SOFTWARE AND SATELLITES HELP U.S. TRACK MIGRANTS HEADING FOR AMERICAN BORDERS

A pilot program in Panama’s Darien Gap, a popular border crossing for migrants, collects data on individuals traveling toward the U.S. Software and satellite communications enable U.S. officials to instantaneously search databases for known information about these individuals. Facial recognition could soon add social media searches to the trove of data available on potential migrants. Could this be one answer to the immigration issue in the U.S.?

The Darien Gap sits along the Panama-Colombian Border

In recent years, illegal immigration and mass refugee flows have begun to weigh heavily upon the security apparatus and financial budgets of the
United States and its allies. The U.N. High Commissioner on Refugees estimates that there are more than 20 million refugees swarming the globe. That number more than doubles when internally displaced peoples are counted. In the Americas, immigrants and refugees are now regularly coming from across the globe into the Western Hemisphere. In Central America, customs enforcement services are identifying migrants as far as Somalia and Nepal. Panama processed over 200 Somalis crossing their border in three months of 2015 - 3.5 times more than in all of 2014.1

Who these people are, where they are coming from and going to, and what they may be carrying with them is an unknown that carries tremendous security risks. In a story exposing ISIS’ attempts to build a global network of terrorists, the NY Times detailed new mechanisms for planting recruits back in their home countries to conduct attacks after training in Syria.2

Increasing global migration patterns of all varieties require stricter border controls in the U.S. and in pathway countries – countries used as thoroughfares on the way to the U.S. Several U.S. government agencies and Central American border patrol services are now partnering with the private sector to identify and mitigate weaknesses along border lines in Central and South American countries. Officials hope to identify, classify, and track migrants traveling through the South/Central American corridor to gain a better grasp on who is coming in, and where they are coming from.

The Case of Panama
One example of the work taking place with Central American partner nations can be found in Panama. According to the Panama border control

1“Global Migrants Brave Panama’s Vipers, Bats, Bandits to Reach U.S.”
Sara Schaefer Munoz 5/29/15

2 “How a Secretive Branch of ISIS Built a Global Network of Killers,”
services, anyone who lacks a passport or proper documentation is turned away from entering, but a somewhat porous border prevents identification of everyone transiting the country. A path through the Darien Gap, for example, one of the most dangerous places to travel due to the jungle environment, drug cartels, and smugglers, has been identified as a regular pathway from Columbia into Panama where undocumented travelers can pass relatively freely due to lack of government outposts.

Panama has become a funnel for many South American and other nationals migrating northbound. In an attempt to cross the border unimpeded at places like the Darien Gap in the event of a run-in with border security, migrants may abandon their documents before emerging from the jungle. U.S. authorities have begun to engage with Panamanian border services to ensure migrants are being properly stopped, questioned, and documented before passing through the country.

**The Importance of Data**

Implementing advanced software into partner nation border agencies in the Darien Gap, has formalized the data collection process during migrant processing. Data collection and dissemination software, which creates compact files based on biometrics and other easily collectible information, enables an almost instantaneous cross-check with U.S. official databases to confirm known identities of individuals crossing international borders. This software gives enforcement officials the ability to not only identify and/or document travelers, but also to compare collected data against national and international databases for any history of criminal or known associate criminal activity. With developments in facial recognition software, identities will also be cross-referenced with social media and other public digital infrastructure like Google image search.

The implementation of sophisticated data collection software across partner nation border control offers a significant improvement in migrant tracking capabilities. However, the remote locations that often serve as the most vulnerable crossing points for border control pose a challenge to real-time cross-referencing. With limited staff and detention facilities along vast
borders, authorities are seeking more efficient ways of checking the identities of individuals attempting to cross.

In the Darien Gap example, no terrestrial communications exist. The only way to share data to date has been for a government official to travel, by car, to the remote jungle border several times per week to collect the data stored on a thumb-drive, return to the capital, and send the data back for processing against cloud-based databases. With the rise of radical groups attempting to gain access to the U.S., tracking and identifying passers-through is an increasingly time sensitive capability. The role of a reliable Internet connection to instantly share and process identification data is now a critical component to this capability, and to protecting American borders.

The Criticality of Satellite Communications

In order to remove the time lag from data collection to cross-referencing at the Darien Gap, Lepton Global Solutions was contracted to build a satellite communications solution for real-time data transfer of traveler identity. Using their global satellite communications network, Lepton Global implemented secure Internet access at the remote checkpoint, providing Panama border control forces with the ability to send and receive data.
inquiries instantaneously. Since the border control outpost is a permanent location, Lepton installed a satellite dish on the roof that now connects the outpost to the outside world. The availability of the secure link is monitored 24x7 to ensure data can be sent and received at all times, and the voice over IP capability enables what was previously a guard shack to be a full-time immigration office. This capability is being replicated throughout Panama and other neighboring countries in remote border crossing locations.

As digital identity monitoring capabilities develop, and the U.S. government partners with more countries to increase its understanding of who is coming into and leaving the U.S., the ability to cross-check remote border activity will become a vital element of national security. The ability to conduct rapid and accurate background checks, collect biometric data on foreign travelers, and increase associations among foreign migrants will continue to deter organizations like ISIS and Al Qaeda from trying to enter the U.S. International partnerships and the integration of private technology capabilities into government border enforcement are key to ensuring the continued security of the U.S. and our partner nations.

About Lepton Global Solutions:
Lepton Global Solutions specializes in the engineering and delivery of customized, yet cost-effective turnkey satellite communications solutions to commercial and government customers. Lepton’s end-to-end solutions, which go beyond managed satellite services to include VSAT equipment installation, 24-7 technical support, and customized back-end IT infrastructure, are tailored to meet customer-specific needs.

Lepton is headquartered outside Washington, D.C., in Vienna, Virginia. For additional information, please visit [www.leptonglobal.com](http://www.leptonglobal.com).