



Civil Security Application Brief

Governments must be capable of responding to all citizens no matter where they are located, the nature of their need or when it arises. Ensuring public safety, managing a crisis, controlling borders and providing health and educational services are all government responsibilities that benefit from a reliable and secure high-speed broadband platform.

The challenge is extending uniform bandwidth availability across all locations, from the capital city to remote locations. In order to support mission-critical applications across agencies and to remain interoperable with other networks, governments require an IP-based solution that provides a consistent experience.

Because it is independent from terrestrial networks and wireless infrastructure, IP-satellite broadband supports the same, secure, always-on voice, video and high-speed data applications no matter the location. Advancements in satellite communications have eliminated the hindrances of legacy satellite networks, making a VSAT solution comparable to its terrestrial counterparts in reliability, availability and security.

Flexible Communications

With a reliable and secure high-speed broadband platform like satellite communications, a government can ensure that its able to meet the many needs of its citizens anywhere and at all times:

- ◆ Quickly and easily deploy communications for disaster response or national emergencies
- ◆ Provide reliable backup network or overflow capacity for terrestrial services
- ◆ Extend communications access to rural border checkpoints and remote outposts seamlessly
- ◆ Extend access to education or healthcare services to remote regions of the nation

Complete and Total Coverage

iDirect - The Industry Standard for Government Applications

Governments must provide services under some of the harshest conditions possible, whether first responders are offering aid during a natural or manmade disaster or border guards are operating from distant outposts located in the midst of rough terrain. The more information that can be shared, the less impact the event will have and the more secure the nation will be. When it comes to trusted satellite technology, one company is the clear industry leader—iDirect.

The iDirect platform is a two-way broadband IP communications system. With the high-speed connectivity and mobility iDirect offers, governments can readily meet the needs of citizens in urban centers and at the outer edges of domestic borders.

Guaranteed Reliability

The nature of a government's voice, video and data traffic requires superior network performance in any weather condition and across any terrain. iDirect's IP-satellite broadband solution is designed for high availability. Technological advancements, including Adaptive Coding and Modulation (ACM), enable powerful data throughput rates and guaranteed connectivity even during the most inclement weather.

Bandwidth Availability

iDirect's shared TDMA-based system offers the efficiency of an organization-wide bandwidth pool without sacrificing the availability that is crucial for government organizations. Border control outposts and first responders can share the same capacity so that any site on the network is guaranteed the bandwidth it requires based on real-time demand. Data is prioritized so that mission critical applications always take precedence over other network traffic. If the need arises to transmit large, constant volumes of data, the iDirect Platform can switch to a dedicated satellite link for a given period of time.



iDirect Intelligent Platform™

Engineered to deliver the highest quality broadband connectivity wherever and whenever it's needed:

- ◆ Maximum availability and performance for ensuring broadband access in any environment or geography
- ◆ Toll-quality voice communications and broadband data rates
- ◆ Flexible bandwidth management with ability to prioritize critical network traffic
- ◆ Built-in redundancy with fail-over capability
- ◆ Military-grade encryption to protect sensitive traffic

Secure and Mobile Connectivity

Security

Given the sensitive and sometimes classified nature of the traffic they transmit, governments require the highest levels of encryption to prevent adversaries from intercepting and interpreting information. iDirect has implemented 256-bit AES encryption throughout its product portfolio and offers solutions that are in compliance with military-grade security standards such as TRANSEC and FIPS.

Diverse Application Support

Independent from terrestrial and wireless networks, IP-satellite broadband services can help governments support an ever-expanding variety of applications, even in the most remote parts of their territory.

Public Safety

To keep the lines of communication open in the rural areas they serve, public safety personnel, police, and first responders may require a flexible broadband-capable platform that can complement the commonly-used Terrestrial Trunked Radio (TETRA) system. Since TETRA relies on fixed local base stations emergency personnel, in order to extend their reach, need a technology that is not susceptible to line-of-sight issues. Unlike microwave links or cellular towers, IP-satellite broadband is not hindered by rough terrain, buildings or other line-of-sight impediments.

iDirect's Platform enables broadband connectivity to easily and quickly be established in the case of a natural disaster or a public safety emergency, such as a riot or terrorist attack. Emergency personnel can set up fly-away broadband satellite terminals in order to use laptops and VoIP-enabled phones in any remote location, deploying communications wherever necessary. And, a global network management system makes the system easy for non-technical personnel to operate.

With the iDirect platform's high-speed connectivity and mobility, governments can readily meet the needs of citizens in urban centers and at the edges of domestic borders.



Extended Communications Reach

Border Control

To fully support surveillance and security efforts along a nation's border, broadband connectivity has to expand to checkpoints and outposts. While terrestrial infrastructure would be cost-prohibitive and difficult to build out, iDirect's platform can be extended to any location without expensive rollouts. The solution is cost-effectively scaled by adding line cards to the universal hub chassis.

Continuity of Operations

Should disaster strike and terrestrial-based communications become disabled or overtaxed, it is crucial that emergency personnel remain connected. Likewise, given the critical nature of governmental communications, continuity of operations for all agencies is critical. IP-satellite broadband is uniquely suited to serve as a backup system as it will not be affected by the same event that caused an interruption to the primary system, nor is it as susceptible to physical damage.

iDirect's platform allows the bandwidth from a satellite backup solution to be used on a daily basis to provide additional capacity throughout an organization. This way the valuable resource does not sit idle. However, should the need arise, mission-critical applications can be quickly activated and continue to run uninterrupted.

Telemedicine and Distance Learning

Faced with the challenge of providing equivalent health and educational services to citizens in both urban and rural areas, governments need a communications system that can bridge the digital divide and bring high-speed connectivity to every corner of the country. iDirect supports multiple satellites and network configurations to further ensure a uniform broadband experience. Residents in remote locations can take advantage of distance learning and benefit from telemedicine applications.



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