



Multi-Sig Governance Document for Ethiopia Access Scholarship Fundraiser 2024

Last edited September 28nd 2023.

This document is to outline the rules, processes and expectations surrounding the custodianship of the Access Scholarship Pool multi-signature wallets.

Section 1: Purpose of the Multi-Sig

Transparency and accountability lie at the core of Web3.

The DirectEd Development Foundation has therefore decided to distribute the control of the funds raised from the DirectEd Lions Access Scholarship Ethiopia 2024 fundraiser to one or several Cardano wallets controlled by several trusted community members.

By doing so we introduce further checks and balances so that the broader donor community can be certain that the funds are being used for their intended purpose.

Section 2: About DirectEd

The DirectEd Development Foundation ('DirectEd') is a charitable organisation registered and regulated by the Charity Commission of England & Wales. It is also registered as a US 501(c)3.

Our statutory purpose is the following:

For the public benefit, to advance education in technology and digital skills, including programming and coding skills, and in soft skills including leadership, communication and teamwork, for young adults in particular, but not exclusively, in Sub-Saharan Africa through

(a) tuition-free, evidence-based, and cost-effective coding bootcamps adapted to low-resource contexts,

(b) scholarships for students who do not have the resources to effectively take part in the aforementioned coding bootcamps,

(c) internship programmes with partnering technology firms for students who complete the coding bootcamps to prepare them for entry into any occupation, trade or profession.

Section 3: Multi-sig Description

A multi-signature wallet (henceforth 'multi-sig') is a cryptocurrency wallet with a single public address where transactions require more than one signature from several cryptocurrency private keys to validate any given transaction. For the purposes of this document, the members of the multi-sig are called 'signatories'.

A description of the parameters of DirectEd's Access Scholarship Pool multi-sigs can be found below

- All DirectEd's multi-signature wallets have 3 members.
- The multi-sig wallets are created on the Cardano blockchain using the ADAO Roundtable V2 accessed through <https://roundtable.adaodapp.xyz/>
- 2 out of 3 members of the multi-sig must sign a given transaction for it to be valid
- Signatories of the multi-sig are, for the purposes of this document, considered volunteers working for the DirectEd Development Foundation.

Section 4: Description of the Multi-Sig

There are currently two multi-sigs set up for the purposes of custodianship of DirectEd's Access Scholarship fundraiser pools. Below is a description of the institutions the multi-sig have custodianship over and their contact details.

Public receiving address:

ADAhandle receive address: \$ddf.ethiopia

Members

- Kaloyan Rakov. [LinkedIn](#). Linktree: <https://linktr.ee/clovernodes>

- Stephanie King. [LinkedIn](#). Email: stephanie@lidonation.com
- Mike Hornan. [Twitter](#). Email: mike.hornan@able-pool.io

Section 5: Expectations

Members of the multi-sig are entrusted by stakeholders including donors, beneficiaries and DirectEd staff to further the Objectives of the DirectEd Development Foundation.

They are expected to exhibit loyalty to the spirit of DirectEd's mission and maintain a high degree of professionalism.

Section 6: DirectEd Lions Ethiopia Fundraiser

The DirectEd Lions Collection is designed to enable students from four partner institutions to take part in the DirectEd Bootcamp by providing them with Access Scholarship which entails getting a laptop to borrow, WiFi device, mobile bundles, transport stipend and tutorial vouchers.

Donors will be able to donate and receive an art piece also represented as a non-fungible token on the Cardano blockchain. They can also choose to donate directly to any of the multi-sig wallets using a direct ADA donation.

There are four tiers of the DirectEd Lion collection, each one representing different levels of support.

1. Warrior Tier. \$15 equivalent in ADA
2. Hero Tier. \$500 equivalent in ADA
3. Royal Tier. \$1100 equivalent in ADA.
4. God Tier. — (currently not open)

Funds are donated through the DirectEd Development Foundation's donation portal (<https://app.directed.dev/>) on the Access Scholarship pools page. On this page, donors can choose the amount they want to donate. After choosing an amount, the donor is redirected to the NFT minting service provider NMKR and their payment gateway NMKR Pay.

On NMKR Pay, donors can check out using ETH, SOL, ADA or VISA/Mastercard credit cards. Funds donated with ETH, SOL and ADA will be sent to the corresponding multi-sig less service provider fees. Funds donated using VISA/Mastercard will be sent to a Polygon wallet that is controlled by DirectEd.

You can read about the schools where students come from on this page:

<https://directed.notion.site/Our-Partner-Institutions-e6ee47333fc645d5a44aa6805885aee4?pvs=4>

Section 7: Accounting of Funds

The metadata of each sold NFT will contain information about the institution the funds donated are designated for. This will enable multi-sig holders, DirectEd staff and other stakeholders to observe the funds raised for each partner institution.

Funds are received in ADA. The USD equivalent of the ADA using the exchange rate at the time of the NFT purchase or donation will be used for the purpose of income accounting.

Section 8: Conversion of funds to Stablecoin

The funds will be converted to a USD-pegged stablecoin on the Cardano blockchain promptly after the conclusion of the fundraiser on November 12th, 23:59 UTC. This conversion should be completed no less than 3 calendar days after the conclusion.

If, at any time prior to the conclusion of the fundraiser, the amount held in the multi-sig exceeds \$2000, then this amount should be converted to a USD-pegged stablecoin on the Cardano blockchain within 3 calendar days.

To diversify the risk, two stablecoins will be used (percentage allocation in parenthesis): iUSD (20%), USDC (20%), DJED (60%).

The conversion process is detailed below.

1. CEO Simon Sällström will send a proposal to initiate a stablecoin swap to the members of the multi-sig. This will be done in written form through a Telegram group.
2. The members of the multi-sig will transfer the requested amount to the DirectEd wallet dedicated to DirectEd operations with ADAhandle \$simondirected
3. After the multi-sig has successfully transferred the requested amount, DirectEd CEO Simon Sällström will complete the required swaps in accordance to the pre-specified parameters.
4. The resulting amount, less transaction and swap fees, must be sent back to the multi-sig wallet within 24 hours of receipt (in step 3).

Section 9: Access Scholarship Pool Funds Use

The donations to Access Scholarship pools are designated to several uses. These have been publicly announced to donors and other stakeholders on <https://app.directed.dev/>.

Once the smart contract is audited and ready, funds for Data bundles and Tutorial vouchers will be in the smart contract.

For completeness, they will also be described herein:

Use	To be sent to	Description	Allocation
Laptops	\$simondirected wallet	These funds will be used to partially offset the cost of laptop purchases. The laptops will be lent out to Access Scholarship scholars for the duration of the DirectEd Bootcamp.	
Tutorials	\$directeddev	Funds will be sent to a Tutorials Smart contract. This smart contract enables whitelisted wallets belonging to vetted Junior Tutors to send tutorial voucher tokens to the smart contract and, in return, receive stablecoin. More details in section 8.	
Internet and Transportation	\$directeddev	Students will use these funds to pay for WiFi and to cover transportation costs for in-person tutorial sessions.	
Curriculum	\$directeddev	This part of the Access Scholarship partially	

Development		offsets the costs of developing and running the free DirectEd Coding Bootcamp.	
Programme Scaling and Donor Relations	\$directeddev	These funds will be used to scale the programme to reach more high schools and institutions. It will also be used to cover the costs of Measurement, Evaluation and Reporting of the programme results to donors.	

As is clear from the above, the majority of access Scholarship funds go to DirectEd custody or are intermediated by DirectEd. Members of the multi-sig are expected to request receipts for laptop purchases.

The number one priority of the Access Scholarship funds is to ensure that Access Students can participate in the DirectEd Coding Bootcamp. The second priority is to ensure that students have stable internet access enabling them to participate in the programme. This means that the above percentage allocations may be subject to adjustments with more funds being reallocated from other uses to the above two priorities following new information regarding computer prices, WiFi/mobile data cost and the USD value of the funds raised.

Section 10: Tutorials Smart Contract

The Tutorial Smart Contract is an experimental implementation of a decentralised tutorial system. It will intermediate the value transfer between donors, tutors and students.

In short, students receive tutorial vouchers that they transfer to Junior Tutors after each tutorial session. Junior tutors then exchange tutorial vouchers for stablecoin which can readily be converted to local fiat currency. Junior Tutors' wallets are hard-coded into the smart contract such that only whitelisted wallets holding the token can request withdrawals, thus preventing students from directly withdrawing stablecoin. Students can only continue to pay tutors if they pass milestone exams, meaning that tutor incentives are aligned.

The step-by-step user flow is described below:

1. DirectEd specifies a smart contract with an associated Tutorial Voucher Token.
2. DirectEd mint Tutorial Voucher Tokens and send them out to Access Scholarship Students.
3. Students attend in-person tutoring sessions organised by Junior Tutors and pay them using Tutorial Vouchers.
4. Access Scholarship Scholars complete milestone exams. Upon passing the exam, they receive further Tutorial Vouchers tokens manually distributed to the students by DirectEd staff.

The smart contract developed by DirectEd can replace step 4.

Section 11: Detailed Description of the Access Scholarship

Herein follows a schematic description of how the funds raised through the Access Scholarship Pools will be used and when the funds will be sent.

DirectEd will procure the required number of laptops corresponding to the Access Scholarships following the conclusion of the fundraiser. The multi-sig will disburse the pre-defined amount for this purpose.

Once the multi-sig is satisfied that the selection process of Access Scholars have been conducted appropriately, the multi-sig will send the funds dedicated for data bundles to the smart contract, if it is ready. Otherwise, it will be sent to \$directeddev multi-sig.

The multi-sig will disburse the funds allocated for curriculum development, programme scaling and donor relations when students have complete the first module exam.

The multi-sig will send the funds allocated for Tutorials to the Tutorials Smart Contract, assuming that said contract is completed and has undergone some community peer review¹. If it is not completed, we will distribute this manually and hence the funds are sent to \$directeddev.

Section 11: Use of Unused Funds

The distribution of Access Scholarships is conditional on students' satisfactory progress in the DirectEd Coding Bootcamp.

However, this bootcamp is extremely demanding and designed to meet the highest industry standards on the market. This means that we do not expect the majority of students enrolling in the coding bootcamp to complete the rigorous bootcamp successfully.

Any funds remaining in multi-sig or the Tutorial Smart Contract will be reallocated to a special wallet controlled by DirectEd designated to finance Access Scholarships of future scholarship students (as per the allocation in section 7) or DirectEd Graduate Programme students.

¹ This smart contract function similar to LP tokens of DEX liquidity pools. Holders of the tutorial voucher token can exchange their token 1:1 for the stablecoin token.