Humanitarian Payment Digitisation: Focus On Uganda’s Bidi Bidi Refugee Settlement
The GSMA Disaster Response programme aims to strengthen access to communications and information for those affected by crisis in order to reduce loss of life and positively contribute to humanitarian response. We work to drive the creation and adoption of coordinated, impactful solutions and practices that leverage the ubiquity of the mobile technology under the umbrella of the Humanitarian Connectivity Charter.

Learn more at www.gsma.com/disasterresponse
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The GSMA Mobile Money programme works to accelerate the development of the mobile money ecosystem for the underserved.

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The GSMA represents the interests of mobile operators worldwide, uniting nearly 800 operators with more than 300 companies in the broader mobile ecosystem, including handset and device makers, software companies, equipment providers and internet companies, as well as organisations in adjacent industry sectors. The GSMA also produces industry-leading events such as Mobile World Congress, Mobile World Congress Shanghai, Mobile World Congress Americas and the Mobile 360 Series of conferences.

For more information, please visit the GSMA corporate website at www.gsma.com

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This initiative is currently funded by the UK Department for International Development (DFID) and supported by the GSMA and its members.

The GSMA’s Mobile Money programme works to accelerate the development of the mobile money ecosystem for the underserved.

For more information, please contact us:
Web: www.gsma.com/mobilemoney
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Acknowledgements
The GSMA would like to express its sincere appreciation to Airtel, MTN, Mercy Corps, the International Rescue Committee, the United Nations High Commissioner for Refugees (UNHCR) and the United Nations Capital Development Fund (UNCDF) for sharing their insights and peer reviewing this report.

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Executive Summary

Mobile network operators around the world are leveraging their mobile money bulk payment offerings to deliver humanitarian cash transfers to people affected by crises.

At a time when humanitarian budgets are being stretched to their limits, electronic money transfers, notably mobile money, offer a cheaper, faster, more secure and more transparent means of getting help to those who need it, compared to a physical cash equivalent. The pace at which humanitarian organisations are shifting from in-kind aid, to cash transfers, then to digital cash transfers, is intensifying. As such, the humanitarian sector is increasingly leveraging mobile money, specifically their bulk payment offerings, to facilitate the delivery of digital cash transfers. The benefits of delivering funds electronically to beneficiaries through a mobile money provider stretch beyond just efficiency and transparency - the opportunity to promote financial inclusion is vast. Yet delivering humanitarian cash transfers (HCTs) in fragile environments is costly business for mobile money providers, thus, in order to build a sustainable business case, mobile network operators (MNOs) must drive the usage of mobile money accounts as well as GSM services to increase average revenue per user (ARPU).

For the first time in Uganda, mobile network operators are using their mobile money bulk payment service to deliver humanitarian cash transfers in Bidi Bidi refugee settlement.

Uganda hosts the world’s fastest growing refugee population - today, the country hosts over 1.3 million refugees. In northern Uganda, the mobile industry and humanitarian sector have collaborated to deliver humanitarian assistance to refugees via mobile money. This has resulted in savings in logistical costs, whilst also giving refugees greater dignity and choice. Such partnerships are a first for MNOs in Uganda who are rapidly adapting their mobile money services to meet the needs of their humanitarian partners. This case study offers insights into the business models, modalities and operations involved in two mobile money humanitarian cash transfers projects in Bidi Bidi refugee settlement, in northern Uganda. Both projects are based on partnerships; the first between Airtel and Mercy Corps, and the second between MTN and the International Rescue Committee.
Significant investment in time and monetary resources is required from the mobile industry, NGOs and other ecosystem players to make HCT projects successful in geographic areas where mobile money is in its infancy.

Ugandan MNOs have dedicated substantial resources to expand and upgrade their infrastructure in Bidi Bidi refugee settlement to provide reliable connectivity, and to achieve the enabling environment necessary (robust agent networks, sufficient liquidity, training and customer service provisions) for successful humanitarian cash transfer projects. Mobile money is a heavily OPEX-centric business, with constant investment necessary to maintain a readily available and highly liquid network of agents that perform cash-out for customers. Additionally, NGOs in Uganda have committed time to navigating fast-moving regulatory environments and iterating projects along the way. Furthermore, development agencies, such as the United Nations Capital Development Fund (UNCDF) have provided financial, operational and technical support to mobile money providers seeking to expand their businesses into more challenging locations.

Success factors include:

- Frequent communication amongst stakeholders to build trusting relationships
- Flexibility, agility, and willingness to make projects succeed (HCT via mobile money is a new and promising chapter, which requires a fair amount of trial and error to get right)
- A focus on building out the mobile money ecosystem to foster wider financial inclusion
- Investments in connectivity infrastructure, agent network and liquidity management to ensure that beneficiaries have a positive, smooth experience
- Organisational capacity, notably sufficient technical knowledge of mobile technology within humanitarian organisations, for projects to succeed
- Significant investment in training and sensitisation of beneficiaries on how to use mobile money to receive payments

Challenges include:

- Fast-changing Know Your Customer (KYC) regulations for electronic money transfers, which have had a particularly negative impact on the ability of non-Ugandan HCT beneficiaries to access mobile money services¹
- Strict and/or unclear guidelines on due diligence of partner organisations. Humanitarian organisations must present the required due diligence documentation to the MNO before they can open a mobile bulk payment account. The requirements can be stringent, and this has caused confusion in the process of contract signing
- Low phone penetration amongst beneficiaries, many of whom are selected precisely because of their heightened vulnerability and are therefore unlikely to already own a mobile handset
- Agent liquidity management, including ensuring agents have the correct denominations of physical cash to be able to perform cash-outs

Despite the challenges faced, in all cases, an innovative workaround or solution was found, made possible by the strength of the partnerships between the MNOs and NGOs involved in the projects.

Humanitarian Payment Digitisation: Focus On Uganda’s Bidi Bidi Refugee Settlement

Introduction

2.1 Refugees in Uganda

Uganda’s refugee policy is often cited as one of the most progressive and generous in the world, with a favourable protection environment for refugees, including freedom of movement, the right to work, own business and property (including land to settle and cultivate), and access to public education and health services. Many Ugandans have been victims of protracted wars that have forced them to live in exile for decades. These experiences have led many Ugandans to better understand the plight of those in need and to recognise that all parties are best served when refugees are incorporated into national development plans, instead of being confined to refugee camps.

However, the scale of refugee flows into Uganda is stretching the country to its limit, placing excessive pressure on state and host community resources. Bidi Bidi refugee settlement in Yumbe is now the largest refugee settlement in the world, hosting over 280,000 refugees. Since the escalation of the civil war in South Sudan in July 2016 and the declaration of famine in February 2017, Uganda has become the largest recipient of fleeing migrants in Africa, with the total daily new arrivals of refugees averaging nearly 3,000 in March 2017. In less than a year, the refugee population in Uganda has doubled to over 1.3 million, and 80% of refugees are women and children. As a result of the deteriorating situation in South Sudan, a large proportion of refugees are in the north of Uganda (see Figure 1), predominantly in four districts; Arua, Moyo, Adjumani and Yumbe.

In response to the growing crisis, the UN Secretary General António Guterres visited Uganda in June 2017 to co-host the Solidarity Summit on Refugees. This summit was called to translate the New York Declaration Commitments into action and tackle the chronically underfunded humanitarian appeals, aiming to raise US$ 2 billion a year for the next four years to meet needs. The conference raised just US$ 358 million in pledges, including donations, investments and programming commitments. Within this context, the humanitarian sector is thinking creatively about how to maximise the impact of the minimal resources available. As donor agencies display an increased preference for cash aid to complement in-kind aid, the way in which many humanitarian organisations are operating is changing. In northern Uganda, a number of humanitarian organisations have started to collaborate with the private sector, in particular mobile network operators, to test whether mobile money should be the preferred modality for the delivery of cash to refugees.

2. UNHCR, http://reporting.unhcr.org/node/5329
3. UNHCR, July 2017
5. Devex, July 2017 Uganda seeks support as Africa’s largest refugee host country
**Figure 1:** Refugees and asylum seekers in Uganda

### Key Figures

| Total Refugees and Asylum Seekers | 1,355,764 |

### Countries of Origin

<table>
<thead>
<tr>
<th>Country</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Sudan</td>
<td>1,021,903</td>
</tr>
<tr>
<td>DRC</td>
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<tr>
<td>Burundi</td>
<td>38,356</td>
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<td>Somalia</td>
<td>34,963</td>
</tr>
<tr>
<td>Rwanda</td>
<td>15,031</td>
</tr>
<tr>
<td>Others</td>
<td>20,763</td>
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</tbody>
</table>

Data as of 1st September 2017

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Humanitarian Payment Digitisation: Focus On Uganda’s Bidi Bidi Refugee Settlement

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Figure 1: Refugees and asylum seekers in Uganda

KEY FIGURES

Total refugees and asylum seekers

1,355,764

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</tr>
<tr>
<td>Others</td>
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Data as of 1st September 2017
UGANDA’S MOBILE INDUSTRY

Mobile sector
Mobile Network Operators

- Africell
- Airtel
- MTN
- Itel
- Smart
- Smile
- Vodafone
- Uganda Telecom

Population

42m

Unique mobile subscribers

18.5m

66% use mobile internet

Multi SIMing is common

1.45 SIMs per unique subscriber

% connections (exc M2M)

- 2G: 72%
- 3G: 21%
- 4G: 7%

Smartphone adoption

18%

ARPU per subscriber

€3.63

Compared to €6.88 for whole Africa average
Mobile money

8 mobile money services
(Africell, Airtel, EzeeMoney, Micropay, MobiCash, MTN, Smart Telecom, UT Mobile)

Dec 2016
21.5m REGISTERED ACCOUNTS
(Bank of Uganda)

133k mobile money agents in Uganda in Dec 2016
(Bank of Uganda)

UGX 43.8tn Transacted via mobile money (US$12 bn)
(Bank of Uganda)

Banking

24 COMMERCIAL BANKS operating in Uganda, a number of which have partnered with MNOs to offer Mobile Money

193/100,000 adults in Uganda have a deposit account at a commercial bank
(2014 IMF FAS)

18% Ugandans have debit card, and just 1.6% a credit card
(FINDEX)

Other stats
Ease of doing business index (World Bank)

115/190
A move away from the provision of in-kind aid to cash aid has recently been driven by (a) a desire to empower beneficiaries by providing them with greater choice, and (b) increasingly urban, out-of-camp settings in which displaced individuals live and so have access to functioning markets.

Digitising humanitarian cash transfers has much appeal for humanitarian organisations. Electronic transfers have the potential to offer a faster, more secure and more transparent means of getting help to those who need it, compared to a physical cash equivalent. An added benefit of delivering funds electronically to beneficiaries through a mobile money provider is that this opens up opportunities for financial inclusion, whilst simultaneously boosting local markets by encouraging spending at merchants.

In December 2016 alone, businesses, governments and donors disbursed US$ 718 million to citizens via mobile money—but just 2.3 per cent of this was donor-to-person transfers, the rest were government-to-person and business-to-person transfers.6

6. GSMA Mobile Money Adoption Survey data 2016
Many leading humanitarian organisations have plans to use digital cash transfer mechanisms to disburse humanitarian cash transfers. Between 2009 and 2014, the use of cash by the World Food Programme (WFP) increased from US$10 million (less than 1 per cent of total aid) to US$3 billion, and by the start of 2016 it was estimated that humanitarian cash transfers accounted for more than 25 per cent of WFP’s total spend on assistance. In 2000, UNHCR implemented 15 programmes that relied on cash and cash-alternatives, by 2015 that number had increased to 60 programmes and in 2016 UNHCR delivered US$ 688 million through cash-based modalities, which exceeded the in-kind assistance provided by UNHCR. Almost all of this was delivered through unrestricted cash.

### 3.2 Three ways beneficiaries can receive their funds via mobile money

There are three distinct ways in which a mobile money platform and agent network can be leveraged to disburse humanitarian funds to beneficiaries, as detailed below:

- **FUNDS ARE TRANSFERRED FROM THE ORGANISATION**
  - TO BENEFICIARY’S MOBILE MONEY ACCOUNT
  - AS A CASH VOUCHER
  - AS MOBILE VOUCHER FOR A SPECIFIC PRODUCT(S)
3.3 The potential for longer-term financial inclusion

Mobile money accounts with access to broader financial services have the potential to provide a comprehensive offering to users including payment of bills for traditional utilities, pay-as-you-go solar, peer-to-peer remittances, international money transfers, merchant payments, access to credit, savings and insurance products. For many refugees, this will be the first time they have access to a wide variety of formal financial products. The potential for financial inclusion will depend on the kind of transfer mechanism adopted (see three examples under section 3.2 above).

<table>
<thead>
<tr>
<th>TRANSFER TO A MOBILE MONEY ACCOUNT</th>
<th>CASH-OUT VOUCHER</th>
<th>GOODS VOUCHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Ability to cash-out, as well as store funds safely in the account</td>
<td>• Ability to cash-out</td>
<td>• Potential ability to access service even if lacking ID documentation that complies with national financial services Know Your Customer (KYC) regulation. However, humanitarian agencies may want to put in place their own ID requirements to ensure correct identity at point of purchase</td>
</tr>
<tr>
<td>• Ability to send or receive funds from another organization or individual, or pay for a good or service via the mobile money account</td>
<td>• No need to go through the mobile money account opening process to access funds on the voucher</td>
<td>• Often safer than handling cash</td>
</tr>
<tr>
<td>• Access to the broader range of financial services offered, including savings and lending</td>
<td>• Often safer than receiving physical cash</td>
<td>• Often easier than transporting physical items</td>
</tr>
<tr>
<td>• Often safer than holding physical cash</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Ability to cash-out</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 3.4 Planning for pre-, mid- and post-payment cycle activities & responsibilities

With the commercial partner selected and contracts signed, the following activities will need to be undertaken pre-, mid- and post-payment.

<table>
<thead>
<tr>
<th>Responsibility falls with...</th>
<th>PRE-PAYMENT</th>
<th>PAYMENT CYCLE</th>
<th>POST-PAYMENT CYCLE</th>
</tr>
</thead>
</table>
| **Humanitarian agency**      | • Identifying beneficiaries | • Transfer of funds by humanitarian agency into MNO escrow account  

• Humanitarian org staff present at cash-out points | • Promote continued use of the mobile account (i.e. storing funds) |
| **Mobile money provider**    | • Distribution of SIM cards & registering mobile money accounts (KYC)  

• Ensure presence of sufficient agents in specific location | • Inform mobile money agents and dealers of cash-out day, and support with liquidity management | • Technical support for beneficiaries to replace SIM cards, or obtain new PINs |
| **Joint**                    | • Sensitisation of beneficiaries (*continuous exercise throughout whole cycle*)  

• Set up customer service processes (assistance, recourse) | • Reach agreement on cash-out day (potential staggering to avoid liquidity burden)  

• Inform beneficiaries of cash-out day and location | • Monitoring & evaluation of fund transactions using reports (*continuous exercise throughout whole cycle*) |

1. **Funds moved from NGO bank account to MNO escrow account**  
2. **NGO identifies how much funds go to each beneficiary, and shares this with MNO**  
3. **MNO transfers funds to individual beneficiary SIM cards**  
4. **Beneficiaries go to mobile money agent to cash-out the funds (or merchants to spend the voucher)**
3.5 A consideration of the costs involved in mobile money cash aid disbursements

There are a myriad of costs involved in cash disbursement via mobile money platforms, as outlined below. Mostly, these costs are wrapped up into a single transfer fee which mobile money providers charge humanitarian organisations. In addition, development agencies such as the United Nations Capital Development Fund (UNCDF), the UN’s capital investment agency for the world’s 48 least developed countries, have provided financial, operational and technical support to mobile money providers seeking to expand their businesses into more challenging locations. Depending on the type of modality used (full account, cash-out voucher, or merchant voucher), the following costs will need to be considered and accounted for.

<table>
<thead>
<tr>
<th>COST</th>
<th>Transfer of funds into mobile money account</th>
<th>Transfer of funds to an SMS cash-out voucher</th>
<th>Transfer of funds to an SMS merchant voucher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Platform / technical</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Staff liaison</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>SIM provision</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Customer registration</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash-out fee</td>
<td>Y</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Liquidity management</td>
<td>Y</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Security cost of cash handling</td>
<td>Y</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Merchant acceptance network</td>
<td></td>
<td></td>
<td>Y</td>
</tr>
<tr>
<td>Customer service</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>NGO staff training</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Beneficiary training</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Marketing &amp; Communications</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Risk management &amp; compliance</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>
Bidi Bidi Refugee Settlement Focus

4.1 Mobile network operators have invested heavily to both extend and upgrade mobile connectivity in Bidi Bidi refugee settlement

Bidi Bidi is a relatively new refugee settlement established in July 2016. As recently as November 2016, there was very limited 2G mobile connectivity in the settlement. As the influx of refugees into the settlement rapidly increased, UNHCR – the coordinating UN agency for the refugee response – began liaising with the telecommunications regulator and mobile network operators to discuss the challenges faced by refugees in the settlements regarding connectivity and access to information and communication services. Following bilateral site visits, information exchange and strategic planning discussions, MNOs began investing in Bidi Bidi, initially with cell-on-wheels temporary sites. As the situation evolved, these were upgraded to more permanent structures (2G and 3G), with further commitment to expand coverage to newly established settlements. MNOs see these areas as strategically important to them, given the fact that refugee populations in some regions now outweigh the host populations, and due to the increased interest from humanitarian agencies in delivering cash digitally.

Box 1: MNO perspectives on expanding/upgrading infrastructure in Bidi Bidi

**What infrastructure do you have in Bidi Bidi?**

“In November 2016, there was no infrastructure in place. We initially setup moveable sites to cover four zones in the camp. Today we have five permanent sites which fully cover the settlement with 3G networks...We understand that it will take time to generate revenue from extending coverage in Bidi Bidi refugee settlement. Currently it is more a case of investing for the future; we know the potential in the settlement, but have not realised that potential yet.”

Iris Kissiti, Corporate Accounts Manager, Airtel Money

“Network coverage has been scaled up recently. We provided mobile BTS (base transceiver station) in Bidi Bidi last year in November and we now have two permanent sites installed in zones 2 and 3 of Bidi Bidi – providing 97% of the settlement with 3G coverage.”

Felix Mugeni, Regional Mobile Money coordinator – Northern Uganda, MTN
For the first time in Uganda, mobile network operators are leveraging their mobile money bulk payment offerings to deliver humanitarian cash transfers in Bidi Bidi refugee settlement

Airtel and MTN are currently the only MNOs in Uganda using their mobile money platform bulk payment offerings for humanitarian cash transfers. However, Africell are currently developing their bulk payment platform and Uganda Telecom is exploring the potential of developing products specifically for refugees and partnering with humanitarian organisations. Table 1 outlines the various HCT projects currently being implemented by NGOs and MNOs in Bidi Bidi. The projects are small scale, with the largest reaching just under 6,000 beneficiaries. Such collaborations are a first for MNOs and humanitarian organisations in Uganda, with both learning a vast amount as the projects are piloted.

Table 1: Humanitarian cash transfer projects in Bidi Bidi refugee settlement (August 2017)

<table>
<thead>
<tr>
<th>NGO/UN agency</th>
<th>Partner</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Rescue Committee (IRC)</td>
<td>MTN</td>
<td>2,185 beneficiaries. UGX 40,000 (US$ 11) transferred per month per beneficiary</td>
</tr>
<tr>
<td>Save the Children</td>
<td>MTN</td>
<td>500 beneficiaries, 80 traders.</td>
</tr>
<tr>
<td>Mercy Corps</td>
<td>Airtel</td>
<td>4,750 refugees (200 host community). UGX 38,000 (US$ 10) transferred per month, for 6 months, per beneficiary. Zones 3, 4</td>
</tr>
<tr>
<td>DanChurchAid</td>
<td>Airtel</td>
<td>5,750 beneficiaries (300 from host community). UGX 38,000 (US$ 10) for 6 months in Zones 1, 2, 5.</td>
</tr>
<tr>
<td>World Food Programme</td>
<td>PostBank</td>
<td>WFP is currently partnering with PostBank</td>
</tr>
<tr>
<td>Norwegian Refugee Council</td>
<td>Airtel</td>
<td>1,288 beneficiaries. UGX 38,000 (US$10) transferred per month per beneficiary in zones 3, 4, 5.</td>
</tr>
<tr>
<td>In the pipeline: Action Against Hunger</td>
<td>TBC</td>
<td></td>
</tr>
</tbody>
</table>
The drivers for the mobile industry to partner with humanitarian organisations to deliver humanitarian cash transfers are attractive but must be considered carefully against the heavy costs involved

MNOs in Uganda recognise the potential business opportunities presented by humanitarian cash transfers - increased revenue generated from charges on monthly bulk payment transfers, the growth of subscriber bases in rural areas, as well as significant learning opportunities, both about new rural customer segments and partnering with the humanitarian sector for bulk payments. However, significant investment is necessary from the MNO to ensure that humanitarian cash transfers can be operationalised successfully at scale, especially in areas where mobile money is still in its infancy. In most contexts, operators incur heavy losses in the early years of setting up mobile money platforms, with significant investments needed to acquire and educate customers and build robust distribution networks. The potential benefits must be weighed against the OPEX and CAPEX costs.

Box 2: Humanitarian organisations support with informing the business case

In the case of Bidi Bidi, UNCDF, alongside UNHCR, and other humanitarian organisations, provided MNOs with critical information to help inform their decision to upgrade and expand coverage in the settlement, including the provision of GPS coordinates, population statistics, and predicted trends.

“We are helping the MNO understand refugee and host community settlement demographics, patterns and aggregate demand to mobile money so that they can make informed business cases for site roll out. We anticipate an additional three permanent sites in the Yumbe settlements alone. We also have a facility available to de-risk the installation of towers. The promise of a loss guarantee, whereby we reimburse the MNO for any losses suffered through the site, can enable the MNO to invest in a new site without financial risk.”

Delia Dean, Value Chains & Digital Financial Services Consultant, UNCDF
### Humanitarian Payment Digitisation: Focus On Uganda’s Bidi Bidi Refugee Settlement

**Table 2: Cost-benefit assessment for MNOs**

<table>
<thead>
<tr>
<th>COSTS</th>
<th>BENEFITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CAPITAL EXPENDITURE</strong></td>
<td><strong>Increased revenue</strong> from client (i.e. humanitarian organisation): transfer and cash-out fees</td>
</tr>
<tr>
<td><strong>Mobile network infrastructure</strong></td>
<td><strong>Growth of subscriber base:</strong> Diversifying subscriber base with new rural customer segment</td>
</tr>
<tr>
<td>Upgrading or extending, if not already in place.</td>
<td><strong>Churn reduction &amp; customer stickiness:</strong> The more valuable a mobile money account becomes to a customer, with more linkages to a range of financial services providers and businesses, the stickier it can become.</td>
</tr>
<tr>
<td>• Building a new macro-cell costs between US$ 120k-140k</td>
<td><strong>ARPU increases from customers:</strong> Mobile money adoption can drive up the amount being spent on other mobile services, increasing average revenue per user.</td>
</tr>
<tr>
<td>• Consideration of using cells on wheels (COWs) or permanent infrastructure</td>
<td><strong>Learning opportunities:</strong> Partnering with humanitarian organisations</td>
</tr>
<tr>
<td><strong>Network and IT</strong></td>
<td><strong>Reputation:</strong> Opportunity to illustrate the power of mobile technology to support vulnerable people and promote broader financial inclusion</td>
</tr>
<tr>
<td>Platform evolution costs to be able to perform high-volume payouts, if platform not already capable.</td>
<td></td>
</tr>
</tbody>
</table>

#### OPERATING EXPENDITURE

**Mobile network infrastructure**

Approximately US$ 4K per month per macro-cell

**Mobile money OPEX:** Mobile money is first and foremost an OPEX business. Agent commissions (for registrations and provision of mobile money services), as well as marketing, and personnel expenditures are all essential components of building out agent networks and ensuring liquidity to maintain a successful mobile money business.

- **Personnel:** Dedicated mobile money staff, excluding field marketing staff.
- **Technology:** Platform maintenance and operating costs, energy, connectivity, license fees (these are more general overhead costs but should be considered).
- **Fraud and settlement:** Fraud, settlement, revenue assurance (these are more general overhead costs but should be considered).
- **General and administrative:** Procurement and supply chain, finance, management, real estate
- **Customer care:** Call centre, processing and back office
Why are you involved in humanitarian cash transfers?

“We are convinced of the commercial opportunity that humanitarian cash transfers represent, and have had previous experience in bulk payments in the form of a G2P (Government-2-Person) social protection (SAGE) program that we previously ran for the government. We wish to take on more humanitarian cash transfer projects in the future and are already in talks with a number of humanitarian organisations. Exploring humanitarian cash transfers in Bidi Bidi for refugees has been the first of its kind for us. We see our experience here as a success story which can be emulated in new refugee camps in Uganda and our other operating markets where we can leverage mobile money for humanitarian cash transfers, for example Kyaka refugee settlement in western Uganda.”

Felix Mugeni, Regional Mobile Money coordinator – Northern Uganda, MTN

Where did the interest to collaborate with humanitarian agencies to digitise their bulk payments come from?

“The demand was on both sides. When NGOs approached Airtel we were very willing to help. We are not looking at revenue at the moment as we know it will take time. For now, this is more of a humanitarian CSR initiative and a learning opportunity for Airtel. In the long run, because of the high influx of refugees, we are hoping with time we will realise a profitable business case.”

Iris Kissiti, Corporate Accounts Manager, Airtel Money
4.4 For humanitarian organisations, the benefits of leveraging mobile money to deliver cash transfers are wide-ranging, but operationalising the projects can be complex in new settlements like Bidi Bidi

There are a number of different methods in which humanitarian organisations can deliver HCTs; through digital means or in physical cash. Using mobile money as a digital payment solution increases transparency, safety, cost saving and efficiency for humanitarian organisations and importantly, for beneficiaries. In addition, using mobile money as a transfer modality can connect refugees to a range of financial and other mobile-enabled services. The benefits can reach beyond the scope of delivering cash in partnership with a bank, or hiring a security company to transport physical cash to beneficiaries, which increases security risks, given large amounts of cash, and costs to humanitarian organisations, which are higher than using a mobile money service provider. However, the use of mobile money to receive cash payments also requires a significant amount of training to ensure that beneficiaries, particularly the most vulnerable segments of the population, are not excluded from digital services (see Section 6.7).
Box 4: NGO perspectives of leveraging mobile money for humanitarian cash transfers to meet needs of refugees in Uganda

**Mercy Corps**

“Mercy Corps decided to provide cash transfers to refugees using mobile money to help meet their immediate needs as they arrived from South Sudan. In the long-term, we see tremendous potential in linking refugees with financial services using their mobile money accounts. It’s important to have mobile network infrastructure and strengthen the payment ecosystem in Bidi Bidi to expand livelihood opportunities for refugees. Many of the refugees do not have mobile phones when they arrive in Uganda and are new to mobile money. We need to support their ability to purchase a phone as needed, assist them to feel comfortable transacting on the phone, as well as understand their interest in other services they can access from the mobile money account, including storing money, sending payments, and receiving remittances.”

*Miji Park, Director of Programs, Mercy Corps Uganda*

**International Rescue Committee**

“Globally, in order to truly scale-up humanitarian cash relief and follow-through on the World Humanitarian Summit Commitments to scale cash transfers, we need digital payment services such as mobile money. We cannot deliver cash at scale unless mobile money infrastructure is there and operational when a crisis happens. Mobile money entirely digitizes the distribution process, removing the need to manage heavy logistics and greatly reduces the time required for field activities. These efficiencies enable us to reach more people with the limited aid budgets available, and to track these resources much more closely for improved auditability and risk management. Not only are mobile money accounts an effective tool for supporting affected people to meet their basic needs through cash transfers, they can also improve access to financial services needed to support jobs, and longer-term income-earning opportunities.

However, in order to realise these benefits, mobile money infrastructure needs to be in place before emergencies, affected populations need to have access to these services and know how to use them. At the IRC, we’re keen to work with MNOs to proactively support crisis-prone populations to have access to mobile money services so that when emergencies do strike, the affected people already have mobile money accounts, are plugged into the system and know how to use it.”

*Gregory Matthews, Deputy Director of Economic Programs – Cash Initiatives, International Rescue Committee*
Table 3: Cost comparison of financial service providers in Uganda

<table>
<thead>
<tr>
<th></th>
<th>Mobile Money Provider</th>
<th>Bank</th>
<th>Security Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening account (one off) (UGX)</td>
<td>N/A</td>
<td>10,000</td>
<td>N/A</td>
</tr>
<tr>
<td>Transfer fee (UGX)</td>
<td>300</td>
<td>2,000</td>
<td>7,200</td>
</tr>
<tr>
<td>Withdrawal/cash-out fee (UGX)</td>
<td>1,210</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Cost of delivering 1 tranche of cash to refugee (UGX)</td>
<td>1,510</td>
<td>12,000</td>
<td>7,200</td>
</tr>
<tr>
<td>Cost of delivering 1 tranche of cash to refugee (US$)</td>
<td>0.42</td>
<td>3.36</td>
<td>2.02</td>
</tr>
<tr>
<td>Cost of delivering 10 tranches of cash to refugee (US$)</td>
<td>4.23</td>
<td>8.38</td>
<td>20.16</td>
</tr>
</tbody>
</table>

7. Costs reported by NGOs involved in cash programming in July 2017
In November and December of 2016, as refugees from South Sudan arrived in their thousands across the Ugandan border each day and settled in Bidi Bidi settlement, humanitarian organisations had to move quickly to support their immediate and longer-term needs. IRC, Mercy Corps and DanChurchAid were some of the fast movers in developing programmes to support refugees with cash aid. This section captures their projects with MTN and Airtel respectively, outlining the operational activities of the projects and documenting the success factors, challenges and lessons learned for future humanitarian cash transfer projects.
### Table 4: Snapshot of IRC and Mercy Corps projects

<table>
<thead>
<tr>
<th>Humanitarian organisation</th>
<th>Mercy Corps</th>
<th>International Rescue Committee (IRC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MNO partner</td>
<td>Airtel</td>
<td>MTN</td>
</tr>
<tr>
<td>Funder</td>
<td>Directorate-General for European Civil Protection and Humanitarian Aid Operations (ECHO)</td>
<td>Stichting Vluchteling (SV)</td>
</tr>
<tr>
<td>Modality</td>
<td>Unconditional cash transfer to beneficiary’s mobile money account</td>
<td>Unconditional cash transfer to beneficiary’s mobile money account</td>
</tr>
<tr>
<td>Number of beneficiaries</td>
<td>4,750 in total</td>
<td>1,225 in total</td>
</tr>
<tr>
<td></td>
<td>4,550 South Sudanese refugees</td>
<td>858 South Sudanese refugees</td>
</tr>
<tr>
<td></td>
<td>200 host community members</td>
<td>367 host community members</td>
</tr>
<tr>
<td>Type of beneficiary</td>
<td>Persons with Specific Needs (PSNs) defined through vulnerability criteria. PSNs include women and child-headed households, elderly (60+), chronically ill, physically or mentally disabled and lactating or pregnant mothers. There were 10,633 PSNs identified in Bidi Bidi, of which Mercy Corps’ target population was 4,750.</td>
<td>Persons with Specific Needs (PSNs)</td>
</tr>
<tr>
<td>Timeframe of cash transfers</td>
<td>6 months disbursing cash (March - August 2017)</td>
<td>3 months disbursing cash (May - July 2017)</td>
</tr>
<tr>
<td>Amount transferred</td>
<td>UGX 38,000 (US$ 10) on a monthly basis</td>
<td>UGX 40,000 (US$ 11) on a monthly basis</td>
</tr>
<tr>
<td>Location (zones)</td>
<td>3 &amp; 4</td>
<td>1 &amp; 2</td>
</tr>
</tbody>
</table>
| Amount charged by MNO     | 1. Transaction fee: UGX 300 (US$ 0.08) for every transaction regardless of value  
2. Withdrawal fee per transaction - cash out UGX 1,210 (US$ 0.33)  
3. SIM costs: UGX 3,000 per SIM card | 1. Transaction fee: UGX 390 (US$ 0.11) for every transaction regardless of value  
2. Withdrawal fee per transaction - cash out UGX 1,210 (US$ 0.33)  
3. SIM costs: Free SIMs |
The IRC has been working in Bidi Bidi to provide emergency health response since August 2016 and now serve all five zones in the settlement through a mixture of health, protection and sexual and gender-based violence (SGBV) programs. IRC’s Economic Recovery and Development department is implementing unconditional humanitarian cash transfers in northern Uganda through mobile money, in partnership with MTN Uganda.

In early 2017, IRC’s Emergency Response Team visited Uganda to support in-country staff during the crisis and suggested exploring the use of mobile money for cash transfers, given IRC’s commitment to having active cash transfer programmes in 75% of their country offices by 2020 (see Box 5), and their proven successes using mobile money as a modality in some of IRC’s other operating countries, including Pakistan and Cameroon.

The intended benefits of integrating a cash component into IRC’s programming were twofold. Firstly, to give the most vulnerable refugees the flexibility to use cash as and when they need it to address their unmet needs, and secondly, to reduce the heavy burden of logistics, including transport and storage involved with in-kind distributions.

### Box 5: IRC’s commitment to cash

IRC’s global 2020 vision is committed to delivering 25% of its humanitarian assistance through cash over the next five years and to having active cash transfer programmes in 75% of IRC’s country offices. Furthermore, IRC have a target that 75% of all the cash delivered is done so digitally.
There were also a number of specific advantages of leveraging mobile money as the modality of choice for cash transfers:

- **Accountability and compliance:** Generating reports gives real-time information on the delivery of cash to beneficiaries.
- **Flexibility and freedom:** Beneficiaries have the choice and liberty to withdraw cash at any time.
- **Improved safety:** The replacement of physical cash with digital cash removes the need for IRC staff to move large amounts of cash from banks two hours’ drive away, preventing some very real dangers. In recent years, an NGO lost a member of staff caught up in a violent attack whilst delivering cash in Gulu.
- **Ease of monitoring and follow-up:** Ability to easily follow up with beneficiaries in case of a problem.

In March 2017, the IRC conducted a study to determine mobile network strength in specific zones of the Bidi Bidi settlement, and found MTN to be the strongest. As a result, the IRC approached MTN to partner on an HCT project. Part of the agreement was for MTN to upgrade their network, which resulted in them replacing a temporary tower with a permanent one in Zone 3 of Bidi Bidi settlement.

With funding coming from Stichting Vluchteling (SV), the IRC targeted 1,225 beneficiaries (858 refugee People with Specific Needs8 and 367 people from the host community), with the objective of enhancing their purchasing power to access life-saving commodities within their local markets and to reducing their dependence on negative coping strategies. US$ 11 was transferred to beneficiaries once per month for three months.

**Contracting Process**

In March 2017, IRC contracted MTN to facilitate the payment of cash transfers through MTN’s bulk payment mobile money offering, and the first cash transfer was made in April. Contracting took longer than three months and presented challenges for both parties, largely due to the fact that a partnership of this nature was a first of its kind. Furthermore, the MNOs are required to perform due diligence on any potential partners with which they transact9, this is a stringent risk management process which resulted in a long process for IRC to collate and present the necessary documentation for compliance. This delayed the start of the project by several months.

**Box 6: Flexibility of cash transfers over in-kind aid**

According to the IRC, many People with Specific Needs (PSNs) in the refugee settlements lack sufficient support to meet their basic needs. World Food Programme (WFP) provides food distributions, but the amount and type of food sometimes does not meet dietary diversity expectations. Similarly, core relief items are provided by UNHCR but gaps remain in access to essential items, particularly for PSNs. IRC’s assessments showed that PSNs have multiple and complex needs, depending on their circumstances. The intention, therefore, was that the integration of a cash component into IRC’s programming would give the most vulnerable refugees the flexibility to use cash as and when they need it to address their unmet needs.

8. PSNs include women and child-headed households, elderly (60+), chronically ill, physically or mentally disabled and lactating or pregnant mothers.
9. Businesses are required to conduct basic due diligence with every transactional partner where transactions pass a certain threshold. This is true for all organisations, not just financial institutions. Due diligence is a risk management process that organisations undertake to ensure they are entering into business with partners that are not involved in corruption, money laundering, etc.
In partnership with Airtel, Mercy Corps is delivering unconditional humanitarian cash transfers in Bidi Bidi settlement, as part of an eight-month project funded by the European Civil Protection and Humanitarian Aid Operations (ECHO). The programme is part of a consortium, led by DanChurchAid, and supported by UNCDF, distributing cash in zones 1, 2 and 5, with Mercy Corps as an implementing partner, distributing cash in zones 3 and 4, and Transcultural Psychosocial Organisation (TPO) focusing on social protection, psychosocial and mental health needs of vulnerable people across the programme.

Mercy Corps is delivering cash to 4,750 Persons with Specific Needs (PSNs), out of a total of 10,633 PSNs in the settlement identified in February 2017. 4,550 beneficiaries are South Sudanese refugees and 200 are from the host communities. Each month, UGX 38,000 (US$ 10) was transferred to each beneficiary via Airtel Money.

5.2 Mercy Corps and Airtel

Overview

“Physical cash transfers using bank models can cost up to six times the amount of using mobile money transfers. Using mobile money is the cheapest option with no maintenance cost for the dashboard, and only UGX 300 for each sending fee and UGX 1,210 for each withdrawal fee, totalling around 50 US cents per refugee [UGX 1,510 / US$ 0.48]. Even working directly with a security company using a van to deliver cash to the settlement, costs on average US$ 2 per refugee.

Mobile money will be a dominant channel for humanitarian organisations delivering cash because most of the resources go directly to beneficiaries. Humanitarian donors support mobile money because more cash ends up in the hands of refugees as less is required for the operational costs.”

Ronald Rwakigumba, Uganda Country Coordinator, Agri-Fin Mobile, Mercy Corps.

Box 7: Comparison of cash transfer modalities
Contracting Process

Mercy Corps began discussing the proposition of a bulk payment account with Airtel in December 2016. Upon providing the organisational Know Your Customer (KYC) information required, the contract between Mercy Corps and Airtel was signed by both parties on 7th February 2017.

Box 8: Financial inclusion and wider benefits to refugee and host communities

What are the benefits of using mobile money as the e-transfer modality for humanitarian cash transfers?

Mobile money has the potential to address the needs of forcibly displaced populations. Beneficiary needs and conditions are the biggest driver, for example security of cash, mobility of cash. Money stored in a mobile money account is safer than cash in refugee settlements when refugees have sufficient opportunities to use their mobile money account.

How can mobile money drive financial inclusion for refugees?

Mobile money is the most accessible form of financial inclusion, enabling access to savings and loan products. For example in the first year (Aug 2016- Aug 2017) of MTN introducing a mobile money loan product, MoKash to Uganda, US$ 8.33 million worth of loans was disbursed, showing high demand for mobile financial services. Availing and exposing these services to refugees improves their dignity and parity with host communities. Uganda has over 20 million mobile money accounts and by distributing cash through mobile money to refugees, they are able to be included in digital cash opportunities just like their host members.

What are the wider benefits to refugees and local communities?

Mobile money infrastructure development also brings along network improvements that benefit all refugee and host populations, for example, payers like Mercy Corps and DCA advocated for good network coverage to facilitate mobile money transfers, but this also supported the entire refugee population to utilise the improved network coverage to communicate with their relatives and friends though voice and data. Airtime purchases also became possible using the developing mobile money agent network.

Ronald Rwakigumba, Uganda Country Coordinator, Agri-Fin Mobile, Mercy Corps.
6 Success Factors

6.1 Frequent communication to build trust

For humanitarian organisations conducting cash transfers via mobile money for the first time, partnering with private sector organisations such as mobile network operators (MNOs) can be a new experience and the need to build trust in the MNOs’ ability to perform the task at hand is key, especially with large amounts of money involved. The same is true for MNOs partnering with humanitarian organisations, particularly with partnerships between sectors that are the first of their kind – frequent communication is key.

Mercy Corps and Airtel were faced with a number of challenges at the start of their respective projects, due to a change in regulation in Uganda no longer allowing previously recognised forms of identification to be used for refugees to register SIM cards or open mobile money accounts (see section 7.1). Consequently, funds were stuck on deactivated SIMs. Airtel quickly credited Mercy Corps’ account with the unallocated money and communicated all processes and actions to the Mercy Corps team, building confidence for all parties.
6.2 **Flexibility and agility on all sides and willingness to make projects succeed**

The flexibility of all stakeholders involved in the projects (donors, humanitarian organisations and MNOs) was reported as a key success factor. For projects implemented in relatively new refugee settlements, all parties must enter into a partnership with a ‘test and learn’ mind-set, adapting specific elements of the project as circumstances change and evolve. The best partners are able to criticise one another, adapt, learn from one another, and continue working with positive outcomes.10

**Flexibility of donor:** One of the top three success factors highlighted by IRC was donor flexibility. IRC’s donor, Stichting Vluchtelings (SV), gave them free reign to design the humanitarian cash transfer project entirely as they saw fit, instead of pre-determining the project design. This gave IRC the agency to design and adapt the project to best suit the specific context.

**Adapting to changing regulation:** In the third month of Mercy Corps and Airtel’s project, a decision was made to transfer money via physical cash distribution vehicles, due to temporary KYC issues around electronic money transfers, as outlined in Section 7.1. Mercy Corps approached a bank, which unfortunately could not deliver a quote on time, so then quickly found a security company to transport the cash to the settlement in a van. This experience led Mercy Corps staff to recognise the significant benefits of mobile money beyond just reduced cost and increased efficiency. Notably, physical cash provides no digital footprint of the transactions - Mercy Corps’ finance and programme teams had to travel to the field every day to physically collect thumbprints of refugees on paper to prove authenticity, increasing time and cost. The flexible way in which Mercy Corps and Airtel were able to adapt, to ensure the continuation of the project, was an important part of the process, with important lessons for all stakeholders.

**Willingness of MNO to ensure language barriers were overcome:** During product education, MTN had to ensure that there were multiple translators to ensure all refugees could understand MTN’s mobile money product. Multiple languages spoken by the refugees included Arabic, Nubi, Kakwa and Dinka.

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6.3 Financial and operational support to build out the mobile money ecosystem

Having basic infrastructure in place remains a challenge in Bidi Bidi. Whilst the MNOs are investing heavily in communications and mobile money infrastructure, the extra operational and financial support offered by the UNCDF has helped to develop infrastructure in Bidi Bidi faster. Mobile money is expensive business, with OPEX costs remaining high throughout roll-out and well into the first couple of years of operation. UNCDF is helping to propel the digital financial services landscape forward in Uganda by de-risking the installation of cell towers in strategic locations, and helping to set up new agents in hard-to-reach locations.

**UNCDF’s approach in Uganda**

**Phase 1: Lay down the Digital Financial Service (DFS) rails:** leveraging MNO and bank technology where possible (MNO infrastructure, efficient distribution networks, efficient communication and coordination channels and agent networks).

**Phase 2: Focus on the “carriages”**: Build the products and services that can be enabled once basic Digital Financial Services are established, in the areas of health and sanitation, clean energy, education etc. In the long term, UNCDF aims to leverage digital solutions to create an enabling environment for development of trade and commerce, social infrastructure that enables communities in the north of Uganda to transition from dependency to self-reliance.

Financial inclusion is a core pillar in driving this transition. Basic DFS infrastructure must be in place to support private sector investment and growth in settlement areas.

6.4 Reliable mobile network coverage

An obvious, but often overlooked, success factor for humanitarian cash transfer projects is ensuring reliable mobile network coverage. Although mobile money platforms themselves are accessed via USSD menus and therefore typically only require a 2G network, other components of HCT projects can benefit from 3G connectivity, such as registration of mobile money accounts for beneficiaries.

As outlined in section 4.1, the leading MNOs in Uganda upgraded or expanded their coverage in Bidi Bidi following the refugee influx at the end of 2016, to ensure that potential customers could benefit from a suite of mobile services, including mobile internet.

Both IRC and Mercy Corps requested for Airtel and MTN to upgrade their mobile coverage in particular areas of Bidi Bidi settlement to ensure the smooth running of their projects. The MNOs were happy to meet these expectations, to meet high demand and ensure that their customers would be satisfied with the service being provided.

To successfully register beneficiaries for a SIM card and mobile money, an electronic KYC app is used. The app works with 3G connectivity and is able to capture the OPM ID, photograph and registration form of the beneficiary. Registration is instant, followed by mobile money activation upon successful registration.
6.5 Ensuring agent network availability, competency and liquidity

Availability of agents in beneficiary locations, and the sufficient liquidity of these agents, are key to the success of humanitarian cash transfer projects, and yet both are often a primary challenge for MNOs engaging in HCT projects, particularly in remote locations with newly displaced populations. Nonetheless, Airtel and MTN have made significant improvements in order to better serve beneficiaries, the most important being the onboarding of ‘dealers’ (also referred to as ‘master agents’) to help better manage the liquidity of individual agents in Bidi Bidi.

A survey conducted by Mercy Corps with refugees in January 2017 revealed that both agent network and liquidity were insufficient. Indeed, there was limited network coverage in zones 3 and 4 of Bidi Bidi where Mercy Corps was planning to conduct HCTs. Further, there were very few mobile money agents and this formed the basis for partnership with MNOs who were willing to invest in the key infrastructure for network coverage and for mobile money roll out. The nearest bank to Bidi Bidi is two hours’ drive from the settlement (in a town called Koboko), so it was essential to come up with innovative strategies to improve agent liquidity in order to support large-scale disbursements. Despite substantial efforts from MNOs and other stakeholders, capacity of agents and liquidity remains a challenge.

**AIRTTEL**

Bidi Bidi is a new settlement and as recently as December 2016, Airtel only had four permanent agents in the area with an average float of UGX 150,000. Today, Airtel has 27 permanent agents with an average float of between UGX 300,000 – 500,000. On days when beneficiaries are due to cash-out their funds, Airtel (via its dealers/distributors, also known as ‘master agents’) ensures there are a further 20 roving (non-permanent) agents that come to the settlement to support cash-out.

**MTN**

MTN has 23 permanent agents in the settlement and employs a number of unique strategies to ensure a robust agent network, including hiring a reliable franchise-dealer in charge of the territory to manage liquidation of agents. The dealer has recruited a helper and given him a motorbike to drive around the settlement to help liquidate agents by rebalancing their e-money float and cash. During cash-out days, MTN also brings in additional agents to facilitate cash-outs.

**UNCDF (United Nations Capital Development Fund)**

UNCDF is supporting the roll out of mobile money agents who can maintain sufficient cash levels to sustain withdrawals by refugees whenever they receive cash disbursements. UNCDF supports solutions that are in line with the partner’s core operating model. In West Nile, they supported Airtel to increase the capacity of their distributor responsible for last mile delivery, which de-risks the distributor’s penetration into deeper rural areas. The distributor has fine-tuned his approach to delivering core services like product awareness education and training, airtime, devices and float distribution, PIN reset, SIM swap and registration errors. UNCDF also extended a grant to DanChurch Aid to support operating expenditure for Airtel’s distributor, including the costs of vans, motorcycles, service centres and salaries.

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6.6 Humanitarian organisational capacity and sufficient technical knowledge

For HCT projects, a common and realistic understanding of the challenges, opportunities and costs associated with serving displaced populations via mobile money help to determine project feasibility, as well as operational and financial sustainability. Humanitarian organisations and their payment partners must be aligned on their objectives – a process that can be made smoother if there is sufficient expertise of the private sector, within humanitarian organisations, as well as of the complexities of mobile money ecosystems.

Mercy Corps’ Uganda project team had extensive technical experience of mobile technology, making all components of the HCT project smoother – from negotiation with the MNOs at the outset, to interpretation of challenges and proposals for innovative solutions.

IRC staff working on the project had interacted with MTN’s mobile money product in the past and were familiar with how it worked. This reduced the amount of capacity building necessary, speeding up the process of familiarising the IRC’s project team with how the product works, the security features and potential risk areas (e.g. PIN security). When it came to IRC working alongside MTN to educate beneficiaries on mobile money awareness training, including addressing issues such as PIN security, mobile money fraudsters, general safety and security, the process was a lot smoother and quicker.
6.7 Significant investment in training and sensitisation of beneficiaries on how to use mobile money to receive payments

While humanitarian cash transfer via mobile money has the potential to improve choice and dignity for refugees and lead to financial inclusion, its success is dependent on beneficiaries knowing how to use it and accepting it as an alternative to cash. The risk that beneficiaries may have had little or no prior experience using mobile phones, and mobile money specifically, becomes heightened when working with marginalised and vulnerable groups.

The beneficiaries of Mercy Corps’ and IRC’s projects were Persons with Specific Needs (PSNs) - including women and child-headed households, elderly (60+), chronically ill, physically or mentally disabled and lactating or pregnant mothers; a demographic who are the least likely to have previously owned or used a mobile phone and adopted mobile money. Therefore, it was crucial for the implementing partners to dedicate additional time and resource to ensuring that these beneficiaries had the sufficient digital literacy to effectively use mobile money as a form of cash transfer. The fact that there was pre-existing capacity to use mobile money in the communities, given that mobile money is also available in South Sudan, meant that beneficiaries had an awareness of mobile money as a service.

Mercy Corps and the IRC, alongside the MNOs, conducted group meetings with beneficiaries in each of the villages targeted, to educate them on the process for obtaining money via Airtel Money and MTN, including how to ensure the security of their mobile money accounts and PINs. Sessions on the purpose of the unconditional cash transfers, to sensitise beneficiaries on the suggested ways to spend the money, were also conducted.

The IRC and Mercy Corps ensured that their staff were present and visible at the cash distribution points to assist beneficiaries on any issues with cashing out. Toll free call centres and protection information points were also setup to support beneficiaries with any queries. These investments in capacity building, training and support services for beneficiaries were critical for ensuring that PSNs could efficiently receive their cash transfers. Further research is needed to measure the success of such strategies and understand the socio-economic impact of HCTs on refugees in Bidi Bidi.
7 Challenges

7.1 Fast changing Know Your Customer (KYC) regulations

All financial service providers are required by the national financial regulator to adhere to proportional, risk-based, Know Your Customer (KYC) requirements when registering customers for their services\(^\text{13}\). These registration processes most often rely on National ID cards and other official documentation issued by national government. Refugees may not be in possession of official ID documents. In such cases, it is advisable that regulators set AML/CFT (Anti Money Laundering/Counter Financing of Terrorism\(^\text{14}\)) controls that are effective and proportional to the specific risks of these services: neither unduly burdensome nor insufficiently rigorous. This may mean national financial regulators enabling lower, “tiered” thresholds of KYC requirements to allow forcibly displaced populations to access vital funds, particularly in emergency contexts\(^\text{15}\).

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In April 2017, the Uganda Communications Commission (UCC) issued a directive to deactivate any SIM cards that had not been registered using national IDs by 20th April (within seven days), following an initial deadline to deactivate by March 29th. Previously, UCC accepted Government-issued identification documents including passports and driving permits. The consequences of the new Directive were drastic on a national scale. An estimated 15 million Ugandans had registered for national IDs, while approximately 21 million Ugandans had registered SIM cards. This left around 6 million Ugandans to register for national IDs in seven days\(^\text{16}\) and then re-register their SIM cards, or risk having their phone lines de-activated.

The deadline for SIM re-registration was later extended to 20th May and subsequently to 30th August.

The implication of this Directive on refugees was even more problematic, no longer allowing refugees to register for SIM cards and mobile money accounts with previously accepted identification documents, such as UNHCR ID. In response, Airtel and MTN went to the regulator to highlight the issue of refugees being excluded from the use of mobile services due to the new KYC requirements. The regulator agreed to accept refugee biometric IDs issued by the Office of the Prime Minister (OPM). As of May 2017, 81 percent of refugees and asylum seekers in Uganda had been biometrically registered.\(^\text{17}\)

There were immediate implications of the UCC Directive for stakeholders with humanitarian cash transfer projects already underway. The Directive impacted Mercy Corps’ project, culminating in SIM cards being blocked the night before one of the cash-out days in April 2017. Money had already been transferred to the refugee SIM cards but Airtel reacted quickly by crediting the cash back into Mercy Corps account.

For IRC, their project went live several months after the UCC Directive, meaning that a significant proportion of beneficiaries in their operating zones already had been issued with an attestation card (OPM ID). To avoid delaying the projects, IRC asked refugees without the OPM ID (approximately 30%) to nominate a relative to receive the cash on their behalf.

These examples show that, despite challenging regulatory environments, MNOs and NGOs, together with other stakeholders, can advocate for sufficient and achievable KYC requirements, as well as work together to find innovative solutions to overcome temporary bottlenecks.

To combat such challenges, GSMA has worked with key stakeholders to develop a policy note, highlighting identity-related barriers faced by underserved populations who lack identification documents. The policy note\(^\text{18}\) outlines a number of recommendations for governments on why they should, and how they could create enabling environments that allow forcibly displaced populations to access mobile connectivity and mobile money services.

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7.2 **Complex and/or unclear partner due diligence requirements**

Another key challenge experienced by NGOs was the due diligence process, whereby humanitarian organisations present the requested documentation to the MNO to meet their requirements before they can open a mobile bulk payment account.

Even within the same country, different MNOs can apply varying due diligence requirements due to ambiguity in the regulation, and the stringency of their own risk management policies.

Mercy Corps and IRC experienced challenges when it came to opening mobile bulk payment accounts with Airtel and MTN. It took IRC three months for the contract to be signed, due to difficulties involved in acquiring the necessary documentation to become a client. For Mercy Corps, the due diligence requirements for them to have a bulk payment account with MTN were rigorous, resulting in them working solely with Airtel for the disbursement of funds. This example highlights the issue that even within the same country, different MNOs apply varying due diligence requirements due to ambiguity in the regulation, making the due diligence process for humanitarian organisations complex.
7.3 Low mobile handset penetration

The main barrier highlighted by both MNOs and humanitarian organisations in Bidi Bidi is the low mobile handset penetration rate. Limited research conducted in the settlement suggests that phone ownership rates range from 10% - 30%. Ownership is believed to be even lower for beneficiaries of Mercy Corps, DCA and IRC, because these are the most vulnerable people within the community, with limited means of generating income to purchase handsets. IRC reported that in its project, just 200 out of 1,225 beneficiaries had mobile phones. Although a full representative survey was not conducted, early rapid assessments highlighted discrepancies in access and ownership across (a) zones, with rates increasing as zones became more established (highest in Zone 1 and lowest in zone 3,) and (b) demographic discrepancies, particularly in terms of gender and age. Results were shared with MNOs and conversations were held around how to identify solutions.

The negative implications of low handset penetration for humanitarian cash transfers are wide-ranging making operations more complex and challenging for beneficiaries, MNOs and NGOs. However, all stakeholders are finding innovative solutions, proving that under such circumstances humanitarian cash transfer projects are still be feasible. In Bidi Bidi, low handset penetration resulted in the following complications:

- Additional time required to perform cash-outs due to the need to insert and extract SIM cards from agents’ phones
- Intense use of mobile phones by agents requires extra charging stations
- Beneficiaries cannot be notified about arrival of funds via SMS
- A higher proportion of SIM cards are damaged or lost
- Financial inclusion impact is low and profitability limited for the mobile money provider

In an effort to minimise such challenges and risks in the future, Mercy Corps solicited funding from NetHope to subsidise 20,000 feature phones and 1,050 smartphones for vulnerable refugees in Bidi Bidi, at a cost of less than US$ 3 per refugee. Simple interventions such as this can go a long way in solving such challenges.
7.4 Ensuring agents have the correct denominations of physical cash

Beneficiaries of humanitarian cash transfer projects in Bidi Bidi typically cash-out the full amount transferred to them. Therefore, during large cash-out cycles, agents must have the correct denominations of money for each beneficiary. This proves difficult when smaller notes are necessary as it can be challenging to get hold of a large quantity of these smaller denominations.

At first, Mercy Corps’ plan was to transfer each beneficiary US$ 10 (fluctuates around UGX 38,000) per month. For the first transfer (involving 667 beneficiaries), agents experienced no issues obtaining lower value bank notes, however when the number of beneficiaries was increased to 1,500, agents struggled to obtain the lower value notes from the banks (agents needed 3 x 1,000 shilling notes per customer). Airtel solved this challenge by partnering with a greater number of financial institutions to expose mobile money agents to different sources through which to access physical cash. A more straightforward solution was for the IRC to fix disbursements at UGX 40,000, even if this was a little over or under the US$ 11 amount initially proposed.
GiveDirectly – Can large cash grants accelerate a refugee’s journey to self-sufficiency?

GiveDirectly, an NGO that delivers unconditional cash transfers to the extreme poor in Africa, is undertaking a new initiative in Uganda to test whether providing refugees with large cash grants enables them to accelerate their journey towards self-sufficiency.

According to Joanna Macrae, Director, European Partnerships, GiveDirectly, “Given the fact that refugees increasingly remain in exile for long periods of time, this project seeks to address how we can help refugees rebuild their lives in the long-term. Instead of offering small payments which are unlikely to allow them to overcome savings and credit constraints, this project will deliver larger payments which will help people to invest in assets and as a result improve their overall income.”

The project also aims to contribute to poverty eradication and economic growth for host communities, and to strengthen social cohesion between the refugee and host communities.

In this unique approach, GiveDirectly has partnered with MTN to deliver unconditional cash transfers to refugee households in Kyaka II settlement, as well as 800 households living in extreme poverty in the host community. Kyaka II is in south-western Uganda and has been hosting refugees since 1984, primarily from DRC. Refugees in Kyaka II are at a more advanced stage of displacement compared to those in Bidi Bidi refugee settlement. Whilst Mercy Corps and IRC are responding to the acute needs of refugees who have very recently been displaced, GiveDirectly is addressing the longer-term needs of refugees.

A total of approximately US$ 600 (on par with an average household annual income) will be transferred via mobile money in three tranches over three months. The first installment is approximately 10% of the total transfer and the latter two installments each comprise approximately 45% of the total transfer.

GiveDirectly will work in partnership with the Government of Uganda and UNHCR to develop a robust approach to targeting and registration of recipients into the project. Field officers will provide basic mobile phones to households without them, and also deliver basic training on how to use mobile money to receive the transfers. This is an important component of the project given that a recent study suggests that just 15% of refugees had phones and 6% had access to mobile money. The value of the mobile money account as a savings instrument, particularly given the comparatively larger sums of money being transferred to refugees, is high.
In Bidi Bidi refugee settlement, mobile network operators have shown a great deal of goodwill to ensure that humanitarian cash transfer (HCT) projects can be a success, meeting the needs of refugees. Given the complexity of digitising HCTs, especially for areas previously not covered by GSM or mobile money agent networks, MNOs have had to invest in building infrastructure from scratch. This has also been supported by development agencies, who will continue to play a key role until the business case becomes more sustainable.

NGOs have also had to put in extra time and resource to see projects through to the end, despite challenging and fast-changing regulatory environments. This study makes it clear that if the private sector is to successfully partner with the humanitarian sector to deliver HCTs, then the national financial regulator must consider refugees as a distinct set of individuals, with unique needs and circumstances, thereby ensuring that KYC requirement is proportional.

While the challenges are many, so are the innovative solutions being implemented. In both of the HCT projects documented in this case study, for every challenge, a workaround solution was found to solve the problem. This highlights the importance of strong and trusting partnerships.

Looking to the future, for HCT to be profitable for MNOs, particularly in areas where mobile money is nascent, MNOs must scale both mobile money transactions, by building out the product ecosystem, and scale GSM revenue. Delivering HCTs to a beneficiary’s mobile money account, rather than as a voucher, will accelerate this process.

Using mobile money as the digital modality of choice can connect refugees to a range of financial and other mobile-enabled services, increasing the potential for financial inclusion, whilst increasing transparency, safety, cost saving and efficiency for donors and humanitarian organisations. Improving handset ownership rates will be key to achieving these common objectives. Whilst this research focuses on the operational success factors and challenges for MNOs and NGOs delivering humanitarian cash transfer projects in Bidi Bidi, further research is needed to understand and measure the socio-economic impact of HCTs for beneficiaries.