



Government–MoFA Application Brief

Ministries of Foreign Affairs (MoFAs) are responsible for managing a network of embassies around the globe, in both urban centers and remote regions. Each site requires secure, reliable and always-available communications with headquarters and other agencies in order to carry out critical diplomatic functions. Bandwidth availability and security must be consistent across all sites in order to ensure a uniform experience and the ability to run core office and diplomatic applications seamlessly.

All this can pose a major challenge for MoFAs, especially in developing nations with limited infrastructure. The cost and time requirements for building out traditional fiber or wireless infrastructure in these locations are often too high.

Today, satellite communications is overcoming these issues for MoFAs. Advancements in IP satellite technology have eliminated issues related to legacy satellite systems, making it comparable to terrestrial in reliability, availability and security. With an IP satellite broadband platform, MoFAs can extend terrestrial and wireless networks to the most remote parts of the world, providing embassies with always-on, high-speed broadband access for core applications like voice, data and video communications.

Global Broadband Access

Governments must be connected to embassies across the globe at all times, no matter where they're located. IP-based satellite communications offers a highly reliable broadband solution:

- ◆ Secure, private network for global information exchange between headquarters and embassies
- ◆ Seamless terrestrial integration to extend connectivity to other remote embassies
- ◆ Uniform experience across all sites, with ability to prioritize critical voice or data traffic
- ◆ Quick and easy to deploy; able to relocate without onsite support if an embassy is at risk

Uniform Global Broadband

Bridging the Communications Gap

In order to successfully carry out diplomatic functions around the globe, a MoFA must establish and maintain embassies in locations in varying stages of technological development and with widely different levels of access to communications infrastructure. An IP satellite platform provides a secure and private network for exchanging information between headquarters and embassies in remote regions where a build out of terrestrial infrastructure would be cost prohibitive or time consuming.

Because VSAT is IP based, the MoFA can combine terrestrial and satellite communications into one seamless IP network so that embassies can use either depending on their location.

iDirect's solution is fully interoperable with global terrestrial and wireless systems. This means organization-wide support for all mission critical applications and the ability to exchange traffic with other IP-enabled devices. Embassies running on terrestrial systems can communicate seamlessly with those using IP satellite broadband. And all pertinent applications can be run network-wide across platforms and to all locations.

Guaranteed Availability

The capacity requirement of each embassy in a MoFA network is based on variables, including location, number of internal departments, and the types of applications being used--VoIP, high-speed VPN, video-conferencing, or enterprise resource planning, for example.

In the past, MoFAs would have had to invest in expensive, dedicated satellite links to ensure every site had access to sufficient bandwidth at all times. Otherwise, administrative voice traffic might have interfered with the sending of mission critical information. This is no longer the case.



iDirect Intelligent Platform™

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

- ◆ Industry-leading efficiency for large traffic volumes and high-bandwidth applications
- ◆ Military-grade encryption to protect sensitive traffic
- ◆ Toll-quality voice communications and broadband data rates
- ◆ Adaptive links that preserve connectivity in severe weather
- ◆ Supports multiple bands, frequencies and up to five satellites for extended network coverage.
- ◆ Intuitive network management system that enables central monitoring of all sites

Seamless and Consistent Connectivity

Today, capacity can be shared across multiple sites and within an organization without sacrificing availability. Embassies can draw from a bandwidth pool, depending on requirements at any given moment in time.

With iDirect's platform, data is prioritized so that crucial applications always take precedence over other network traffic. If an embassy needs to transmit large, constant volumes of data, MoFAs always have the option of switching to a dedicated channel for a given period of time.

Reliable, Cost-Effective Communications

The iDirect network is built on the next generation satellite coding standard, DVB-S2 with Adaptive Coding and Modulation (ACM). This allows the satellite link to adjust signal strength to maintain connectivity during inclement weather and improves network throughput performance, helping to ensure both the reliability and availability that embassies around the globe require.

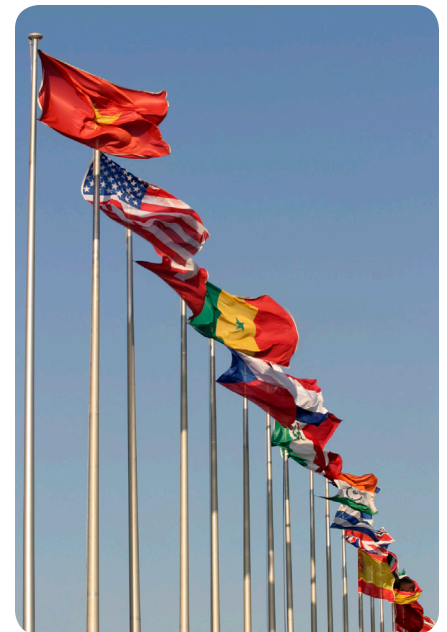
iDirect's platform can be cost-effectively expanded by adding line cards to a universal hub chassis as the network needs to increase in size. Each line card supports four to eight software-activated return channels. This reduces hardware costs as there is no need to purchase a new piece of equipment each time the system must scale.

Security and Ease of Use

Since diplomatic traffic is highly sensitive and often classified, MoFAs require that their communications networks offer the highest levels of encryption to prevent adversaries from intercepting and interpreting information.

In certain circumstances, MoFAs also must take into account the security of their physical network, which could come under attack. With a terrestrial infrastructure, the lines

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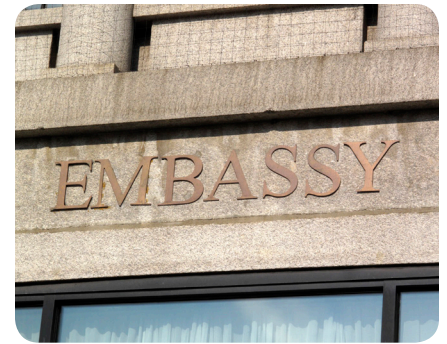
Secure and Stable Communications

can be cut and communications shut down. In extremely volatile areas, a situation may deteriorate to the point where embassy personnel are no longer safe. If they are dependent on terrestrial communications, they might be cut off from contact with headquarters or the aid they require. Diplomatic functions may cease.

To ensure data security, iDirect has implemented AES 256-bit encryption throughout its product portfolio and offers even more secure solutions that are in compliance with military-grade security standards.

Additionally, with iDirect's network management system, non-technical personnel can operate the equipment.

Monitoring and maintenance is done from a single, central location. IT staff back at headquarters keeps control over the entire network, eliminating the need for individual embassies to staff technical personnel.



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