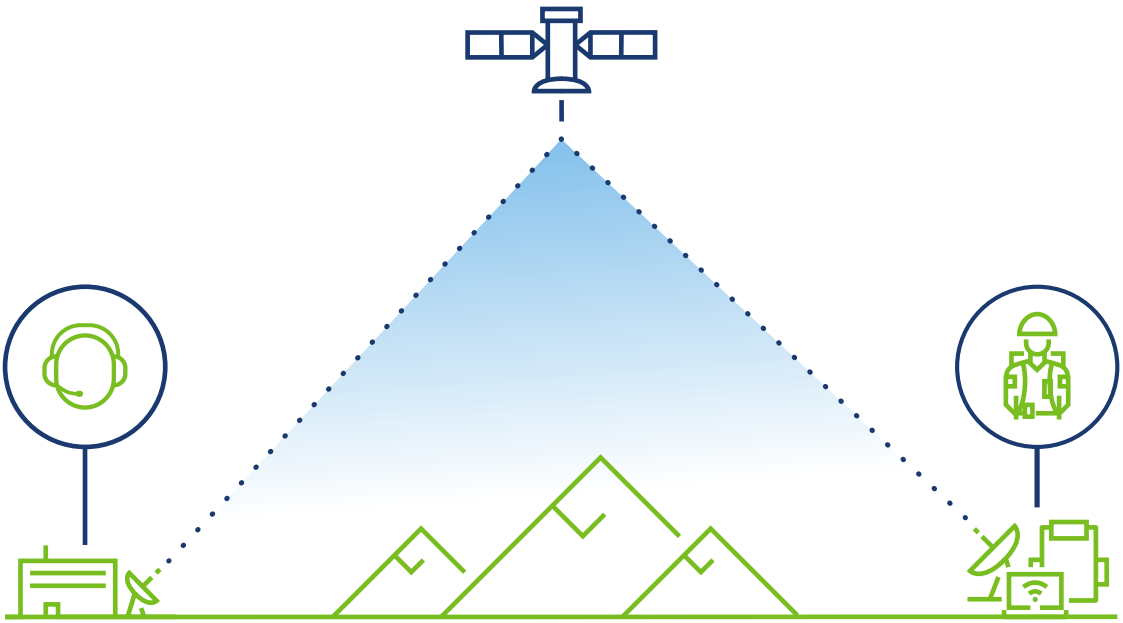
Get resilient, high-speed functionality and flexibility with easy-to-deploy packs made for mobile deployment or to be carried on foot. Units can be set up in moments so intelligence can be shared and a strategy determined while teams are still in position.

- Internet services to assist with screening, running real-time communications at checkpoints
- Surveillance of remote areas beyond the reach of fixed sensors
- Keeping on foot mobile units connected

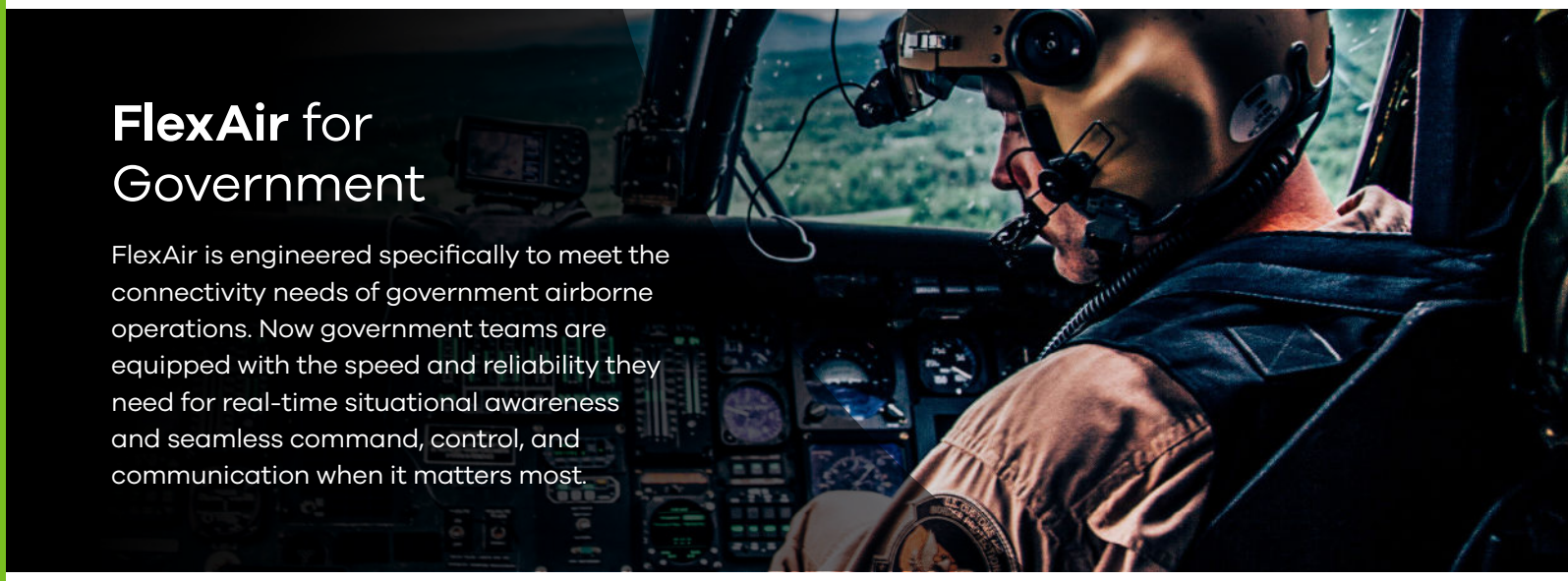
Real-world Scenarios

Connecting Leadership

Hundreds of miles from the mission site, a commander leads their team on reconnaissance from headquarters.



04 Airborne Connectivity **Reimagined**



FlexAir for Government

FlexAir is engineered specifically to meet the connectivity needs of government airborne operations. Now government teams are equipped with the speed and reliability they need for real-time situational awareness and seamless command, control, and communication when it matters most.

Security

Protects authorized signals on specific beams, muting, analyzing, and mitigating hacks or jamming.

Speed

Delivers 10x the data rates of competitive offerings up to 15 Mbps/3 Mbps.

Critical Support

A team of network engineers available 24/7.

Interoperability

Proven Ku-band terminals for a variety of airframes and installations compatible with an OpenAMIP tail- mount, fuselage-mount, and removable antennas as small as 30cm.

Flexible Pricing

Multiple pay scales like pay-as-you-go subscription, or dedicated HTS options for a cost-effective solution for any team.

USE CASE 1

Remotely Piloted Aircraft (RPAS or UAVs)

UAVs are an important means for providing real-time intelligence to combat illegal activity along borders. These “eyes-in-the-sky” provide critical intelligence by transmitting precise and real-time imagery to a ground control operator, disseminating information and passing it along for real-time decision making. In remote areas, these aircraft provide a window not available to ground patrols alone.

USE CASE 2

Manned Patrol or Surveillance Aircraft

Border Control and Coast Guard operations can now support real-time communication links for search and rescue (SAR), environmental threats, and/or interdiction operations. In some cases, this data-driven, integrated approach can extend to connecting vessels, using satellite-to-coastal radar to help identify and track vessels more effectively.

Broadening Airborne Capabilities

FlexAir Enroute

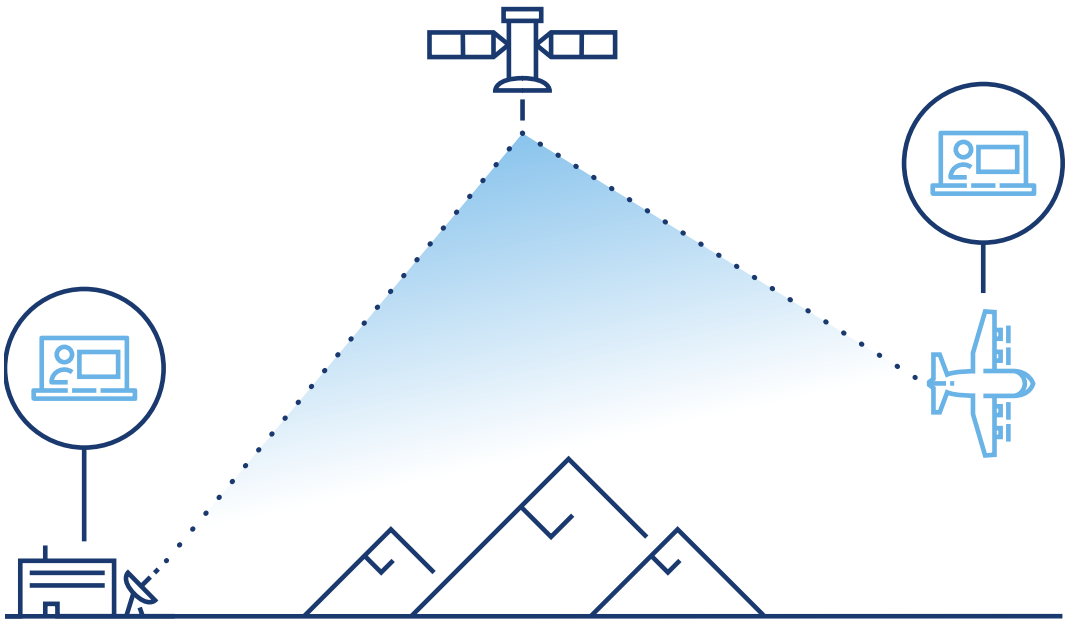
Support a full range of essential enroute communications through the Intelsat HTS network, with broadband speeds up to 10x faster than other offerings.

- Command and Control (C2) and VIP transport communication
- Aerial surveillance
- Search and Rescue (SAR) mission for live “eye-in-the-sky” support
- Telemedicine with video conferencing for in-flight medics

Real-world Scenarios

Connecting Assets

A team lead holds a two-way video call and sends recent footage to their superior in the air, debriefing on the latest intel.



Made for Mission Success

FlexAir ISR

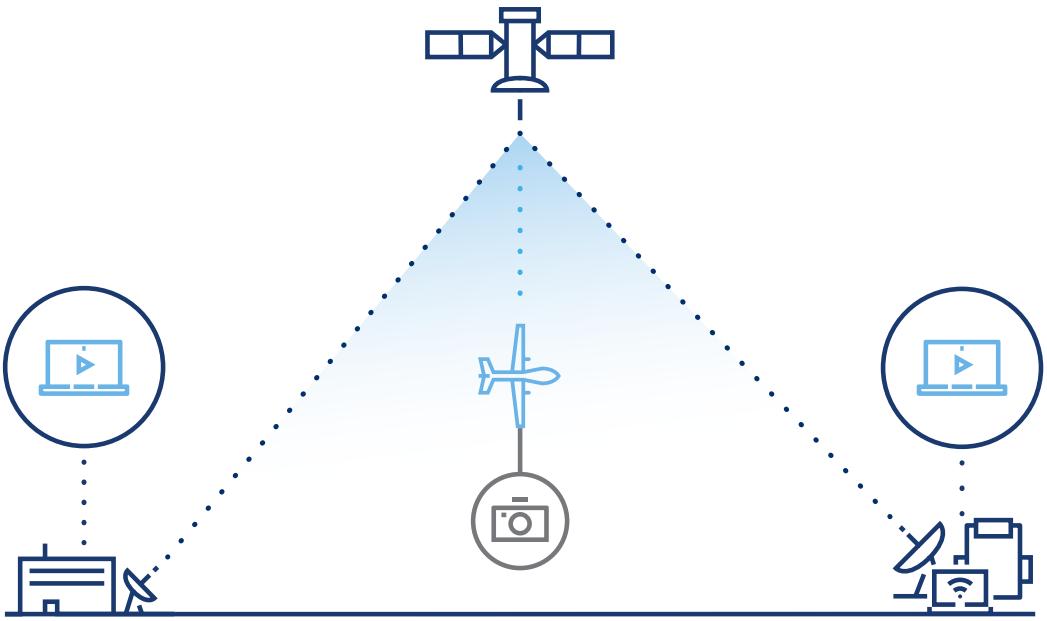
Supply airborne teams with resilient connectivity and coverage through a combination of wide-beams and high-performance spot beams.

- Full-motion video streaming from the aircraft in-theater to command authorities beyond the horizon
- Theater-persistent, multi-spectral surveillance
- High data rates to support bandwidth-hungry ISR applications

Real-world Scenarios

Broadening Teams' Field of Vision

An unmanned drone snaps aerial shots and sends them to a team on the ground.



Secure Borders
Start at Connection

Border conflicts are becoming more complex by the day, and border agencies need innovative systems to meet the challenges ahead. Intelsat solutions enable essential communications, real-time situational awareness, and seamless coordination when moments matter, giving border agencies the flexibility and dexterity to meet their missions head-on.

Prepare your team for connectivity in uncharted terrain.

Speak with an expert about solutions now.

intelsat.com/product-consultation

INTELSAT General

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