The Iridium Push-to-Talk (PTT) service has created a secure, wide-reaching network, with instant communication for local rangers in the National Reserve in Kenya. The network provides quick and timely communication, helping to simplify complicated and often dangerous situations that can threaten the coexistence of people, livestock and wild animals.

**THE CHALLENGE**
The South Rift Association of Landowners (SORALO) in Kenya, is a collective of Maasai-owned group ranches spanning 10,000 square kilometers (3,800 square miles). The Maasai are an East African people indigenous to the Nile Valley, living in southern Kenya and northern Tanzania, under a communal land management system. SORALO's mission is to preserve the traditional pastoralist lifestyle in the reserve and protect the free movement of both people and wildlife on its terrain. This is particularly important as Kenya’s government-run parks cover only 8 percent of its territory, an area too small to sustain the country’s wide-ranging wildlife populations.

**COMPANIES**
- **SORALO**: Community based and community driven land trust uniting 16 Maasai communities in the management and security of their landscape.
- **Kenya Forest Service (KFS)**: Government of Kenya agency enhancing development, conservation and management of Kenya's forest resources.
- **Kinetic Six Ltd**: U.K.-based Iridium Value Added Reseller providing innovative secure communications solutions.
- **Iridium**: Satellite communications company that offers voice and data connectivity anywhere in the world.

**CHALLENGES**
- SORALO rangers have experienced difficulty communicating with each other over an old cell phone network with limited reach in the vast territory they serve.
- SORALO rangers need a real-time and dependable communications solution that would allow them to talk with each other and respond to issues in real-time.
- The rangers need a secure channel to share sensitive and/or confidential information with each other.

**BENEFITS**
- Iridium PTT enables real-time comms-on-the-move capabilities, enabling SORALO's rangers to make quick and timely decisions across the savanna.
- Iridium PTT service has created a secure, wide-reaching network that can easily cover the vast territory of the Greater Mara wildlife reserve and Greater Amboseli national park in Kenya.
- Iridium Extreme® Push-to-Talk handsets offer a unique dual-functionality, featuring both PTT and a traditional satellite phone capability. This allows for communication beyond the SORALO network through its satellite phone mode, which makes it possible to reach outside entities critical to the operations of the rangers.
SORALO is committed to supporting coexistence of people and wildlife. The organization currently has 35 community rangers who help communities protect their natural resources. Rangers patrol daily within community lands to prevent environmental crimes, ranging from poaching to illegal logging. They also act as mediators in any human-wildlife incidents, communicating with the Kenya Wildlife Service (KWS), removing wildlife snares, and keeping people and their livestock safe.

The local Maasai tribes, who patrol the territory every day and are the eyes and ears of the savanna, need reliable connectivity across their vast territory to ensure coexistence and safety for all, the people, livestock and wild animals.

SORALO’s old communication infrastructure relied on a patchy network of cell towers, and a basic analog radio network, which is limited in its transmission range. The lack of communication hindered the work of SORALO rangers and other personnel to rapidly pass information internally and on to government or security agencies. Dependable real-time connections would help foster natural resource and communal management, and communication with local governance institutions.

THE SOLUTION
To revamp its communications system, SORALO teamed up with Kinetic Six Ltd, a U.K.-based communications company with experience in providing digital radio solutions for conservation organizations across Africa.

Kinetic Six, a valued Iridium partner and reseller of Iridium Push-to-Talk (PTT), considered the terrain and area of operations and suggested an affordable, immediate communications satellite solution, Iridium PTT. SORALO purchased several Iridium Extreme PTT phones (including four base stations and vehicle mounts) to replace their existing analog radio network. SORALO then began the process of piloting a combined communications system using both satellite and cellular technology. They established a central operations hub for coordination of security activities and deployed the Iridium PTT satellite service. SORALO also implemented a monitoring framework and a tool using a mobile phone-based Wildlife and Landscape Information Database (WILD) Application. This app also allows the patrol unit’s deployment to be monitored from the central hub.

“The Iridium PTT service has created a secure, wide-reaching network, with instant communication from Nairobi across to the Loita hills, catalyzing quick and timely decisions to be made across the region,” says Guy Western, Program Director at SORALO.

THE IMPACT
Today the Maasai rangers from SORALO use the Iridium PTT satellite handsets to communicate quickly and reliably within the SORALO landscape. This includes the ability for managers to contact ranger units directly on private channels to transmit any confidential information.

The rangers can now monitor wildlife predators and then share information on their movements with local livestock herders. This way, the rangers can guide herders to safe places to graze, for the benefit of everyone involved including the wild animals, the livestock and the herders. The use of Iridium PTT has improved the management of natural resources and coordination of anti-poaching work in the region as well.

Naturally, pastoralists and wildlife will continue to compete for resources, but coexistence, where they benefit each other, is possible. Thanks to Iridium PTT and on-demand communication, rangers can now play a role in keeping land open for wildlife and decreasing instances of conflict between predators and livestock, strengthening the main local livelihood of pastoralism.

Impact By Numbers:

<table>
<thead>
<tr>
<th>Period</th>
<th>Patrols #:</th>
<th>Distance:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan - Dec 2018</td>
<td>317 days</td>
<td>3949km</td>
</tr>
<tr>
<td>Jan - Jun 2019</td>
<td>444 days</td>
<td>4350km</td>
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</tbody>
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Ranger Patrol efforts in 2018 compared to the first six months of 2019.

Service Provider: Kinetic Six
Enabling Product: Iridium Extreme® PTT
Enabling Service: Iridium Push-to-Talk