Developing guidelines
for cash transfers in Somalia:

Proof of ID

This document *Recommendation 5 – Proof of ID* belongs to a larger set of recommendations aimed at improving mobile money cash transfer processes in Somalia. Topics covered in the set of recommendations include: MPSP service offering, automation of the cash transfers, post distribution monitoring, common recipient registry, proof of ID, and enabling ecosystem. This document focuses on biometrics as a proof of ID.

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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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1 Current state

In the absence of an official ID system in Somalia, the majority of INGOs/agencies record recipient biometrics in the form of fingerprints at registration. This allows the INGOs/agencies to conduct their own KYC checks and avoid duplication of recipients within their own system. In addition, more risk-averse INGOs/agencies such as the WFP, using the SCOPE e-voucher system, require their recipients to provide their fingerprints twice at disbursement, once to unlock the funds on the recipient SCOPE cards and a second time to spend the funds within the pre-approved stores. This allows the WFP to ensure that the funds are being disbursed to and spent by the correct recipients, in addition to collecting information on how the funds are utilised.

Another form of biometrics is also being piloted by CARE International and Telesom in Somaliland: voice ID verification. The concept is for the voices of recipients to be recorded at registration to form a 'voice stamp', and at the time of disbursement the recipients will receive an IVR call instructing the recipient to speak a specific sentence. If this spoken sentence matches the oral stamp, the funds are disbursed to the recipient. This allows for an additional layer of verification of the identity of the person receiving the funds. In the current state, in terms of verification of receipt of funds, most INGOs/agencies rely on MPSPs sending a list of inactive numbers, conducting PDM in the form of surveys, and providing a hotline to recipients in case they do not receive the funds, none of which allow the identity of the recipient to be verified at disbursement.

2 Identified challenges

All interviewed INGOs/agencies expressed that they are interested in biometrics for two purposes:

• KYC checks in verifying the disbursement of funds to the correct recipients, and

• De-duplication to avoid the same recipient benefitting from multiple cash transfers.

According to INGO/agency security teams, fingerprints are the most reliable form of biometrics and allow for more secure KYC checks. They all also expressed an interest in voice recognition as a form of biometrics that would be easier to implement to ensure the disbursement of funds to the correct recipients. Development INGOs/agencies expressed more enthusiasm about voice recognition and cited it as a priority. Humanitarian agencies felt it was less of a priority due to the nature of their cash transfers being sent during emergencies and crises. However, they did express their interest in an additional layer of authentication. While targeting may be more of an issue for humanitarian agencies when registering recipients remotely, they are interested in increasing the likelihood that the person they send the funds to are the targeted recipients.

MPSPs expressed willingness in developing and implementing further layers of authentication checks during the process, but shared that they had not developed these services yet because INGOs/agencies had not expressed clear interest in such additional services. MPSPs also shared they had to invest a lot of time and money to set up the voice recognition system.

> " We are not investigating [additional solutions] nor interested in doing the following now according to my knowledge because there is no complaint about the current situation."
> **– MPSP, Puntland**

3 Potential solutions[1]

INGOs/agencies have expressed interest in confirming the identity of the person receiving the funds.

Focus Box

Existing Solutions as Proof of ID in other contexts

Several solutions currently exist in other contexts to verify the identity of the fund recipient. For each of the solutions, the recipient would first receive an SMS or IVR message stating that the funds are available for disbursement and requesting for identification:

• **SMS and PIN:** The recipient enters their PIN to unlock the funds.

• **Oral password:** The recipient provides a unique oral password to unlock the funds.

• **Fingerprint recognition:** The recipient provides their fingerprint to unlock the funds.

• **Facial or iris recognition:** The recipient provides their image (photo or video) or iris scan to unlock the funds.

• **Voice recognition:** The recipient provides their voice stamp to unlock the funds..

Strengths and Weaknesses of Solutions as Proof of ID

Existing Solutions	Strengths	Weaknesses
PIN	• Easy to implement • Cheap • Only requires a simple phone set	• PIN could be shared
Oral password	• Only requires a simple phone set	• Password could be shared • Automated speech-to-text engine does not exist for Somali
Fingerprint recognition	• Biometrics cannot be shared • Fingerprints already recorded at registration	• Requires access to a smartphone • Expensive to set up
Facial or iris recognition	• Biometrics cannot be shared	• Requires access to a smartphone • Need to collect recipients' face or iris scan • Expensive to set up
Voice recognition	• Biometrics cannot be shared • Only requires a simple hand-set	• Need to record recipients' voice stamps • Expensive to set up

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1   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.

Voice recognition is the only solution that could serve its intended purpose as a proof of ID in Somalia since it fulfills the two main criteria: it is a biometric solution and it only requires the recipient to have access to a simple hand-set rather than a smartphone.

Voice recognition is already being used in other contexts to boost security. In Kenya, Safaricom launched *Jitambulishe*, a voice biometrics identification system which enables subscribers to identify themselves without customer care agents in order to access assisted services.[2]

However, the voice recognition solution has several potential limitations:

- **Cost:** the initial development and set-up is expensive, and requires full support from the MPSPs;

- **Recipient trust in and response to the solution:** in Malawi and Kenya, recipients seemed to respond positively to the voice recognition solution overall and had high levels of confidence and interest in the solution, but shared a number of concerns:[3]

  - Reliability: many users expressed their concerns about the potential for recipients' voices to change over time or due to illness;

  - Skepticism about the uniqueness of each individual's voice;

  - Ease of use: many users shared concerns about their low levels of digital literacy and perceived their technology to be complicated;

  - Rumors about fraudulent calls.

" There are a few challenges in setting up the voice recognition system:

- The initial cost of setting up the system is high. We are currently sharing the set-up cost with Telesom and [someone else], but we have the funds to do so

- Information about availability of voice recognition and how it works is missing

- It depends on the scale of cash transfers. If some agencies only do 100 cash transfers a month, this is easy to track. We have 60,000 HH recipients, so it is not possible for us to visit each of our recipients in person." **– INGO/agency**

Similar concerns could be expected from recipients in Somalia. Recipient response will be measured during the Telesom-CARE International pilot currently being conducted in Somaliland. Preliminary discussions with recipients did however provide insights into concerns around voice recognition.

" The majority of the community in this village are not literate. I might be able to use this system easily but others would face a great challenge with this procedure." **– Female recipient, Borama**

" It is very difficult to recognise somebody's voice. It changes over time. If the person gets a common cold, which is common in the camp, the voice changes." **– Male recipient, Kismayo**

" The system already in place is satisfactory for us. We are very pleased with using pin codes. It has made our lives easier and it would be very time and energy consuming if we establish a new system now." **– Female recipient, Borama**

In order to address the concerns, the following solutions could be implemented:

- Common financing of the voice recognition solution between INGOs/agencies and MPSPs across South-Central, Puntland and Somaliland (although some investment has already been made by Telesom and CARE International in Somaliland);

- Conducting awareness campaigns and trainings of recipients on the use of the solution and on how to avoid becoming a victim of fraud.

2   https://www.safaricom.co.ke/annualreport_2018/jitambulishe-leveraging-voice-biometrics-to-boost-security.php
3   Opportunities for Improving Digital Identification in Social Cash Transfer Programmes through Mobile, GSMA, April 2020

4 Targeted recommendations

Stakeholder	Recommendation	Difficulty[4]	Timeframe[5]	Cost[6]
CWG	Lead discussion (on both financing and coordination) to expand voice recognition for disbursement beyond the CARE International-Telesom pilot and Somaliland	Moderate	Medium-term	High
INGOs/ agencies	CARE International to share their findings about their experience setting up the voice recognition solution in Somaliland with other INGOs/agencies during a CWG meeting	Low	Short-term	Low
	Engage in efforts lead by the CWG and provide funding towards the implementation of the voice recognition solution	Moderate	Medium-term	High
MPSPs	Hormuud and Gollis to engage with Telesom to benefit from their experience in setting up the voice recognition solution	Low	Medium-term	Low
	Engage in efforts lead by the CWG and continue R&D efforts towards the implementation of the voice recognition solution	Moderate	Medium-term	High
Government	Lead on the creation of a Government national digitial ID system, where registration is not based on a birth certificate but simply on the provision of biometric data to enable anyone to register, through SCALED-UP with support from the World Bank Group. The system would not aim to verify citizenship, only identity	High	Long-term	High

4   The level of difficulty refers to the level of effort and coordination required to implement the recommendations. Recommendations with a 'low' difficulty level might only require coordination within one type of stakeholder, while those with a 'high' level may require coordination between multiple types of stakeholders.

5   The timeframe refers to how long it is assumed to take for a recommendation to be implemented. 'Short-term' recommendations are those that could be implemented within a period of three months, 'medium-term' could be implemented between three months and year, while 'long-term' recommendations could be implemented over period of more than a year.

6   The cost refers to how much each recommendation is expected to cost to implement. 'Low'-cost recommendations should require little to no cost at all to implement, 'medium'-cost recommendations would require a certain amount of investment but which could be covered by one type of stakeholder, while 'high'-cost recommendations would require significant investment from multiple types of stakeholders.