

STELLAR AID ASSIST

**Transforming Humanitarian Aid Delivery
Through Blockchain**



ABOUT STELLAR

What is Stellar?

A public, decentralized, fast, scalable, and uniquely sustainable blockchain built for financial products and services

What is the Stellar Development Foundation?

A non-profit organization focused on working with and supporting changemakers to create equitable access to the global financial system through blockchain




A CHALLENGING PICTURE

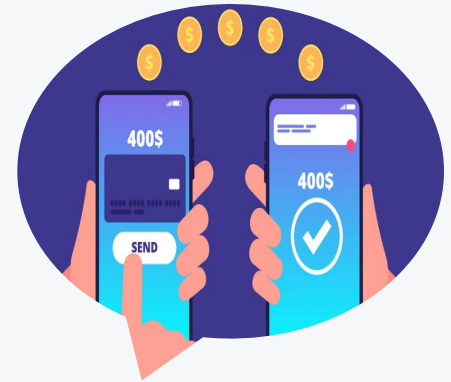
- Over **123 million people** globally are currently displaced, with **nearly 16 million of those in the Asia-Pacific region**.
- Humanitarian crises are escalating, driven by **conflict, climate change, and natural disasters**.
- The Grand Bargain commits us to **increasing the routine use of cash for humanitarian aid**; and **investing in new delivery models that can be increased in scale**.
- But **delivering cash in fragile contexts is be hard**.



WHAT CAN WE DO?

Introducing blockchain-based digital payments

- Payments made from an organization to an individual, or between individuals, that are **recorded on a blockchain** (like Stellar).
- Use distributed ledger technology to securely process transactions, **reducing the need for legacy intermediaries like banks.**
- Data recorded on the blockchain is **immutable, verifiable, and tamper-proof.**
- Payments settle in an average of **5.8 seconds on Stellar; 24/7/365.**
- Payment processing fees are **virtually free on Stellar** (~\$0.01 per 10,000 transactions).
- **Stablecoins** are typically used as the payment instrument—fully reserve-backed digital currencies that are pegged to a stable asset (like the US dollar) to reduce volatility.
-  Stellar is approved for use by the SEC, NYDFS, RBA, and others.



STELLAR AID ASSIST: A FIRST-OF-ITS-KIND CASH ASSISTANCE SOLUTION

Low-cost, near-instant, transparent way to send payments to multiple individuals at once

Distribute stable digital currency to eligible recipients for cash transfers and staff payments

Created in consultation with (and still in use by) UNHCR when the conflict broke out in Ukraine in 2022.



Digital currency (ex: Circle's USDC) sent on Stellar blockchain provides a stable store of value to recipients.



Assets sent into a non-custodial digital wallet controlled by the recipient, accessed via phone.



Funds can be withdrawn in cash at any MoneyGram location, banks, mobile money, etc.



STELLAR DISBURSEMENT PLATFORM (“SDP”)

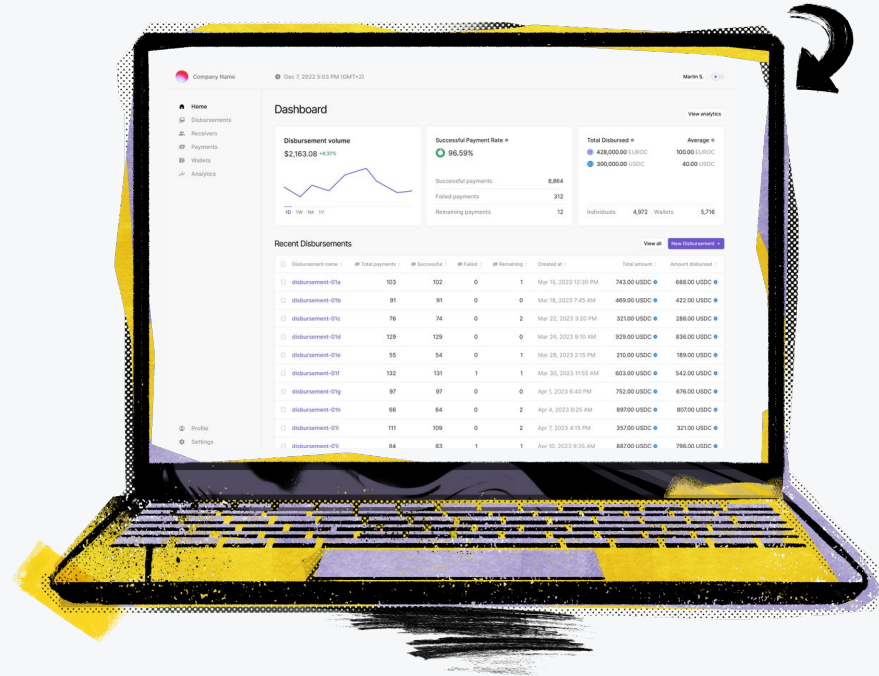
An open-source, turnkey solution to send bulk payments across the globe

Benefits:

Enables organizations to disburse funds that move in real-time and settle instantly 24/7/365

How it works:

1. Initiate a disbursement
2. Invite recipients to create wallet and access funds
3. Monitor digital payments
4. Review analytics



THE PROCESS



Set up

Identify SAA host

Ensure liquidity
(i.e. procure USDC)

Identify receivers

SENDER



Upload CSV to SAA



Real-time reporting



RECEIVER



Notified via
e-mail or SMS to
**Download
digital
wallet**



Verify account



Seamless funds transfer

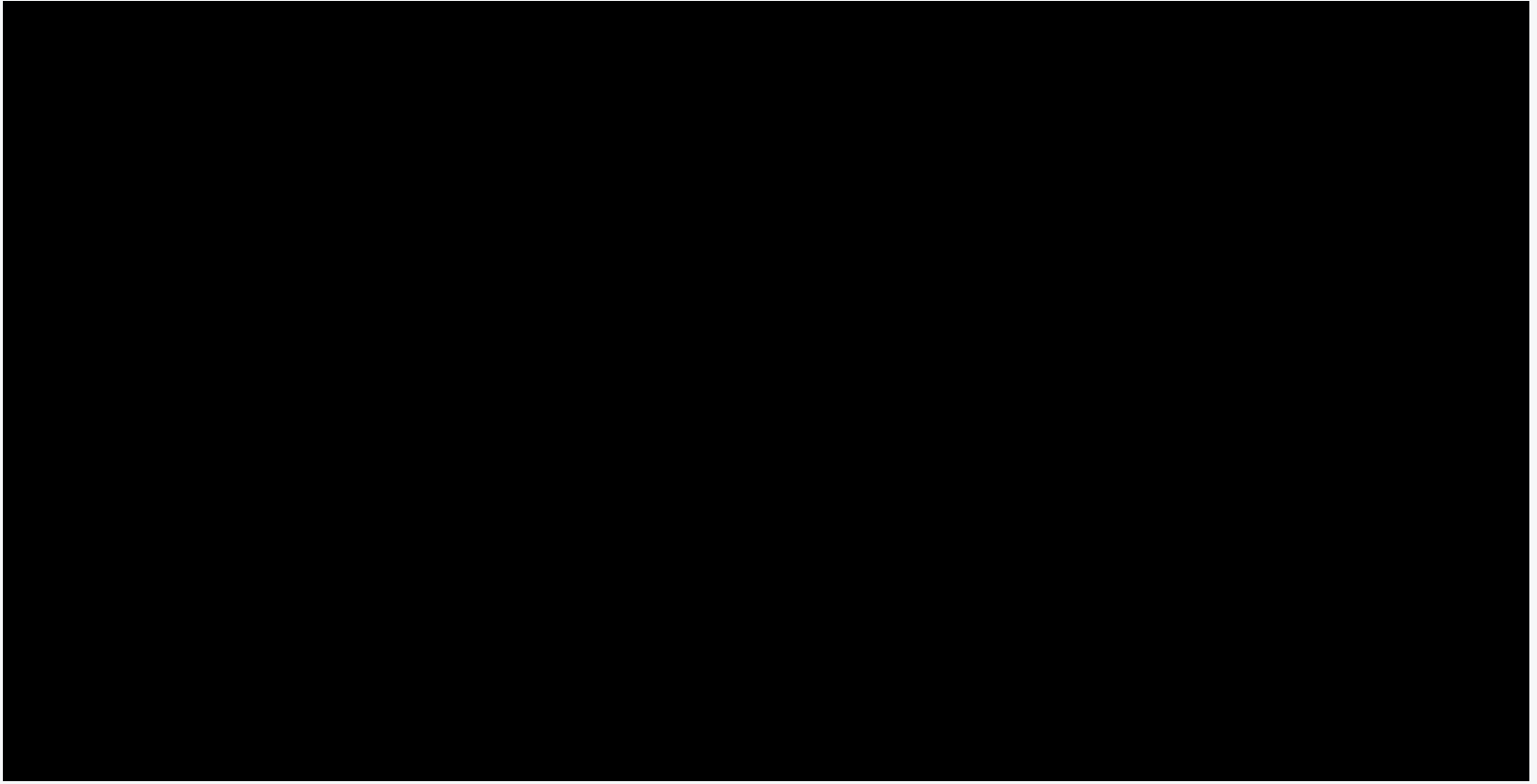


Cash out (includes necessary KYC)

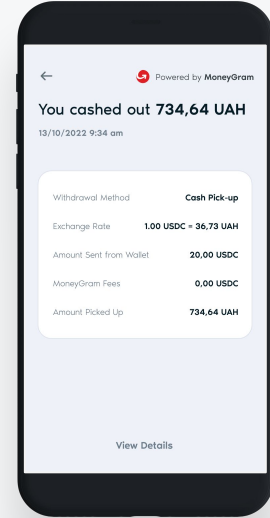
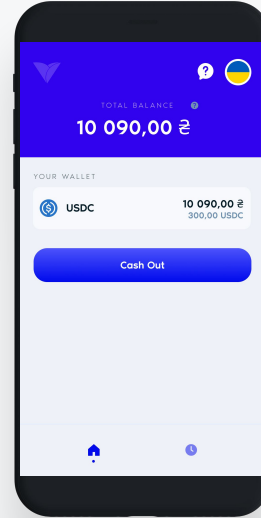
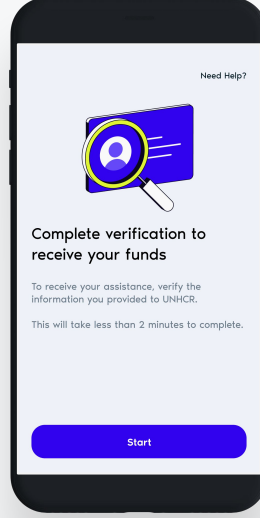
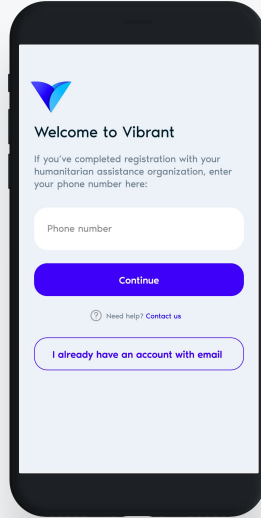
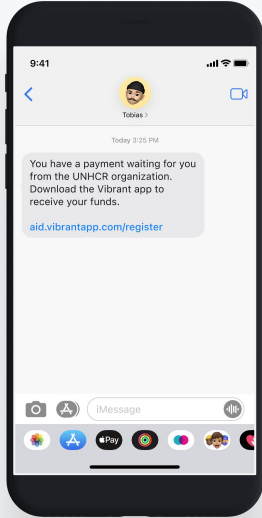
MGI
Other fiat offramps
Mobile money
Bank accounts
Prepaid cards



SENDER EXPERIENCE



WHAT DOES THE RECIEVER FLOW LOOK LIKE?



RECEIVER EXPERIENCE



DESIGNED TO ENHANCE DISBURSEMENTS

Benefits to organizations

- Realize benefits of the public blockchain (i.e. **fast, transparent, negligible fees**)
- **Alleviates administrative burden** of cross-border payments
- Digital assets **can reach places that are challenging for fiat**
- **Can be extended easily** to support additional countries and use cases (e.g. local payroll)
- **Low-cost solution** vis a vis legacy systems
- Facilitates **end-to-end tracking of funds**
- **Programs can be stood up quickly** in response to humanitarian emergencies
- **Data privacy and financial security** (SDF is never in the data flow or flow of funds)



Benefits to receivers

- Supports both **banked and unbanked populations** and **people on the move**
- **Simple-to-use digital** wallet with **immediate availability of funds** and access to global peer-to-peer transfers
- **Access to a global reserve currency** to protect against potential inflation and local currency devaluation
- **Funds can be cashed out in local currency** through a variety of options
- **Resources are completely controlled by the receiver**, allowing for agency and dignity
- **Substantially lower fees for receivers** at cash out vis a vis legacy systems (typically under 2%)

Direct cash assistance use case



UNHCR (the UN Refugee Agency) recognized the need for digital payments when conflict broke out in Ukraine in 2022; and **co-developed the Stellar Aid Assist technology with SDF** to meet this need.

In Ukraine, UNHCR has disbursed nearly **\$5 million USD in direct cash assistance to 2,500+ households** and is now scaling to other locations.

At the 2024 UNGA, the Deputy High Commissioner noted that **UNHCR has already saved \$12 million USD using digital payment technology** (including SAA) to reduce financial service fees; and has **saved 30% of their operating budget in Argentina** (supporting enterprises for local migrant populations) versus devaluation.



Payroll use case



GIZ and UOSSM International (Union des Organisations de Secours et Soins Médicaux - International) launched a pioneering **digital payment project in Northwest Syria as of October 2024**.

The program ensures that **monthly payrolls** are delivered nearly instantly, with **100% of cash outs successfully processed on the first attempt** by local liquidity providers, substantially reducing the time and effort required by medical workers to receive their monthly salaries.

GIZ and UOSSM noted **at least 25% savings in administrative time to process payments alone**. This solution will be scaled to 7 hospitals and 700+ employees in 2025 (and hopefully beyond!).

100% of participants in the pilot:

- Were **satisfied or completely satisfied** with the solution.
- **Want to continue** with the digital payment solution versus the previous fiat system.
- Were **willing to advocate for the digital payment solution** within their organization.

WHAT ELSE CAN BLOCKCHAIN TECHNOLOGY SUPPORT?



- **Remittances** by enabling fast, low-cost cross-border transfers using blockchain technology, allowing families and communities to receive funds into a digital wallet securely and quickly.



- **Government livelihood support** by providing a transparent, scalable solution for disbursing cash assistance directly to citizens, ensuring funds are delivered efficiently and reach the intended recipients.



- **Vendor payments** by streamlining the payment process for suppliers and service providers, ensuring timely and secure transactions with reduced administrative costs.

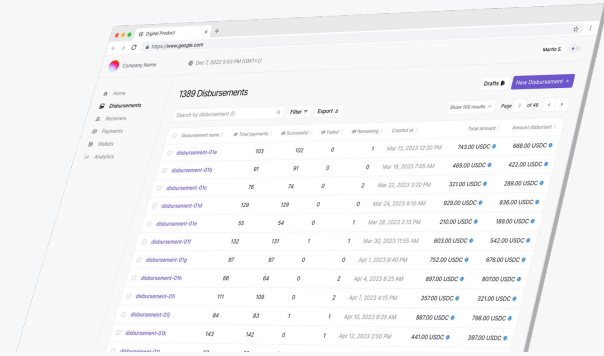


- **Tokenization** by converting anything with real-world value into digital tokens on the Stellar blockchain, enabling more flexible, traceable, and efficient management of aid, incentives, or vouchers in humanitarian contexts.

WHERE CAN THIS WORK?

When selecting a location to pilot / use Stellar Aid Assist, it's essential to consider the following key factors:

- **Legal and regulatory considerations:** It's important to ensure the selected country or region does not have sanctions, restrictions, or local laws that restrict the use of digital wallets or stablecoins.
- **Internet coverage and smartphone penetration:** Selected geographies should have at least moderately reliable internet access and smartphone penetration, as these factors are crucial for beneficiaries to access and manage their funds through their digital wallet.
 - *Note: next year, SDF will focus on extending coverage to low bandwidth environments and feature phones.*



The screenshot displays a web interface for Stellar Aid Assist, showing a table of 1388 disbursements. The table includes columns for Disbursement ID, Status, Amount, and Date. The data is filtered to show 100 results per page, currently on page 1 of 14. The table lists various disbursement entries with their respective IDs, amounts in USDC, and dates.

Disbursement ID	Status	Amount	Date
disbursement-01a	Success	742.00 USDC	Mar 15, 2023 12:30 PM
disbursement-01b	Success	488.00 USDC	Mar 15, 2023 12:30 PM
disbursement-01c	Success	422.00 USDC	Mar 16, 2023 7:45 AM
disbursement-01d	Success	288.00 USDC	Mar 20, 2023 9:30 PM
disbursement-01e	Success	636.00 USDC	Mar 24, 2023 9:30 PM
disbursement-01f	Success	189.00 USDC	Mar 28, 2023 2:15 PM
disbursement-01g	Success	542.00 USDC	Mar 30, 2023 15:55:00
disbursement-01h	Success	876.00 USDC	Apr 1, 2023 8:45 PM
disbursement-01i	Success	807.00 USDC	Apr 4, 2023 8:25 AM
disbursement-01j	Success	321.00 USDC	Apr 7, 2023 8:10 PM
disbursement-01k	Success	798.00 USDC	Apr 10, 2023 9:20 AM
disbursement-01l	Success	307.00 USDC	Apr 12, 2023 2:00 PM



CONSIDERATIONS FOR USING BLOCKCHAIN TECHNOLOGY

- **Blockchain platform matters** (e.g. governance, robustness, ecosystem participants, fees)
- **A strong payment instrument protects users** (e.g. reserve backing, issuer/asset regulation, issuer risk management)
- **Interoperability with traditional finance is a must** to convert digital assets into fiat
- **User experience is essential** to a wide-scale adoption

SDF risk management principles

- Strong legal framework for digital assets
- Robust payment instrument with low credit and liquidity risks
- Smooth offramping solution, including user convenience, customer support, and partner liquidity management
- Easy-to-use digital wallet, including for those not digitally inclined
- Robust data protections by limiting data transfers and storage of unnecessary information



THANK YOU!



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