Four Ways Satellite Communications Accelerate Disaster Response and Recovery Efforts



When fiber and cellular telecommunications networks are impacted or rendered completely unavailable by a natural or manmade disaster, establishing secure connectivity is a crucial first step in the overall response effort.

Emergency responders, government officials, and aid organizations are among the many groups that typically descend on a disaster site to provide support. As the first to arrive on scene, they require the presence of immediate, reliable connectivity to begin coordinating efforts and deliver relief. Relying exclusively on the locally available terrestrial network is not an option.

In disaster scenarios, satellite communications offer the resilience, and ubiquitous connectivity needed to accelerate the recovery process and ensure that response teams can do their jobs effectively and efficiently. High-throughput satellite (HTS) solutions, like **Intelsat FlexMove**, offer Communications on the Move (COTM) and Communications on the Pause (COTP) connectivity via highly mobile and portable equipment that even a technical novice can quickly and easily deploy anywhere in the world.

These are four of the most common ways HTS networks, like FlexMove, can support all those involved in disaster recovery operations:

1

On-the-Ground Coordination:

In the aftermath of a disaster, any on-scene first responder must have immediate access to robust connectivity to swiftly coordinate efforts. Connectivity enables firefighters, police officers, emergency medical personnel, non-profit organizations, and government workers to share information, allocate resources, and fluidly respond to changing events on the ground. When cellular is unavailable, satellite-powered connectivity can provide emergency response providers the communications capabilities needed to confront the crisis at hand.

Intelsat FlexMove is a HTS service designed specifically to meet the connectivity needs of first and emergency responders in a disaster scenario. Multiple satellites provide global coverage while multiple layers of capacity offer network resiliency and redundancy. When response teams descend on a focused geographic area, FlexMove delivers high-throughput capacity providing a premium and consistent user experience across all disaster relief use cases.





Restoration and Recovery:

Whether a disaster strikes a small town, major city, or wider-spread geographic region, restoring the basic infrastructure as quickly as possible ranks among the highest priorities. Utility workers play a critical role in repairing towers, pipelines, cables, and other damaged ground equipment that enables the restoration of essential services such as electricity, water, and gas. The work is hard, and in many cases, must be done under dangerous conditions. In the absence of terrestrial networks, an HTS satellite communications solution like FlexMove can enable workers to organize, quickly procure needed supplies, and coordinate to initiate and complete repair work quickly and safely.

Intelsat FlexMove is a fully managed COTP and COTM multi-layered global connectivity solution supported by a fleet of over 20 satellites and more than 200 HTS beams, a fiber-based ground network, and points of presence around the world. An experienced network support team monitors demand to ensure resources are allocated where and when needed by disaster relief and response teams.

3

Maintaining Civil Order:

Disasters can cause panic, fear, and instability among the affected population. Random violence and looting can occur in the absence of authority, exacerbating an already difficult situation and making the recovery process even more challenging. Restoring order is critical. When cellular networks fail, satellite network solutions provide law enforcement officers with an alternative communications capability to re-establish and maintain public safety, enforce laws, and respond as quickly as possible to crimes in progress, accidents, and disturbances.

FlexMove removes the complexity of dealing with bandwidth availability, configuration, and management of network infrastructure. With a variety of portable terminals and modems enabling Communications on the Move (COTM) for mobile equipment, vehicles, and applications or Communications on the Pause (COTP) for temporary connectivity, any first or emergency responder can have network access in a matter of minutes.

4

Public Health Response:

When a disaster causes injuries and imperils the health and safety of a community, paramedics are charged with providing aid to those in need, transporting patients to hospitals, and coordinating with treatment centers. In these scenarios, high-speed connectivity can enable highly trained medical professionals to provide advanced life support, administer medications, conduct remote telemedicine, and stabilize patients whose conditions may be critical. In cases where the health of the public may be at risk, satellite enables health professionals to coordinate responses, manage resources, and broadcast critical information in the absence of social media platforms and other information-sharing sources.

Through evolving partnerships with low-Earth orbit (LEO) providers, Intelsat combines geostationary (GEO) and LEO capabilities with FlexMove to provide greater flexibility for the evolving communications requirements of agencies supporting disaster relief.

Reliable communication systems are a lifeline for first responders. Intelsat FlexMove ensures ongoing and effective coordination, informed decision-making, and public safety when traditional cellular networks falter. With ongoing investments in a next-generation, software-defined network, Intelsat FlexMove can confidently support first and emergency responder bandwidth demands as they evolve.

