



Developing guidelines for cash transfers in Somalia





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The Somalia Cash Working Group (CWG) leads the inter-sectoral cash coordination mechanism and aims to improve the coordination of cash assistance, quality of implementation of cash assistance monitoring, evaluation and learning. It is co-chaired by the World Food Programme and Concern Worldwide/Somali Cash Consortium. The Financial Service Provider (FSP) workstream's objective is improving the systems and processes of humanitarian mobile money cash transfers in Somalia, benefiting programme participants by working with implementing agencies, mobile network operators, private sector and learning partners. The GSMA M4H has supported the FSP's work since 2020.

Further information on the Somalia CWG can be found here: www.humanitarianresponse.info/en/operations/somalia/cash-activities

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Contents

Introduction	3
1 Current State Mapping	4
1.1 Step 0: Negotiations between INGOs/agencies and MPSPs	6
1.2 Step 1: Registration	7
1.2.1 Step 1.a. Collection of recipient personal data	7
1.2.2 Step 1.b. Supply of free SIM cards	8
1.2.3 Step 1.c. Recipient list and registration data transfer to INGOs/agencies	8
1.3 Step 2: Money transfer	9
1.3.1 Step 2.a. Bank transfer to the MPSP by INGOs	9
1.3.2 Step 2.b. Recipient payment data are shared with the MPSP	10
1.3.3 Step 2.c. Verification of recipient data against SIM registration data	10
1.3.4 Optional: Step 2.d. Recipient verification using a PIN code	11
1.3.5 Step 2.e. E-money transfer to the recipient wallet	11
1.4 Step 3: Disbursement	12
1.4.1 Step 3.a. Fund disbursement report shared by MPSPs to INGOs	12
1.4.2 Step 3.b. Funds utilisation by the recipients	12
1.4.3 Step 3.c. Post-distribution monitoring surveys	13
2 Future State Mapping	16
2.1 Step 0: Negotiations between INGOs/agencies and MPSPs	18
2.2 Step 1: Registration	19
2.2.1 Step 1.a. Collection of recipient personal data including voice recording	19
2.2.2 Step 1.b. Supply of free SIM cards	20
2.2.3 Step 1.b.2 Verification against a common recipient registry database	20
2.2.4 Step 1.c. Recipient list and registration data transfer to INGOs/agencies	21
2.3 Step 2: Money transfer	24
2.3.1 Step 2.a. Bank transfer to the MPSP by INGO/agency	24
2.3.2 Step 2.b. Recharge of INGO/agency mobile money wallet by the MPSP	24
2.3.3 Step 2.c. Upload of recipients' profiles on the INGO/agency platform	25
2.3.4 Step 2.d. Verification of recipient data against SIM registration data	24
2.3.5 Step 2.e. Recipient verification using voice recognition	24
2.3.6 Step 2.f. E-money transfer to the recipient wallet	25
2.4 Step 3: Disbursement	26
2.4.1 Step 3.a. Automatic fund disbursement report generation, available on the INGO/agency platform	26
2.4.2 Step 3.b. Funds utilisation by the recipients	26
2.4.3 Step 3.c. Post-distribution monitoring surveys	27
3 Recommendations	28



List of abbreviations

AML/CTF	Anti-Money Laundering/Counter-Terrorism Financing
API	Application Programming Interface
CWG	Cash Working Group
FGS	Federal Government of Somalia
INGO	International Non-Governmental Organisation
IVR	Interactive Voice Response
KYC	Know Your Customer
MNO	Mobile Network Operator
MPSP	Mobile Payment Service Provider
PDM	Post Distribution Monitoring
USSD	Unstructured Supplementary Service Data (or 'Quick Codes')
WFP	World Food Programme

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Introduction

In April 2020, the GSMA partnered with the Somalia Cash Working Group to commission this study on cash transfers in the three regions of Somalia: South-Central, Puntland and Somaliland.¹ The overall aim is to improve the effectiveness, efficiency and transparency of humanitarian mobile money cash transfers in Somalia by reducing the information gap that exists between key stakeholders, in particular mobile payment service providers (MPSPs) and International non-governmental organisations (INGOs).

This process mapping document aims to show in detail the current steps INGOs/agencies take to implement their cash transfer programmes in Somalia. It also aims to provide recommendations for cash transfer stakeholders on how humanitarian mobile money cash transfers in Somalia could be improved in terms of security, efficiency and transparency.

This document is complemented by:

- A series of six guidelines that aim to provide more detailed recommendations on specific steps of the cash transfer process in Somalia; and
- A regulatory and policy analysis brief, which explains the regulatory and policy ecosystem around mobile money and cash transfers and recommendations to build on the current ecosystem.

This document first starts by mapping the current state of cash transfers in Somalia, then provides recommendations and a way towards a future map for mobile money cash transfers in Somalia. It then provides a brief mention of the associated guidelines.

The draft guidelines and process mapping were initially presented to INGOs/agencies during a series of three webinars in November 2020. The following webinars and topics were conducted:

1. November 17, 2020: Current and future process mapping and MPSP Service Offering;
2. November 24, 2020: Automation of the Cash Transfer Process, Common Recipient Registry, and Proof of ID;
3. November 26, 2020: Post-Distribution Monitoring and Enabling Environment.

Feedback provided by INGOs/agencies during and following these webinars have been incorporated as best as possible in the final versions of the process mapping and guideline documents.

¹ Throughout the report, the three regions of South-Central, Puntland and Somaliland will be referred to as Somalia for brevity.



1

Current state mapping

This section maps the current processes used by International Non-Governmental Organisations (INGOs) and aid agencies in their cash transfer programming to recipients in Somalia and identifies their associated challenges and risks. The majority of the INGOs/agencies interviewed conduct cash transfers through the mobile money mechanism. Other mechanisms are very rarely used in Somalia as mobile money offers a range of advantages. This process mapping therefore places an emphasis on mobile money cash transfer processes over other mechanisms. Another important approach to the distribution of humanitarian system is the SCOPE system, which will be described briefly towards the end of this section.

Mobile money cash transfer processes are similar across all three Somalia regions (Somaliland, Puntland and South Central), the major Somalia Mobile Payment Service Providers (MPSPs), and the INGOs. A notable exception is the World Food Programme (WFP), which is currently piloting mobile money cash transfers using slightly different processes than other stakeholders.

After presenting the general process map of current mobile money cash transfers in Somalia, this section will examine each of the steps of the process and provide detailed explanations as well as a description of the potential challenges and risks associated with each step.

Key Considerations:

- Most INGOs/agencies contacted that use mobile money for cash transfers were rather satisfied with the mechanism, due to a pragmatic view: “It’s the best we have”
- Humanitarian actors tend to have a more pragmatic approach and hence favor mobile money despite its imperfections, while development actors are willing to take less risk and have more stringent Know Your Customer (KYC) requirements
- There are some INGOs/agencies and agencies that are unwilling to take any risks on KYC and a potential fund diversion, and are therefore reluctant to use mobile money at all
- Challenges and risks identified in this section result from Altai Consulting’s analysis of the mobile money transfer process. Some INGOs/agencies and agencies may not consider them as challenges or risks, due to different levels of risk tolerance



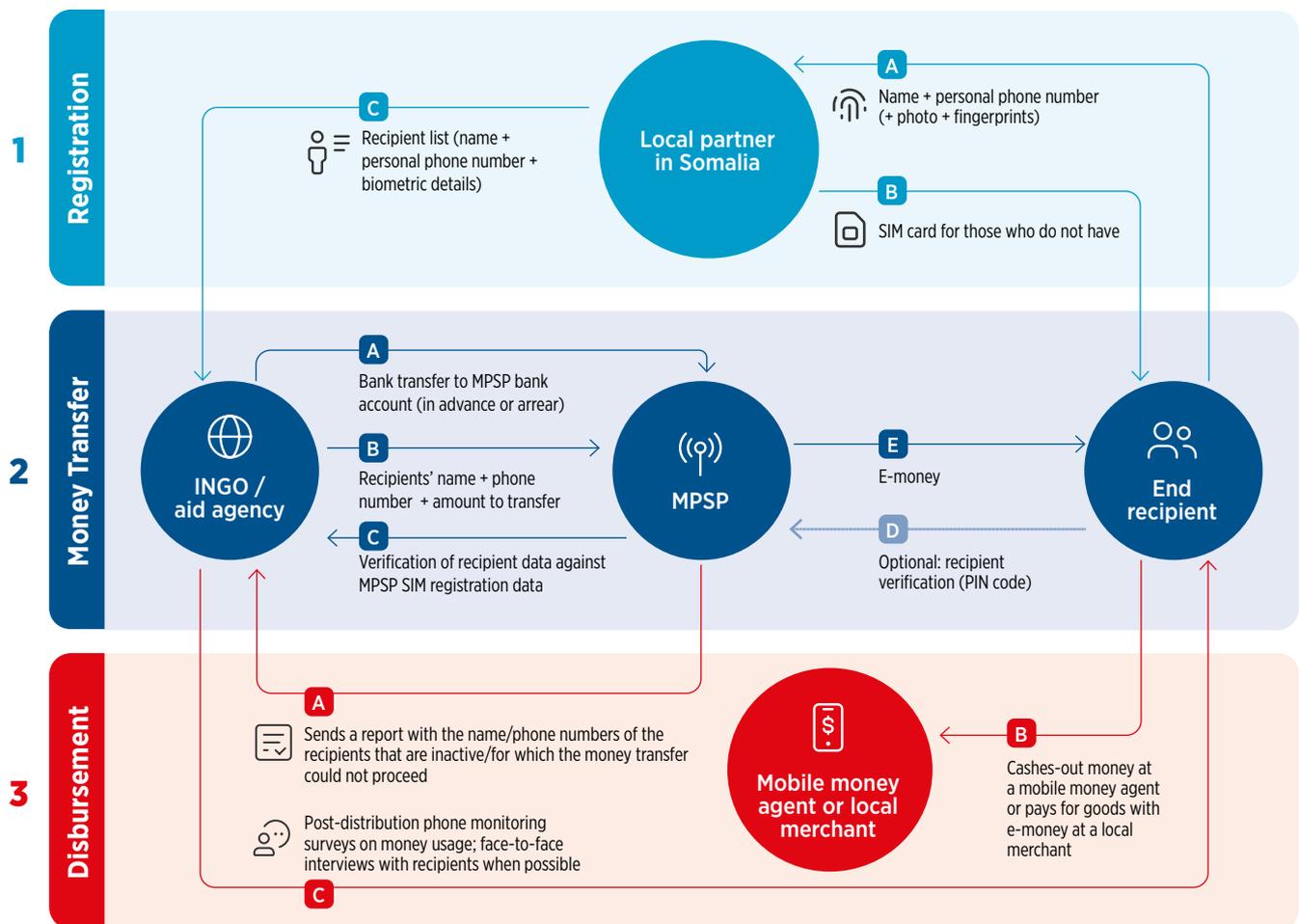
The negotiation of service agreements between INGOs/agencies and MPSPs is identified as step 0 in the process. Once framework agreements or service contracts have been signed between INGOs/agencies and MPSPs, the mobile money cash transfer process begins. Three phases to the process have been identified:

- **Registration:** the process of targeting, identifying and registering recipient basic information
- **Money transfer:** how the money flows from the INGO/agency to reach the end recipient
- **Disbursement:** the process for the recipient to access and utilise the funds it has received

The figure below presents the current state of mobile money cash transfers in Somalia.

Figure 1

Mobile money cash transfer in Somalia: Current state mapping





1.1

Step 0: Negotiations between INGOs/agencies and MPSPs

Prior to engaging in mobile money transfers, INGOs/agencies negotiate service agreements with MPSPs. In Somalia, the process can be rather cumbersome as negotiations have to be conducted with MPSPs across all three Somali regions to enable country-wide coverage, which cannot be avoided due to the regionalisation of the MPSP markets.

Two main types of contracts can be negotiated with MPSPs:

- Framework agreements, whereby INGOs/agencies and MPSPs agree on a set of services and fees over a certain period of time (generally a few years);
- Service contracts, which are one-off agreements that apply on a project basis.

Experiences with contract negotiations with MPSPs vary and depend on the MPSP in question.

“We conducted a long negotiation process with [MPSP]. Negotiations are complicated and some things are unclear and still being worked on in the contract.” - INGO/agency

“It is not challenging to deal with MPSPs. They have been responsive.” - INGO/agency

The main challenges identified during the negotiation phase include:

Lack of transparency regarding the service offerings and the pricing;

Limited technical knowledge on the part of the INGOs/agencies thus limiting their capacity to assess the risks.

“Humanitarian agencies contribute to our income very little [...] we just provide services to them to keep our GSM SIM card customers happy.” - MPSP

“There is no set fee for all, we do negotiations per agency.” - MPSP



1.2 Step 1: Registration

1.2.1

Step 1.a. Collection of recipient personal data

Local implementing partners (such as local NGOs) support INGOs/agencies in identifying recipients, assessing eligibility, and registering them into the cash transfer programme. At registration, they collect personal information about the recipients

such as their name, ID number (if available), phone number (linked to a mobile money wallet), registration criteria and sometimes photo and fingerprints.

“I was asked my full name and telephone number, and if it was registered with money transfer. I was not asked for proof of identity.” – **Male recipient, Kismayo**

“I shared my personal information and my thumb print, and I did not share any identity document. They did check whether I was registered for another cash transfer programme.” – **Male recipient, Baidoa**

Main challenges/risks: Most Somalis do not have an ID, particularly in South-Central Somalia and Puntland where there is no formal ID system. This renders the identification of recipients particularly challenging. INGOs/agencies therefore rely on clan leaders, trusted community workers or government officials to testify the identity of recipients. Biometric data, most commonly fingerprints, is often collected to enable the INGOs/agencies to have comparable and unique personally identifiable data.

This information can also be used in later programme stages as a proof of identity. Associated challenges are:

- Recipients may register under false names or provide another person's phone number out of fear or misunderstanding;
- Recipients may register for several programmes (duplication);
- Data entry mistakes or misspelling of the names and phone numbers may occur.

“With the multiplication of programmes, it is becoming important to check for duplication.” – **INGO/agency**



1.2.2

Step 1.b. Supply of free SIM cards

Some 12 per cent of the population of Somalia do not own a SIM card, which is a requirement for mobile money transfers.² INGOs/agencies usually provide SIM cards for free to those who are not equipped. Some INGOs/agencies negotiate with MPSPs to both provide recipients with free SIM cards as part of their agreement and accompany them during the registration process to register new SIM cards and mobile money wallets for the recipients in their own name. The bulk distribution of SIM cards has two negative impacts:

- It is harder for agencies to contact recipients who have received additional SIM cards as they are likely to only have the SIM active to receive distributions, and then revert to using their existing SIM card for communication;

- Recipients' transaction records are spread across multiple SIM cards making it harder to demonstrate a credit history which could be used for access to finance.

Main challenges/risks: While 90 per cent of residents own a phone in Somalia,³ some recipients do not own a handset and would need to borrow or buy one to be able to access their mobile wallet.

“The community leader made a list of people who do not own a SIM card and delivered it to the implementing partner. They then came to the village with a number of SIM cards for those unregistered recipients. They only had to take pictures, give their names and ages to get a SIM card. Frankly, we have not come across a simpler process.” – **Male recipient, Borama**

1.2.3

Step 1.c. Recipient list and registration data transfer to INGOs/agencies

Recipients' registration data (name, ID number if available, photo, fingerprint, phone number and other) are shared by the local partner with the INGO.

² Mobile Money Ecosystem in Somalia, The World Bank/Altai Consulting, June 2017

³ Ibid.



1.3 Step 2: Money transfer

1.3.1

Step 2.a. Bank transfer to the MPSP by INGOs

Before launching a payment to recipients, INGOs/agencies transfer money to MPSPs' bank accounts, which corresponds to the total amount of money to transfer to all recipients, plus the agreed fees (generally between 1 per cent and 2.5 per cent of the total transferred amount). INGOs/agencies can transfer the amount to the MPSP's Somali bank account through bank transfers if they have a Somali bank account. Those based outside of Somalia (usually in Kenya), either transfer the funds to MPSP's foreign bank accounts (usually in Djibouti) or work with Kenyan banks that themselves interact with the corresponding bank in Somalia. The transfer can either be conducted prior to the transfer to recipients (advance payment) or after distribution once the MPSPs provide proof of transfer to the recipients (payment in arrears).

Main challenges/risks: INGOs/agencies accept a certain amount of risk when conducting direct advance payments:

- INGOs/agencies bear the risk should the MPSP, for any reason (bankruptcy, technical failure, administrative closure, etc.), not be able to transfer the funds to recipients.
- For each payment, a small percentage of recipients will have inactive mobile money accounts (SIM cards lost or stolen, recipient deceased, etc.). This percentage is only known after distribution. Therefore, INGOs/agencies that make direct payments often transfer more money to the MPSPs than the recipients will receive. Fund re-balancing, where money is sent back or deducted from the next payment, is therefore necessary, and some INGOs/agencies negotiate this regularly. Other INGOs/agencies only do this re-balancing at the end of the programme period. In both cases, INGOs/agencies take the risk of sending more money to the MPSPs than will actually be received by the recipients.
- Additionally, INGOs/agencies that are based outside of Somalia are confronted with challenges when transferring money into Somalia as they are heavily scrutinised by banks as part of their Anti-Money Laundering/Counter Terrorism Financing (AML/CTF) policies. Banks (including those in Kenya where most INGOs that operate in Somalia are based) are being encouraged to become stricter when transferring funds to Somalia.

“We send the exact transfer amount to the MPSP after reconciliation. We used to send money to MPSPs in advance, but this exposed us to a risk. We now send money in arrears. Money is sent from our account in Somalia to the MPSP account in Somalia.” - INGO/agency

“There are concerns with the legislation regarding bank transfers to [Somali bank] via [International bank based in Kenya]: the Kenyan government is having concerns regarding how [International bank based in Kenya] operates in Somalia.” - INGO/agency



1.3.2

Step 2.b. Recipient payment data are shared with the MPSP

INGOs/agencies share their list of recipients with the MPSPs, including the name, phone number and the amount to be transferred for each recipient. The list is usually shared by email, in a Microsoft Excel file format.

Main challenges/risks: The rudimentary data transfer system (Excel file shared by email) is subject to multiple risks, including:

- Fraud on both the INGO/agency and MPSP side. Any employee that has access to the list can relatively easily add or delete recipients or change the amount to be transferred.
- Questionable data protection and security given the sensitivity of the information being shared (name, phone number, amount of money to be received).
- Inefficiency as INGOs/agencies have to share the recipient list with MPSPs every time they want to launch a new transfer.
- Mistakes and delays as the process involves multiple steps between the moment the INGO/agency decides to operate the transfer and the moment it is actually launched.

“Manual Excel [sent prior to each transfer] is another problem, as there may be lists of recipients which have previously been sent to [MPSP] with problems. The same recipients list might be sent again and we need to re-check, which does consume some time.” - INGO/agency

“There have been problems with manual inputting of excel sheets. Mistakes will always be made from time to time.” - INGO/agency

1.3.3

Step 2.c. Verification of recipient data against SIM registration data

Upon receipt of the Excel list, MPSPs import the file into their systems. The MPSPs verify whether the recipients' names and phone numbers sent by the INGOs/agencies match the information they have in their system. Discrepancies in the recipients' identity are then identified by the MPSP and shared back with the INGO. Funds can only be transferred if, for a given phone number, the recipient name provided by the INGO/agency matches the name in the MPSP customer list. When discrepancies are identified, the INGO/agency generally aims to correct them by correcting spelling and data entry mistakes and re-verifying the identity of the concerned recipient on the ground, thereby improving the overall quality of the registry. Once all corrections are made, INGOs/agencies provide the MPSPs with a letter authorising the transfer.

Main challenges/risks: All interviewed INGOs/agencies recognise the existence of discrepancies when conducting this verification against MPSP SIM registration data. The reported mismatch percentage varies significantly depending on the INGO/agency (from over 60 per cent to only a few percentage points). This wide range highlights the difficulty to conduct verification in the absence of unique identification data (such as a national ID number). Names are not always unique in Somalia and spelling differences are common, rendering the comparison and verification process complicated. In addition, resorting to manual corrections renders the process vulnerable to fraud particularly since MPSPs (and INGOs/agencies to a lesser extent) have an interest in ensuring they can transfer the money to the recipients quickly and simply.

“Much of the information we have about recipients does not match the information MPSPs have about them [in their customers list]. [At a given time], there was only a 34 per cent match between the identification from our registration and the identification from MPSPs.” - INGO/agency

“[INGO] sends a list of recipients to MPSPs, who check this master list against their own customers list. They check that the name matches, but it is rare that it does not match.” - INGO/agency

“The initial registration and matching of the INGO/AGENCY recipients list with the MPSP data is a big exercise. [...] Checking is done manually on our part.”
- MPSP

1.3.4

Optional: Step 2.d. Recipient verification using a PIN code

Some INGOs/agencies use an MPSP service which requires recipients to authenticate themselves before funds are transferred to their mobile wallet. Recipients receive an SMS/Interactive Voice Response (IVR) message which requires them to enter their Personal Identification Number (PIN). Once correctly entered, the funds are transferred by the MPSP to the recipient's wallet. This optional step is an additional security layer, which aims to improve the assurance that the person who will receive the funds is in fact the INGO's/agency's registered recipient (which they can prove by entering their

PIN). Should the SIM card be lost or stolen, the new recipient would not be able to access the funds because the PIN would be unknown to them. This step is only conducted by a few INGOs/agencies.

Main challenges/risks: Although this constitutes an additional security layer, entering a PIN does not guarantee the identity of the person using the phone (the PIN can be shared and used by others). Only unique personal biometric information could guarantee that the person using the phone at the time of money transfer is the INGO-registered recipient.

“The PIN based system [to verify recipients] is an added value. It is good to have it, but we need to move toward something else to increase confidence that we do not have diversion of funds. If we could have something in Somalia that was not just a PIN, it would be better. Fingerprints would be the best. There is never going to be a national ID system in the coming 5 years so it is worth investing in something at least.” - INGO/agency

1.3.5

Step 2.e. E-money transfer to the recipient wallet

MPSPs transfer the requested amount of e-money to the recipients' mobile money wallets.



1.4 Step 3: Disbursement

1.4.1

Step 3.a. Fund disbursement report shared by MPSPs to INGOs

Once funds have been transferred to all recipients, the MPSP shares a fund disbursement report with the INGO/agency by email, to inform the INGO/agency about the status of the payment. The report highlights accounts to which the funds could not be transferred to (inactive or blocked wallets for instance). For INGOs/agencies that use the PIN code verification system (step 2.d.), the report also highlights the date and time the recipients entered their PIN code to access the funds. The INGO/agency can then investigate recipients who did not enter their PIN code and was therefore not able to access their funds and take the necessary actions (re-train them on how to use the PIN system, update their registry if the recipient is deceased, etc).

Main challenges/risks: Disbursement reports are shared by MPSPs by email. While these reports are supposedly automatically generated by the MPSP's system, the fact that they are being shared "manually" (by email) by the MPSP (rather than automatically generated and shared directly with the INGO) makes them subject to fraud and error.

The purpose of the disbursement reports is limited. Disbursement reports only indicate whether the money has been sent to the recipients' accounts. In theory, MPSPs should know if, when and how the funds have been used by the recipients, although they do not share this information with INGOs/agencies for customer data protection reasons.

"We don't always trust MPSP disbursement reports in Somalia, whereas we might in other countries." - INGO/agency

"We don't know how recipients spend the funds. In most cases, these are unconditional cash transfers, and it is a private matter - we do not engage in such activities/monitoring. Unless there are proper regulations in place regarding this i.e. data privacy, consumer protection etc. to ensure consent we [MPSP] cannot share such info." - MPSP

1.4.2

Step 3.b. Funds utilisation by the recipients

Once recipients receive the funds on their mobile money wallet, they can use them as they wish in line with the principles of unrestricted cash transfers. They can either get the cash out at a mobile money agent, buy goods at any merchant outlet that accepts mobile money payments, transfer airtime, pay bills, transfer mobile money or deposit the money.

Main challenges/risks: INGOs/agencies do not know precisely how the funds are used by recipients (except if running post-distribution surveys - see step 3.c.).

1.4.3

Step 3.c. Post-distribution monitoring surveys

INGOs/agencies conduct post-distribution monitoring (PDM) surveys to both verify whether recipients have received the funds, collect information on funds utilisation, receive complaints and inform future programming and most significantly to understand how the transfers have

changed recipients' vulnerabilities. Surveys are either conducted via phone calls or face-to-face, generally every few months. Depending on the number of recipients it might not be possible to contact all of them, but rather only a representative sample.

“I contributed to surveys. I welcomed them because it will produce information that NGOs need to respond and oversees the impact of their work.”

– Male recipient, Baidoa

Main challenges/risks: PDM surveys are essential to control the mobile money cash transfer process but are expensive and time-consuming for INGOs. They can also be fatiguing for recipients who are frequently called to answer surveys. Depending on the number of targeted recipients, not all recipients

can be contacted and hence testify whether they have received their funds. Surveys can only be conducted every few months due to time and cost constraints. INGOs/agencies can therefore not immediately identify and tackle potential issues in the mobile money cash transfer process.

“Post-distribution monitoring is very logistically heavy.”

– INGO/agency

“We are not necessarily happy with the [PDM] system. It takes a lot of time of staff and recipients to get this breakdown of the spending. I feel this process could be a lot more intelligent.”

– INGO/agency

“If some agencies only do 100 cash transfers a month, this is easy to track. We have [thousands of] household recipients, so it is not possible for us to visit each of our recipients in person.”

– INGO/agency



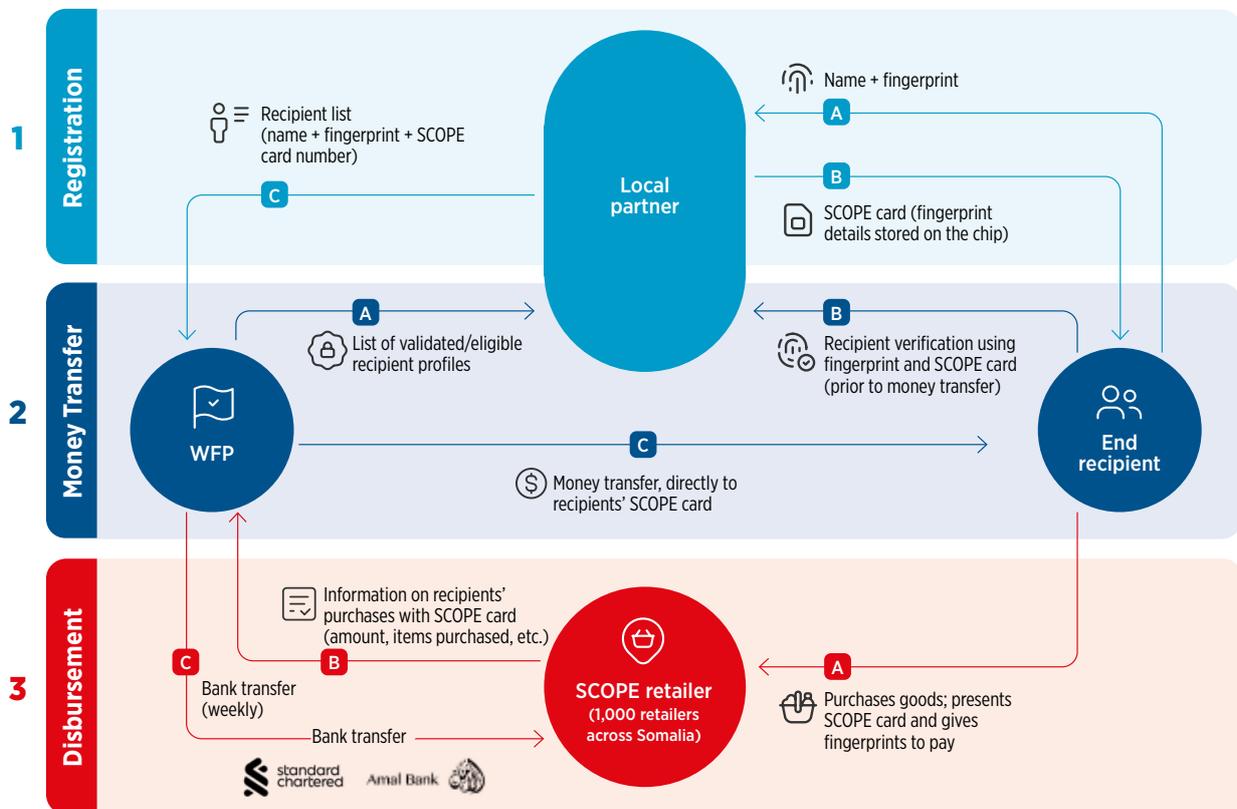
Focus Box 1: WFP SCOPE e-Voucher System

The WFP is the largest agency to conduct cash transfers in Somalia. It does so by using its own registration and cash transfer system called SCOPE whereby recipients' biometrics are checked at each step of the process. The robustness of the system in terms of KYC partly explains WFP's delay in switching to mobile money, as the current mobile money cash transfer process does not currently offer similar KYC checks. Understanding the SCOPE e-voucher system is therefore essential in order to propose an improved process for mobile money cash transfers in Somalia, in the aim of offering greater KYC guarantees.

Using the SCOPE system, recipients are registered (name, fingerprints, etc.) (1.a) and issued a SCOPE card, which contains a chip with all the registration information of the recipient (1.b). The recipient list is then shared with the WFP (1.c), that then shares back the list of recipients to whom it would like to send money with their local partner (2.a). Eligible

recipients are required to verify themselves with local partners prior to receiving the funds from the WFP (2.b). This biometric recipient authentication prior to funds transfer is the missing step in the current mobile money process (when it exists, it is only through a PIN rather than biometric data). Once recipients have identified themselves, funds are sent by the WFP to their SCOPE cards (2.c). Recipients are then free to visit any SCOPE retailer and to use their SCOPE cards and fingerprints to pay for the goods (3.a). Information on recipients' purchases are automatically sent to the WFP via the SCOPE system (3.b). SCOPE retailers are paid by the WFP via bank transfer (3.c)

The WFP also uses SCOPE for unconditional cash transfers, operated in partnership with a bank. The process is similar and recipients are expected to visit the bank branches and verify themselves with their fingerprints and SCOPE card before being able to withdraw the funds.



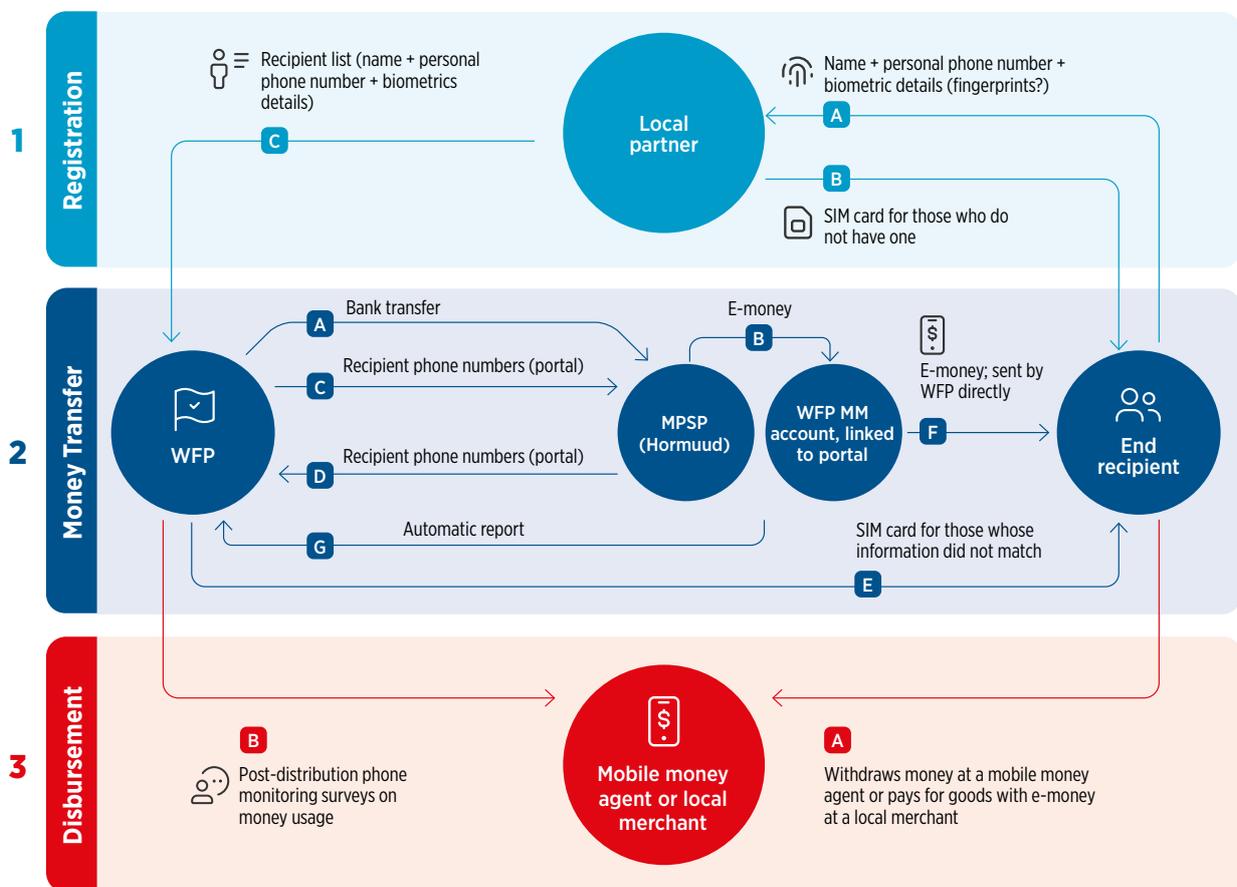


Focus Box 2: WFP Mobile Money System

Since April 2020, the WFP has been using mobile money cash transfers in Somalia. The move to mobile money was precipitated by the Coronavirus pandemic. While the mobile money process does not allow for similar KYC checks as for the SCOPE e-voucher system, it allows for greater reach and for the cash transfers to be conducted without physical interaction. Currently, cash transfers for the three regions are being conducted through Hormuud, which then handles partnerships with Gollis in Puntland and Telesom in Somaliland.

Using the mobile money system, recipients are registered (name, fingerprints, etc.) in the SCOPE system (1.a) and are issued with a SIM card if they do not have one (1.b.) by the local partner, that then shares the recipient list with the WFP (1.c). The WFP

then initiates a bank transfer to Hormuud (2.a.), that tops up the WFP mobile money account (2.b.). The WFP then shares a list of registered recipient phone numbers to Hormuud through a portal (2.c), that checks the phone numbers and sends the matching names to the phone numbers to the WFP (2.d.). When the names do not match the phone numbers, the WFP provides the recipients with SIM cards (2.e.) and once the reconciliation process is completed, the WFP sends the funds to the recipients directly through the WFP portal (2.f.). Recipients are then free to withdraw their money at mobile money agents or pay for goods at local merchants (3.a.). Finally, the WFP conducts post-distribution monitoring on a sample of their recipients to measure money usage (3.b.).





2



Future state mapping

The objective of this section is to suggest a future state mapping of mobile money transfers in Somalia, with the aim of improving the effectiveness, efficiency and transparency of the process. It draws from the lessons identified during the mapping of the current state and aims at solving some of the identified challenges/risks. Only suggestions considered as realistic and implementable have been suggested here.

Efforts are currently being made by the Federal Government of Somalia (FGS) with support from the World Bank Group to develop a digital ID system through the Somalia Capacity Advancement, Livelihoods and Entrepreneurship, through Digital Uplift Programme (SCALED-UP) and to implement an inter-bank payment system through the Somali Core Economic Institutions and Opportunities (SCORE) programme. The digital ID system and inter-bank payment system would improve the process significantly. However, these initiatives are expected to be developed over the long-term. The suggestions provided here concentrate on the shorter-term to enable to process to be improved in the meantime.

The current state mapping revealed five main challenges in the current mobile money cash transfer process:

- Long and cumbersome negotiation process between INGOs/agencies and MPSPs;
- Difficulty to identify recipients in the absence of an official ID system and therefore to avoid duplication;
- Lack of KYC checks prior to funds transfer to ensure that the person receiving the funds is the recipient who was identified by the INGO/agency;
- Risks of fraud, errors and data protection issues linked to the “manual” money transfer ordering process;
- Time, cost and insufficient coverage (for large programmes) of PDM surveys.

The future state mapping therefore proposes five main changes to address these challenges:

- **Service offering** increase through the provision of a menu of services by the MPSPs to increase the transparency as to the available services and associated range of fees, as well as a more systematic approach to framework agreements between INGOs/agencies and MPSPs;
- **A common recipient database** with which INGOs/agencies would be able to share information on their recipients. This would contribute to improved verification of the recipients’ identify and identification of duplicates. An encrypted database system could be used to protect confidentiality of recipient data and prevent INGOs/agencies from accessing the data of other INGOs/agencies, while enabling comparison between the different recipients lists;
- **A voice recognition system**, whereby recipients’ voices would be used as unique biometric identification data. Voices would be recorded at registration and recipients would be required to identify themselves with their voice to enable the funds to be transferred to their wallets;
- **Payment portals and e-wallets for INGOs/agencies**, to give them full autonomy and control over mobile money transfers. INGOs/agencies would transfer money to the MPSPs to top-up their own mobile money wallet and access a customised portal to add recipients and launch payments. No interaction with the MPSPs would be required, and the payment ordering process would be fully automated and directly integrated into the MPSPs’ mobile money infrastructure systems;
- **IVR and Unstructured Supplementary Service Data (USSD)** services to conduct exhaustive, timely and affordable PM surveys to verify funds receipts and utilisation.

2.1 Step 0: Negotiations between INGOs/agencies and MPSPs

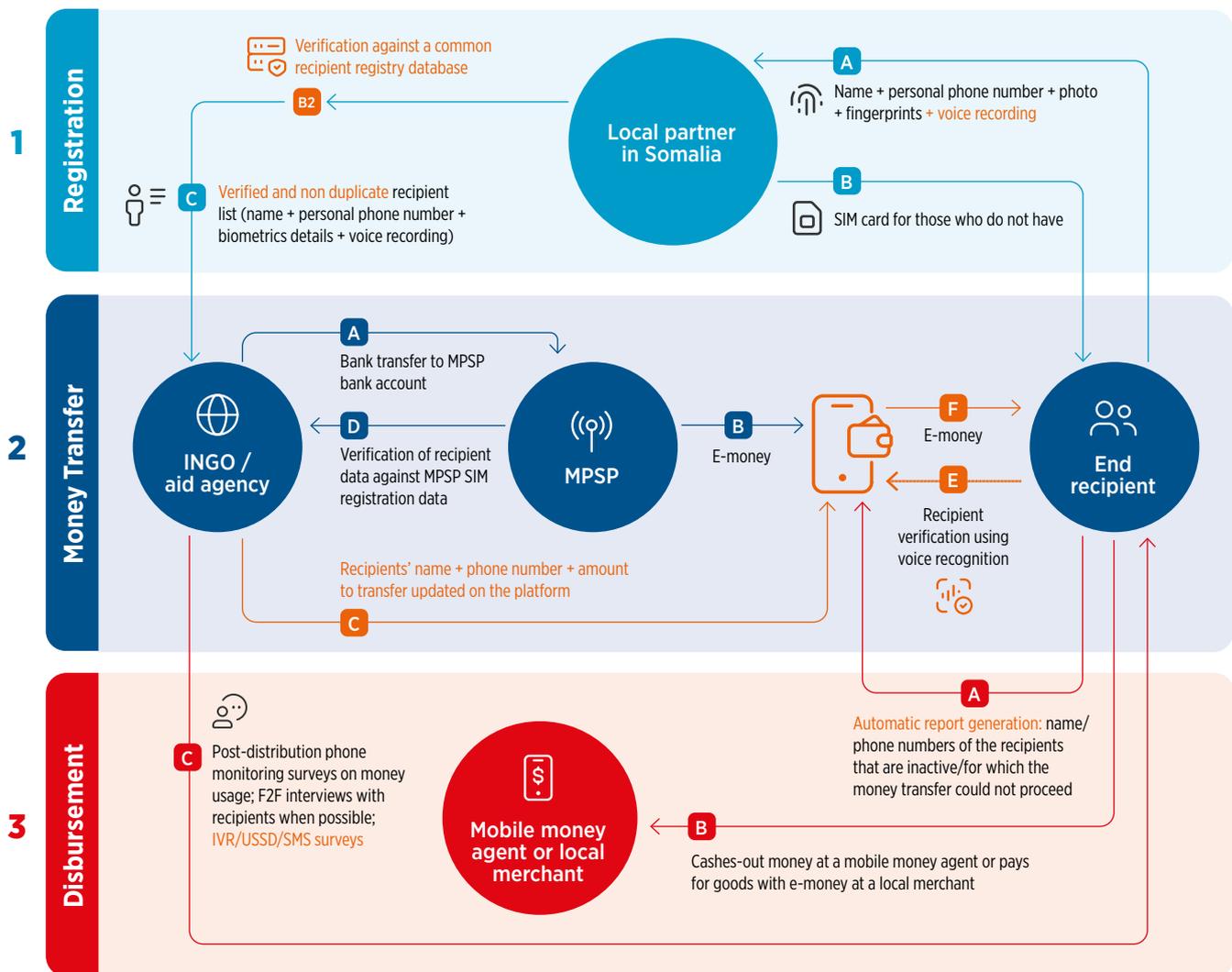
Whenever possible, INGOs/agencies could try to establish framework agreements with MPSPs, encompassing the different services they expect to receive from MPSPs (free SIMs, participation to recipient registration sessions to register SIMs and open wallets, payment portal and opening of an e-wallet for the INGO/agency, voice recognition

verification prior to funds transfer, IVR/USSD for PDM surveys, etc.). MPSPs on their side should try to offer INGOs/agencies a “menu of services” with the available services cited above and a range of associated fees, so that real partnerships (rather than the sole provision of mobile money payment services) can emerge.

Figure 2

Mobile money cash transfer in Somalia: Future state mapping

Suggested adjustments to current state



2.2 **Step 1: Registration**

2.2.1

Step 1.a. Collection of recipient personal data including voice recording

At registration, local partners could collect, in addition to the other personally identifiable information (PII) already being collected, a voice recording of the respondents. Voice is unique personal data which could be used by recipients

to identify themselves remotely to authorise the transfer of funds to their wallet. Some MPSPs in Somalia are currently piloting this technology with INGOs/agencies. Specialised external technology partners could also supply such technologies.

“The idea is that [MPSP] joins us at registration. We register the basic information and fingerprints, while they would register recipients’ voices.” - INGO/agency

How it improves the current state: One of the major challenges is the absence of unique personal identification data in Somalia. Fingerprints are recognised as reliable unique identification data but require the respondent to travel to verify himself/herself in person to a location specifically equipped with fingerprint readers. Voice, however, has the property of being a unique personal identification data that recipients can use from their home to

verify themselves. Once recipients’ voice recordings have been registered in their profiles, IVR calls could be sent to recipients prior to fund transfer, asking them to say a simple phrase orally to verify themselves against their pre-recorded voice print. Voice verification has the additional benefit over fingerprints that it is not currently possible to understand 1:n identification at scale, making it an inherently better system in terms of data protection.

“The biggest fear [with mobile money usage] is KYC issues, specifically for Somalia. Through mobile money, you are unable to confirm who the recipients are.” - INGO/agency

Alternatives to be considered: Other alternatives to voice recognition include facial recognition or fingerprint recognition based on smartphone

cameras/fingerprint readers. These alternatives however require the recipient to own (or at least have access to) a smartphone to identify themselves.

“Our IT team validated fingerprints as the best option in terms of KYC, but most recipients do not have access to a smartphone.” - INGO/agency

“I prefer biometric registration, but the problem is we cannot afford to buy smartphones.” - Male recipient, Kismayo



2.2.2

Step 1.b. Supply of free SIM cards

Same as current state (see above). The presence of the MPSP at the registration sessions to register

new SIMs and open mobile money wallets should be systematised.

2.2.3

Step 1.b.2 Verification against a common recipient registry database

INGOs/agencies could work together, possibly with the support of the Cash Working Group, to develop a common database of their recipients. INGOs/agencies should not be able to view information of other INGOs/agencies for data protection reasons, but should be able to remotely query the database to run comparisons between the information collected by others, and the information they just collected during the registration.

INGOs/agencies could enter the information collected during the registration process into the common registry and ask the system to look for similar information registered by other INGOs/agencies (similar names, phone numbers, fingerprints, etc.). If matches are found, the INGO/agency could: i) check whether the other personal information associated with the recipient are similar to the ones it has just collected (i.e. if the common registry finds a match for a phone number, it verifies

whether the recipient's name is also the same) and ii) check potential duplicates that are already registered with similar ongoing programmes of other INGOs/agencies.

Such systems, known as “e-KYC” are already being used by governments in some countries such as India and Kenya.⁴ There, financial service providers (among other stakeholders) query the Government ID to verify the identity of new customers. New customers provide their fingerprints to the financial service provider, which queries the Government database to obtain information (name, address, etc) on the person it corresponds to, thereby enabling verification without physical ID documentation. Limitations are applied so that only certain information is made visible in order to respect data protection regulations. Financial service providers cannot access the full database, only query for verification purposes.

“ Having a single registry is possible. In some countries, there is a cash consortium which is able to see in almost real-time which programme registers who [as they all use the same system]. [...] But it is easier to implement when the money of all programmes comes from one single donor and this is not the case in Somalia.”

- INGO/agency

⁴ Overcoming the Know Your Customer hurdle: Innovative solutions for the mobile money sector, GSMA, 2019.



How it improves the current state: Each INGO/agency currently has its own registry which is not shared with others (due to data protection rules, competition between stakeholders, etc.). As a result, while probably millions of Somali people are registered (including with biometric data), no common database of Somali people can be leveraged. The suggested process would enable INGOs/agencies to increase the verification of the

recipients' identity (by conducting comparisons with other databases) and allow for de-duplication (by identifying those enrolled in several programmes). An encrypted system could enable INGOs/agencies to operate the checks without allowing them to access other INGO/agency databases, thereby overcoming the identified barriers to a common recipient registry.⁵

“Different agencies currently register recipients using different systems. Ideally, we would all share a registration system.

The barriers to this includes agencies having different perceptions of a joint system, some agencies are less open in terms of accountability and they are not willing to share their information, some agencies are competitive and see other agencies as a threat and finally different agencies have different policies regarding privacy.

We need to build a common vision through a process. We need to build a common understanding, stating why harmonisation would be beneficial for all.”

- INGO/agency

Alternatives to be considered: Any initiative that could enable some sort of (even basic) recipient data comparison between INGOs/agencies would improve the current process by increasing recipient

identity verification and enabling de-duplication. Options to enable data comparisons without giving access to the data should be considered to increase adoption of such a system.

“I am not suggesting using a single registry, but registries could talk more to each other. If there were a system where they could share registry info, that would be helpful.” - INGO/agency

2.2.4

Step 1.c. Recipient list and registration data transfer to INGOs/agencies

Same as current state (see above), except that the data shared would be previously verified against other existing registries and eventual duplicates identified.

⁵ The development and coordination of such a database is a big venture and would require the participation of a range of stakeholders. The practical steps to developing such a database is described in a separate guideline.



2.3 Step 2: Money transfer

2.3.1

Step 2.a. Bank transfer to the MPSP by INGO/agency

Same as current state (see above).

2.3.2

Step 2.b. Recharge of INGO/agency mobile money wallet by the MPSP

Each INGO/agency could have their own mobile money wallet set up with each MPSP, which would be recharged by making bank transfers to the MPSP. Upon receipt of the funds by the MPSP, the INGO/agency wallet would be credited with the equivalent amount in e-money, which could be used as desired to flexibly transfer money to recipients. INGOs/agencies' wallets would be accessed using a web platform, which would enable INGOs/agencies to operate all their mobile money transactions remotely and autonomously, without the involvement of the MPSP.

How it improves the current state: The combination of e-wallet and web platform drastically reduces the need for human interventions to operate mobile money transfers. Once a general service agreement has been signed between the MPSP and the INGO/

agency, there is no further need for INGOs/agencies to interact with MPSP employees to operate transfers, thereby reducing risks of human error and fraud, while significantly speeding up the process of operating cash transfers (see following steps for more details).

Alternatives to be considered: Some technology provider firms are specialised in providing such services including designing platforms and application programme interfaces (APIs) to connect to MPSPs' mobile money systems. They generally also act as aggregators, thereby conducting all the negotiations with MPSPs. It is however unsure whether they would be willing to work in Somalia,⁶ although a global proposition from the Cash Working Group may be an incentive for them to enter the market.⁷

“Rather than letting [MPSP] send money to recipients, [agency, in the framework of a pilot project] negotiated a portal. The money received by [MPSP] is in a [agency]-specific mobile wallet and [agency] has access to a portal whereby we control sending the transfers to recipients ourselves.” - INGO/agency

“We have recently developed a system which allows humanitarian agencies to enter their orders for cash transfer into the system themselves, which cuts-out any errors. Humanitarian agencies will be able to easily obtain reports, such as how much has been sent, the balance remaining, and a list of recipients who haven't yet received the money, and any errors which may be present. We've used this system with a few agencies so far, but overall we have set an aim whereby we would like all our cash transfer customers to use this system within the coming 3 months.” - MPSP

⁶ Technology providers seem reluctant to enter the Somali market due to the country's general instability, but also the lack of clear regulation for digital financial service providers.

⁷ Similarly to the common database, a separate guideline has been developed detailing practical steps towards the development of such a platform.

2.3.3

Step 2.c. Upload of recipients' profiles on the INGO/agency platform

The INGO/agency would directly upload (from an Excel template or the shared database described in step 1.b.2. for instance) its recipients' profiles (name, phone number, etc.) on its platform. Whenever it would want to operate a transfer, it would select the recipients it wants to send money to directly from the platform, enter the amount to send to each recipient and order the transfer. Each time the INGO/agency would register new recipients, it would easily add them to the platform (by uploading the Excel file of newly registered recipients).

How it improves the current state: INGOs/agencies could then manage entirely autonomously the e-money transfer process to their recipients and notably the management of their cash transfer recipient list prior to each transfer. This automation would make the process more secure (less risk of fraud as no files are shared with MPSP employees, no personal recipient data is shared by email, etc.) and faster as it would not require the MPSP to conduct any actions such as receipt of the Excel file by email, upload the Excel data into their system, activate the payment, etc. INGOs/agencies would be autonomous and the entire process would be automated. In addition, as recipients' profiles would be stored on the platform there would be no need to recreate a new recipient list prior to each transfer: existing lists would simply be updated.

Alternatives to be considered: For INGOs/agencies that already have a recipient management database, it would in theory be possible to negotiate with MPSPs to access their mobile money system using APIs. This would directly link INGO/agency databases with MPSP mobile money systems, thereby enabling mobile money payments. Technology providers generally offer this type of integration with MPSPs via APIs to their customers who already have some technical capabilities. Alternatively, the mobile money industry and the GSMA developed the GSMA Mobile Money API, which aims at providing an easy to use, secure and harmonised API for mobile money transactions and management.⁸ It is however unclear whether Somali MPSPs would accept to share APIs with INGOs/agencies to allow them to plug into their system.

“Some humanitarian agencies may require services which involve API integrations. Although there are none currently, we are under negotiation with some agencies for this type of service.” - MPSP

⁸ <https://www.gsma.com/mobilefordevelopment/mobile-money/mobile-money-api/>



2.3.4

Step 2.d. Verification of recipient data against SIM registration data

The verification of recipient data against SIM registration data would be done automatically, as the INGO/agency wallet and platform (which includes the recipient list) would be directly plugged into the MPSP's mobile money system. For each new recipient added by the INGO/agency on the platform, the platform would automatically request a match with the MPSP customer database, allowing INGOs/agencies to view any discrepancies in near real-time, such as the same phone number being associated with a different name in the MPSP customer list. This information would automatically be visible on the INGO/agency platform, and the INGO/agency could then take the appropriate

measures to handle the discrepancies for the concerned recipients, by verifying spelling/data entry errors, re-verifying the information collected, etc.

How it improves the current state: The recipient data verification against SIM registration data would be entirely automated and would not require any an interaction with the MPSP. It therefore limits cases of fraud and accelerates the process. However, although it would improve the current process, the SIM registration data may not be fool proof to begin with. Only a national ID database would facilitate the validation exercise.

2.3.5

Step 2.e. Recipient verification using voice recognition

INGOs/agencies could initiate the transfer of the funds to the recipients themselves. To validate this transfer, recipients would be required to use their voices to authenticate themselves and prove that they are the ones using the mobile phone they registered with. Typically, when the INGO/agency would order the transfer from the platform, an IVR

call would be sent to the recipient requesting them to orally speak a specific sentence. Their voice would be recorded and compared with the characteristics of the voice recorded at registration. Upon the recognition of the voice by the system, the funds would be transferred to the recipient's wallet.

“Recipients would receive an SMS prior to disbursement and be asked to say a sentence which would allow for a voice check before disbursement. We are currently piloting that idea.” - INGO/agency

“[Voice recognition] is currently under the pilot phase. The way it works is that the recipients call the IVR which guides them through the process. Then they speak the password to the IVR which will allow release of funds [to their wallets]. - MPSP



How it improves the current state: This step is similar to step 2.d. (recipient verification using a PIN code) in the current state mapping. However, as voice is a personal and unique identification data, it increases the guarantee that the person holding the

phone and who is about to receive the funds is the intended recipient, whereas a PIN could easily be shared with others. Using voice recognition rather than SMS would also improve access to illiterate populations.

“We would like KYC checks through biometric information. We would be interested in voice verification prior to accessing funds.”

- INGO/agency

“There have been some pilots with voice verification. If that can come into place, that would be welcome to have another layer of verification/compliance.”

- INGO/agency

Alternatives to be considered: Some Somali MPSPs are already piloting such voice recognition systems. External technology providers can also provide such types of technologies. As mentioned previously, other alternatives to voice recognition include facial

recognition or fingerprint recognition based on smartphone cameras. These alternatives however require the recipient to own (or at least have access to) a smartphone to identify themselves.

“We would be more interested in a service provider providing this [type of biometric verification] because it would take forever if done by MPSPs or the government.”

- INGO/agency

2.3.6

Step 2.f. E-money transfer to the recipient wallet

Upon authentication of the recipient using voice, the funds are transferred directly from the INGO/agency wallet to the recipient’s mobile money wallet.

How it improves the current state: The entire transfer would be operated using MPSP infrastructure, but without any intervention from

the MPSP or its employees, which would limit risk of fraud, human error and improve the overall efficiency of the process. It would also give INGOs/agencies ownership and control over the entire cash transfer process.



2.4 Step 3: Disbursement

2.4.1

Step 3.a. Automatic fund disbursement report generation, available on the INGO/agency platform

Once funds have been transferred to all recipients, a report could be automatically generated by the MPSP system and made available on the INGO/agency platform in near real-time. For each recipient, the report would indicate i) whether the funds have been sent to the mobile money wallet (or whether the wallet is inactive or blocked for instance) and ii) whether the recipient has authenticated himself/herself and has received the money on his/her wallet.

How it improves the current state: Disbursement reports would be generated automatically and accessible in real-time on the INGO/agency platform. The automation and absence of human intervention in the process would limit cases of fraud and enable INGOs/agencies to know in real-time which recipients have inactive or blocked wallets, which did not authenticate themselves yet, etc. They could therefore take the necessary corrective actions. Finally, only INGO/agency authorised staff could access the disbursement reports, thereby increasing the confidentiality of the process and security of recipient data.

2.4.2

Step 3.b. Funds utilisation by the recipients

Same as current state (see above).

2.4.3

Step 3.c. Post-distribution monitoring surveys

Same as current state (see above). INGOs/agencies could add IVR/USSD/SMS surveys to their PDM toolbox. IVR calls could be sent to recipients, who would respond (orally or using a numeric keypad) to survey questions regarding the receipt of funds and fund utilisation. Recipients could access the USSD menu using a short code (which could be sent to them via SMS) and start answering basic questions. An SMS with survey questions could also be sent to recipients, who would simply reply to the SMS by typing a number. Literacy levels are obviously a consideration here.

How it improves the current state: IVR/USSD/SMS surveys are cheaper and less time-consuming for INGOs/agencies staff than face-to-face or phone

surveys. They also enable access to all recipients, rather than just a sample. They are also less intrusive than face-to-face interviews or phone calls. As a result, IVR/USSD/SMS surveys could enable more frequent PDM than other tools, thereby improving the reactivity of INGOs/agencies in case of problems encountered by recipients during the cash transfer process.

Alternatives to be considered: IVR calls/ USSD short code/SMS surveys could be provided by the MPSPs directly, but some technology providers are specialised in organising such surveys. They negotiate directly with MPSPs and ease the process of organising the surveys for INGOs/agencies.

“Maybe in the future if the humanitarian agencies work with us, we can develop a sort of solution together [...] so that humanitarian agencies could follow up the disbursed funds.” - MPSP



3

Recommendations

This document has provided a general overview of the current mobile money cash transfer process in Somalia as well as its associated risks and challenges. It has then provided recommendations and a way forward towards a future state. Five solutions have been identified to improve the efficiency of the process for all stakeholders involved. Recommendations have been developed to provide a deeper dive into each of these solutions and act as supporting documents to this process mapping. Recommendations on the following topics have been developed:

- MPSP service offering;
- Automation of the cash transfers;
- Post distribution monitoring;
- Common recipient registry; and
- Proof of ID.

An additional guideline has also been developed on the enabling ecosystem which would allow for the implementation of these solutions. These six guidelines are supplemented by an analysis document on Somalia's policy and regulatory environment, giving a broader overview of existing policies and regulations and potential areas of expansion.

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