

Eye-Imaging ID Unlocks Aid Dollars for Syrian Civil War Refugees

The U.N. is using Iris-based ID technology to track and assist Syrians who have fled to Jordan

By Dina Fine Maron on September 18, 2013

Biometric security systems identifying individuals by their irises are a centerpiece of the United Nations assistance strategy for Syrian refugees in Jordan.

As the number of Syrian refugees fleeing conflict to bordering nations ticked upward to two million this month, U.N. officials were preparing an expansion of iris-identification technology in Jordan to help manage the deluge. The U.N. iris-ID program, unprecedented in its anticipated reach and scale, is expected to help thwart refugee fraud and ease Syrians' access to monthly aid dollars.

In Jordan, where 515,000 Syrians live, some 70 percent of refugees live outside of refugee camps in urban areas, including the nation's two largest cities, Amman and Zarqa. There, they have only limited access to local health care and services, and still depend on international aid. Tracking this population and providing services poses a unique challenge, and the U.N. High Commissioner for Refugees (UNHCR) has employed iris-identification technology since February to lighten the load.

The agency now intends to use the technology for all Syrian refugees living within Jordan's borders—including those in refugee camps—with a mind toward one day potentially employing this system in other nations. The program relies on imaging the unique rings, furrows and freckles of the iris and storing that information in a massive online database.

Registering with the UNHCR is typically a refugee's gateway to food, assistance and protection—whether living inside or outside the camps. But with registration comes a set amount of resources apportioned for each individual. And a common issue that crops up in such humanitarian crisis situations—where resources are scarce and needs are high—is duplication or fraud. People, purposefully or not, may register

twice and get double the resources. “We have to show donors we are limiting duplication and double registration and the double-dipping with assistance,” says Aoife McDonnell, a UNHCR spokesperson in Jordan.

Already about 176,000 Syrian refugees living in Jordan outside of refugee camps are registered via this technology, according to UNHCR. Many of these refugees are scattered in cities, but they often live in equally—if not more—desperate conditions compared with those living in refugee camps, housed in makeshift shelters and relying on sporadic supplies. Iris ID was rolled out in February 2012 to help track them, tapping technology from Amman-based IrisGuard, Inc. And specialized ATMs from Cairo Amman Bank, outfitted with cameras that capture each patron’s unique eye image and match it with iris prints in the UNHCR database, enabled the distribution of aid dollars.

Instead of receiving food packages, money vouchers or bank cards from UNHCR, refugees in the iris-identification system receive a monthly text message saying money has been placed in their accounts. Then, they walk up to an ATM owned by Cairo Amman Bank, and, rather than insert a card and punch in a pass code, they look into a specially designed iris camera. Once ID’d, a refugee would be able to withdraw his or her monthly allotment of cash. Right now 13,500 families are receiving funds, thanks to their iris prints, according to UNHCR. John Daugman, professor of computer vision and pattern recognition at the University of Cambridge, and the inventor of IrisGuard’s technology, says that individuals do not typically need to remove their glasses or contact lenses to be identified by the iris camera.

In the coming weeks UNHCR and the Jordanian government plan to expand the program by tapping the system to reregister for iris-ID the more than 120,000 refugees living inside the massive, sprawling Za’atari refugee camp. Once accomplished, the agency will similarly dole out cash that will allow camp refugees to shop at the more than 1,000 small businesses that have been set up within Za’atari. “It is very quickly becoming a temporary city,” McDonnell says.

The effort is part of a larger transition among aid agencies attending to Syrian refugees, preparing for the realities of administering longer-term services to the refugee population within and outside the camps. Under current plans the UNHCR

iris-ID system will not yet be linked to services deployed by the network of other aid organizations attending to this population. But, other transitions are taking place among other aid groups. For example, the U.N. World Food Programme is now shifting to distributing food vouchers at Za’atari, allowing refugees to buy the food of their choice from designated shops inside the camp, rather than rely solely on monthly rations of wheat, pasta, rice, lentils, sugar and salt.

Za’atari has swelled to become the second-largest refugee camp in the world, dwarfed only by Dadaab in Kenya. Another refugee camp for Syria’s refugees in Jordan is currently being readied east of the capital, and its inhabitants would eventually be integrated into the system. The head of UNHCR has said that the Syria crisis has suffering and displacement “unparalleled in recent history,” underscoring the magnitude of the economic, logistics and health obstacles for aid agencies. Providing basic supplies, sanitation and shelter to meet the urgent needs of the influx of refugees is reportedly a growing challenge.

Just a year ago the number of Syrian refugees registered or awaiting registration globally was about 231,000. But now an average of almost 5,000 Syrians join the exodus daily with more than 97 percent of Syria’s refugees living in immediate neighboring countries. Another 4.25 million Syrians are internally displaced—forced to leave their homes but still living within the country’s borders.

UNHCR previously attempted a smaller-scale effort using iris-identification technology in Pakistan a decade ago, although that was geared toward avoiding duplicative registrations, rather than linking refugees with ongoing services. The current UNHCR program would be the first countrywide rollout. Linking iris technology with aid in all refugee settings, however, still poses significant challenges: Setting up such a system requires a functioning banking system, a functioning rule of law (to mitigate the inherent risks of asking refugees to provide their biometric data to a service provider), and good connectivity that allows iris images to be matched against an online database. The technology must also be culturally accepted—which is no small feat.

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