Encointer Treasury Proposal

Encointer is a common-good parachain on Kusama laying the foundation of a more democratic and more inclusive web3. Its secure and decentralized sybil-resilience protocol enables communities everywhere to generate their own, autonomous local currency, and use it to stimulate the local economy.

In <u>our recent referendum 33</u>, DOT holders decided against funding Encointer's current burn rate of 100k CHF/mt until the end of 2023. Nevertheless, Encointer is deemed a valuable common good for the Dotsama ecosystem by many reputable individuals and projects in the ecosystem. With this adapted proposal we are budgeting with a 50% lower burn rate and aim to still achieve valuable goals similar to the ones described in the previous proposal on a relaxed timescale.

This proposal to the Polkadot Treasury shall cover our expenses for Sep-Dec 2023 (4mt)

The amount of the proposed spend is CHF 238'000 = USD 270'606 = 59'895 DOT

Sybil-Resilience and Proof-of-Personhood are Essential

- In the **age of AI** we need to know if we interact with humans or machines.
- The vision of a truly decentralized web needs to <u>solve the inclusion problem</u> and sybil-resilience to do so. Proof of Personhood <u>opens up the governacne design space</u> to introduce more balanced processes, which improves **Resilience** of Polkadot.
- Effectively preventing various <u>frauds by sockpuppets</u> boosts the utility and value of online platforms

Encointer: Value Creation for DOT and KSM

- Sybil-free social media activity is an attractive signal to investors: Today, investors often measure community by the number of members in the telegram channel and activity on twitter. These indicators are too easy to fake. Encointer's personhood-oracle enables sybil-free telegram channels, twitter, mastodon, discord...
- Onboarding the long tail of the wealth distribution opens up a multi-billion-market.
 Encointer enables onboarding of people who are new to crypto and may even be unbanked. The Encointer Faucet can bring these people in first contact with DOT and all other Dotsama tokens, without requiring a bank account or ID.
- Fosters community engagement: Encointer gives people more incentives to join local communities, attend meetups, conferences and other events to get proof of personhood/attendance

Common good funding in web3 is tricky. Free markets fail to effectively deliver non-excludable and non-rivalrous goods. There is no Rol for the team building these goods. Still, the ecosystem can hugely benefit from the generated value. In the physical world, public goods are mainly financed by governments through taxes. In the Dotsama ecosystem, it is the treasury that is optimally positioned to finance the development of common goods.

Contents

In this document, we focus on updates and adjustments. For full context and history, please refer to our previous proposals

-	Sep - Dec 2023 proposal	(DOT) with CHF 100k burn rate	declined
-	Jul - Aug 2023 proposal	(KSM) with CHF 100k burn rate	approved
-	Q1 and Q2 proposal	(KSM)	approved

The entire funding and expense history can be found in the appendix.

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Worldcoin, without Biometric Scanning

The recent launch of Worldcoin catapulted the concept of Proof of Personhood combined with a UBI into mass media. The vision of achieving a fairly-distributed, cryptocurrency-based universal basic income appears very similar to Encointer's equal opportunity monetary system. Long lines of people who want to be verified and fast growing numbers of new susers are making the news. At the same time the very dystopian aspect of the eye ball scanning process is being pointed out and legitimitate critics showcasing how the system is <a href="exemplescent-legitimetric launch legitimetric launch legitime

How is Encointer different and why do we think it is a superior design:

Worldcoin and other biometric-based personhood protocols combine two things that we believe should be separated: identity (attributes about you, like your iris) with personhood (the fact that you are a unique human).

Any unique-proof-of-personhood protocol which is based on biometric scans can only work if it is centralized, for multiple reasons:

- Biometry necessarily relies on some sort of scanning device (like the Orb). We need to
 trust that the device's design is indeed capable of distinguishing all humans today and in
 the future uniquely and hope there is no vulnerability nor explicit backdoor
- We need to trust that the biometric scanner device is only used with the competent consent of the scanned person. Otherwise, identity-theft and impersonations will be the consequence.
- For this reason, there cannot be any open source hardware biometric scanners that are authorized to derive an identity seed in an unpermissioned open system. Therefore, we have to assume worldcoin will use PKI to authorize scanning devices and operators to keep their system secure - centralizing the system and remaining in control.

Moreover, we advocate that it has to be possible to reset your online identity. Biometrics, however, can't be changed. Key revocation as well as privacy are very hard to implement in a decentralized web3 setting based on biometrics.

Digital personhood is a fundamental human right. Let's not privatize what should be a public good.

Unlike worldcoin, Encointer does not need biometrics. Its sybil-resilience is based on the fact that any human can only be in one place at any time. It lets humans attest other humans at concurrent randomized key signing gatherings.

Obviously, Worldcoin can scale faster than Encointer. But that should not surprise: most centralized systems scale faster than their decentralized counterparts.

Scaling Strategies

Encointer has successfully showcased, through its <u>Leu Community in Zurich</u>, the viability of a community inclusion currency issued as a basic income to those participating in keysigning cycles. Moreover, this currency has facilitated the purchase of tangible goods and services from shop owners unfamiliar with cryptocurrency. However, scaling this pilot both locally and globally proved more challenging than anticipated.

We now think scaling can be accelerated in two dimensions:

- Reducing friction. Making it easier for everyone to use the protocol. If necessary by relaxing proof of personhood security requirements regarding uniqueness.
- Increasing utility and incentives. More integrations with popular platforms, financial incentives

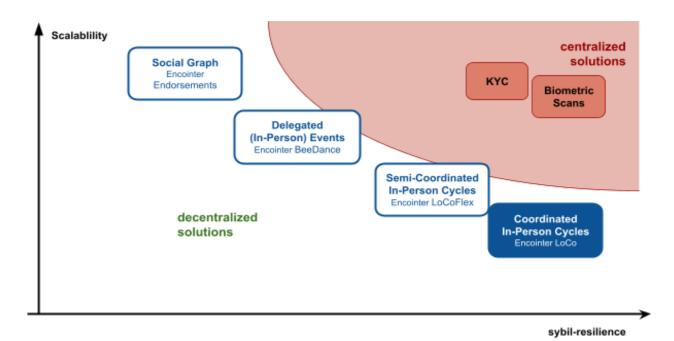
Existing approaches - Implement Learnings

With our existing local communities, we are currently tackling the closing of economic cycles, such that the local currency is circulating. Further the acceptance is increased by onboarding more businesses as part of the community. By ensuring a healthy circulation of the currency the appeal to participate in the local currency will be increased.

Gobally, we are building individual implementation strategies to fit local contexts with the current community leaders.

New approaches - Build MVPs

The scalability of the Encointer proof of personhood system can be increased by relaxing some requirements on security and decentralization. Instead of implementing only the maximally decentralized and secure solution (LoCo protocol), like we did until now, we plan to experiment with new variants which can reach more people in less time.



Digital personhood trilemma - and what areas Encointer aims to extend into.

Encointer LoCo is what we have built and tested already.

There are four experiments we are looking to conduct:

- 1. Social Graph Verifications
- 2. Relaxing the Protocol with LoCoFlex
- 3. Proof of Attendance with BeeDance
- 4. Additional Benefits of Participation

Social Graph Verification

Using the current system with only minor adaptations will allow us to demonstrate a social graph based solution. We <u>plan to implement an Encointer personhood batch</u> on the <u>Polkassembly</u> forum. Besides the Encointer LoCo Proof of Personhood batches, we will introduce first degree social graph verifications, as "trusted to be human" batches. This will allow the active members of Encointer LoCos to endorse accounts they know by an online verification process.

Relaxing the Protocol with LoCoFlex

In contrast to the current LoCo protocol, LoCoFlex is <u>less strict</u> about exact cycle gathering time and location. While the global 10 day cycle is still enforced, LoCoFlex allows community leaders to change the exact gathering time and location for each cycle and they may gather all participants very close to each other in order to have more freedom in organizing events and possibly combine the gatherings with presentations and other social meetup activities.

LoCoFlex will be tested with our next community "NYOTA" in Tanzania. Planned to launch in late Q3 2023

Proof of Attendance with BeeDance

BeeDance uses most of the LoCo protocol personhood attestation logic but is tailored to events. Attendees can obtain a proof of attendance. While some trust must be granted to the event organizer, BeeDance is still significantly more secure and decentralized than its similar counterpart on Ethereum: POAP

A good possibility to test BeeDance is to implement an online version for participation at AAGs. The concept and implementation is being discussed with the AAG team:

B A Participation Badge for AAG - BeeDance for AAG

BeeDance can further be used as event currency for approachable meetups. An MVP is being discussed for a London Meetup-Series in collaboration with the Nova team.

Event Currency for London Meetup-Series - BeeDance in Nova

Additional Benefits of Participation

The <u>recently delivered Encointer Faucet</u> allows dripping allowances of KSM to verified humans. The initial experiment implements a KSM faucet for local communities. By rewarding participation with a tradable token, the incentives to participate in an Encointer community are increased. Moreover, the faucet is a permissionless on-ramp to the Dotsama ecosystem.

We will take out a field experiment and offer small amounts of KSM tokens to our existing communities to claim. We will digest the quantitative and qualitative results into a public report.

In the future, the faucet may be enabled for LoCoFlex and BeeDance as well and it will be able to drip any token in the Dotsama ecosystem, helping new teams onboarding users to their token.

Milestones, Objectives and Team

Achievements since last Proposal

Since June 23rd

- The the faucet is live, tested and working on Testnet. It has been demonstrated in AAG 55.
- The faucet and other improvements are about to go live on mainnet with our <u>latest</u> <u>runtime upgrade</u> referendum 257
- The personhood oracle issuing privacy-preserving personhood badges for nostr PoC has been demonstrated at AAG 59
- +2 official and permanent acceptance points for the LEU local currency, accepting LEU at parity with the CHF (total of 25).
 Additionally +2, which are committed but not live yet (total of 5).
- Promising concept to issue a local currency together with an active NGO in Puerto Madryn Argentina.

- +153 proof-of-personhood attendances now yielding a total **1544 proof-of-personhood** attendances at **49 cycles**
- Team reorganization done, ramping down already.

Focus until End of Year

By cutting the budget by 50% we need to be clear on our priorities in order to be able to deliver the most valuable results. There are three main points we want to push forward.

- Healthy Circulation of Pioneer Community Currency LEU
- Demos for Encointer Proof of Personhood verifications
- MVPs for the Scaling Solution.

Healthy Circulation of Pioneer Community Currency LEU

The bottleneck for the pioneer community is the velocity for first grade acceptance points. To resolve this bottleneck we are onboarding more acceptance points in general. This leads to more options where to spend LEU. Secondly, we have designed a sample cycle in the local food value chain. This cycle will act as inspiration for other value chains.

Additionally we want to establish a revenue model for the LEU until the end of the year. This is crucial to make local currencies in general self-supporting.

Demos for Encointer Proof of Personhood verifications

The oracle feature is coming to mainnet with the runtime upgrade. After nostr, the next integration will be with KILT, issuing personhood credentials which can be used by Polkassembly to assign "verified-human" badges in Polkassembly comments. Later, integrations with Jur, Subsocial or Frequency are envisioned.

MVPs for the Scaling Solutions

Already described above in the section New approaches - Build MVPs

Revised Milestones and Deliverables

- Aug '23 deploy Encointer Faucet on mainnet, enabling all reputables of Encointer LoCo to drip a tiny amount of KSM (to be followed in later versions by any tokens through XCM)
- Sept '23 deploy the privacy-preserving Encointer personhood oracle for the <u>nostr</u> protocol, showcasing sybil-free social media public channels.
- Oct '23 deploy the Encointer personhood oracle for <u>KILT</u>, issuing a personhood credential.
- Nov '23 Release report on KSM faucet usage from the field test with existing communities LEU and GBD
- Dec '23 PoC demo for <u>BeeDance</u> on our testnet with a beta mobile app, involving a social event of at least 30 people.

Objectives and Key Results for Q2 and Q3 2023

The consequences of a smaller budget are also reflected in the Objectives and Key Results. With the strong dedication of our team we can keep the impact of the cut low.

Pioneer Community Objective

Objective for Leu Pioneer Community

The Leu community is growing sustainably through and for Encointer

Key Results until September 2023

By September 2023 we count 50 active points of acceptance 30 active points of acceptance in the Leu Community. This is corresponding to a 5% week over week growth rate.

Economic cycles start to show:

50% of all points of acceptance with a turnover above 1000 Leu per month spend at least 20% of their Leu income for their expenses (B2B suppliers or employees)

To ensure the sustainability of local currencies, a viable revenue stream has been implemented for the Leu community currency, upholding the unpermissioned character of Encointer. The revenue corresponds to 1% of the LEU transaction volume.

By September 2023 the number of <u>reputables</u> (at a reputation lifetime of 5 cycles) grows from 150 to 300, which corresponds to a weekly growth rate of 2.8%.

Global Impact Objective

Objective for Global Impact:

Encointer is growing and able to create sustainable social value on a global level

Key Results until September 2023

New Encointer has 1 scaling solution PoC live on Testnet and gathered the first learnings from the PoC.

Besides Leu there are 3 active and growing communities. 2 of these communities have reached 3 points of acceptance as well as 20 reputables.

Encointer has 1 product live that can be used permissionlessly by other parachain teams or applications in the Kusama ecosystem.

At least 3 third-party teams have used this service I.e. a sybil-resistant faucet for any fungible token.

2 specific projects in collaboration with an international NGO are in the funding process.

The first two financial sources outside the DotSama Ecosystems have been closed.

The Encointer platform and its communities suffer less than 1 day of downtime in total.

Transparent Reporting Process

Within 30 days after the end of Q3 and Q4, progress reports will be published on polkassembly. Within 2 weeks after the publication of the report, a member of the Encointer leadership team will publicly present achievements on either WagMedia's AAG or a similar format. In case the community has needs for discussions, we will organize an AMA call with all interested parties.

Team

To adjust the burn rate, the head count was reduced by almost 40%. Despite the difficult circumstances and the big uncertainty, we are able to hodl all core team members. Our founder <u>Alain Brenzikofer</u> is still dedicating his work pro bono and he can compensate for some of the team reductions. <u>Malik El Bay</u> is working closely with <u>Anna-Lena Stach</u>, <u>Andreas Brändle</u>, and <u>Gesa Feldhusen</u> to reach the goals as outlined above.

To reach our technical milestones, <u>Christian Langenbacher</u> and <u>Piero Guicciardi</u> are still on board.

Finances

Liquidity

as per Aug 11th 2023

This represents the state after one August payment run.

Assets Onchain

KSM wallets (1, 2)	9'202 KSM (excl. 105 KSM reserved)	~180'000 CHF
DOT wallets (<u>1</u> , <u>2</u> , <u>3</u>)	1'617 DOT (excl. 60 DOT reserved)	~7'500 CHF
ETH wallet	1.1 ETH plus 1'700 in USD stable coins.	~3'500 CHF

Assets Offchain

Exchange Accounts	7'500 USD	~6'500 CHF
	950 KSM	~18'500 CHF
Bank Accounts	50'000 CHF	5'000 CHF
	7'000 USD	~6'000 CHF

Total liquidity equals ~227'000 CHF, of which the reserved amount for Community Seed Grants is ~100'000 CHF.

Liabilities

- Outstanding payments from work and invoices in July 23'000 CHF
- Salaries and invoices expected for work in August: 75'000 CHF
- Salaries and invoices expected for work in September: 50'000 CHF

Resulting in using the reserved amount for Community Seed Grants to cover operational expenses by the end of September, not considering the potential funds influx if this proposal passes.

Expenses

Cash outs in June, July (2 months)

Operational Expenses

Developers	mobile app "Encointer Wallet"	26'000 CHF
Developers	core protocol	49'000 CHF
Technical	other (testing, devops, infrastructure)	15'000 CHF
Operations	planning, organization, fundraising, growth	20'000 CHF
Marketing	global	10'000 CHF
Marketing	pioneer community	8'000 CHF
Community	pioneer community project management, communication, user journey, stoke the fire, businesses accepting Leu	28'000 CHF
Ecosystem	Building economic circles, testing revenue streams, resources for global growth	24'000 CHF
Expenses	software, travel, rent, lawyers, buybacks, support of communities	4'000 CHF
Taxes and fees		1'000 CHF
total		185'000 CHF

The total cash out in August, covering work done in July is expected at **102'000 CHF**. The burn rate reduction is decided and implemented. September and October cash outs will be correspondingly lower.

Realized Exchange rate on former proposal

Trades with funds from previous grant 235 so far: sold 21'650 KSM for 585'000 CHF

realized exchange rate: 27.0 CHF/KSM proposal exchange rate: 27.6 CHF/KSM

Realized loss: 13'000 CHF

Grants for early international communities

A reserve was raised with our last proposal of 110'000 CHF which shall be spent for grants to newly emerging communities globally, based on milestones.

Beneficiaries so far were:

GreenBayDollar	Steeber Solutions, Green Bay, Wisconsin, USA • grant 1 54 KSM. on 4.11.2022 • grant 2 150 KSM. on 15.2.2023	6'300 CHF
Aslah	Kigali, Rwanda ● grant 1 2000 USDC on 27.10.2022	1'800 CHF
Nyota	Dar es Salaam, Tanzania ● grant 1 2000 USDC on 08.06.2023	1'800 CHF
total granted		9'900 CHF

The <u>pipeline of emerging communities</u> has expanded. New potential community leaders reach out to us on a regular basis.

Revised Budget for Q3 and Q4 2023

Operational Expenses for staff and infrastructure:

Infrastructure, Operation, and Maintenance of Parachain	refer to Q1 22 grant proposal for plausibility.	
	Reach out to community to run some infra for us to reduce costs	7'000 CHF/mt
Rust Developers, ~2-3 FTE	Core, protocol and democracy and sidechaining.	
New ~1.5 FTE	Reassignments.	15'000 CHF/mt
Flutter Developers, ~3 FTE	mobile app and frontends	
New ~0.5-1 FTE	Cut 3 team members. Reassignments.	7'000 CHF/mt
Operations,~1 FTE	coordination of different teams. support global community leaders. administrative, fundraising and representative activities.	
New ~0.5 FTE	Refocus.	6'000 CHF/mt
Community Growth and Local Marketing, 1-2 FTE	Onboard businesses accepting Leu currency. Ambassadors. "Stoke the fire" of pioneer community. Social media activities and PR.	
New ~0.5 FTE	Cut 2 team members.	6'000 CHF/mt
Local Ecosystem Strategy, ~1 FTE	Building economic circles on local currency level. Testing revenue streams on a local level. Coordinate resources for global growth	
New ~0.5 FTE	Refocus.	6'000 CHF/mt
Marketing Global, 0.5 FTE	Blog posts and social media activities to acquire new community leaders	
	Plus expenses, events, conferences	
New ~0.3 FTE	Refocus.	3'000 CHF/mt
total per month		50'000 CHF/mt

Nonrecurring expenses for Sep - Dec

Expenses	Software licences, administration, travels, marketing materials, bank fees	10'000 CHF
Reserves	Risk budget for emergency freelance work during team reduction phase Unforeseen expenses	15'000 CHF
total		25'000 CHF

Treasury Proposal

For Sep until Dec 2023 according to the budget outlined above

Staff and Infrastructure	4mt x 50'000 CHF/mt	200'000 CHF
Planned nonrecurring expenses		25'000 CHF
realized loss on previous proposal		13'000 CHF
external funding	no influx confirmed until Dec 2023. Outstanding proposals: - 100k \$ OpenAl-Grant	0 CHF
total amount requested		238'000 CHF

Liquidity Strategy and Exchange Rate Risks

This proposal amounts to a significant volume of DOT. Therefore, the Encointer Association will take care not to disturb the market by trading too much at once. We will liquidate the needed funds on a roughly monthly basis.

Should this lead to a realized loss, we may need to request the next round of funds sooner and we will list the realized loss as a position, as we did with this proposal.

Should this strategy lead to a realized gain, we will postpone our request for the next round of funding and use the funds according to our goals, as we are obliged to by our statutes as a Swiss non-profit association.

Payment Conditions

The rate will be applied at the time when the proposal is filed, based on <u>EMA7</u> 7 day moving average for the DOT/USD rate (4.518 USD/DOT). The CHF/USD rate shall be the daily rate at the day of submitting the proposal (1.137 USD/CHF)

The beneficiary address shall be:

1tkqjNRBbHdXAGZcJvswazPDFb2uvp4BvLYK1t7LDHKfsEn

owned by:

Encointer Association 8000 Zürich Switzerland CHE-288.701.841

Appendix

Expenses History

Expenses 2020 - Sep 2022

Developers	mobile app "Encointer Wallet"	268'000 CHF
Developers	core protocol	204'000 CHF
Technical	other (testing, devops, infrastructure)	160'000 CHF
Operations	planning, organization, fundraising	35'000 CHF
Marketing	global	70'000 CHF
Marketing	pioneer community	60'000 CHF
Community	pioneer community project management, events, activities, interviews, user journey	60'000 CHF
Expenses	software, travel, rent, lawyers, buybacks, support of communities	15'000 CHF
taxes and fees		15'000 CHF
total		887'000 CHF

Expenses Oct - Nov 2022

Developers	mobile app "Encointer Wallet"	26'000 CHF
Developers	core protocol	47'000 CHF
Technical	other (testing, devops, infrastructure)	9'000 CHF
Operations	planning, organization, fundraising	20'000 CHF
Marketing	global	15'000 CHF
Marketing	pioneer community	17'000 CHF
Community	pioneer community, pm, communication, user journey, stoke the fire, points accepting Leu	15'000 CHF
Seed Capital	Milestone-based unconditional seeding for community leaders	3'500 CHF
Expenses	software, travel, rent, lawyers, buybacks, support of communities	16'000 CHF

taxes and fees	3'000 CHF
total	171'500 CHF

Expenses Dec 2022 - May 2023

Developers	mobile app "Encointer Wallet"	69'000 CHF
Developers	core protocol	145'000 CHF
Technical	other (testing, devops, infrastructure)	40'000 CHF
Operations	planning, organization, fundraising	60'000 CHF
Marketing	global	40'000 CHF
Marketing	pioneer community	30'000 CHF
Community	pioneer community project management, communication, user journey, stoke the fire, businesses accepting Leu	85'000 CHF
Ecosystem	Building economic circles, testing revenue streams, resources for global growth	15'000 CHF
Expenses	software, travel, rent, lawyers, buybacks, support of communities	30'000 CHF
taxes and fees		18'000 CHF
total		532'000 CHF

Funding History

As of December 2022

Date	source	funding amount	value at time
22.9.2020	web3 foundation grant M1	20'000 DOT (vesting 2y)	pre-listing
16.10.2020	web3 foundation grant M2	10'000 DOT (vesting 2y)	pre-listing
3.9.2020	DOT Treasury Grant Encointer parachain development	7'000 DOT	42'000 CHF
21.9.2021	KSM Treasury 113 Grant for Pre-Launch expenses of common good parachain	98.1 KSM	35'800 CHF
28.3.2022	KSM Treasury 139 Grant for operation expenses Q1 2022	302 KSM	42'300 CHF
1.6.2022	Google NPO Grant (only applicable for ads in google search)	10'000 CHF / month	60'000 CHF
11.7.2022	KSM Treasury 186 Grant for operation expenses Q2&3 2022	6'271.63 KSM	340'000 CHF
10.11.2022	KSM Treasury 226 Grant for operation expenses Q4 2022	7'773.55 KSM	257'500 CHF
2020-now	total amount of private donations so far (June 20th)	13 ETH (2'782USD) 200 DOT (800 USD) 105'830 CHF	109'412 CHF
2020-now	estimation of pro-bono work	1'500h	

Over time, Encointer has sold some tokens and paid most of its employees in tokens at a 7-day moving average exchange rate. The appreciation of the DOT/KSM tokens so far resulted in realized amounts as follows:

means of realization	primary asset	cumulated realization
salaries paid in DOT 2020-May 2022	15'586 DOT	241'000 CHF
Exchange trades DOT until May 2022	8'994 DOT	339'000 CHF
Exchange trades KSM until May 2022	110 KSM	18'000 CHF
Exchange trades KSM Grant 186	6'011 KSM	270'000 CHF
Exchange trades KSM Grant 226	7'773.55 KSM	178'000 CHF
Exchange trades DOT Reserves	1'834 DOT	9'800 CHF
Exchange trades KSM Reserves	316 KSM	7'700 CHF
total		1'063'500 CHF

Realized loss on Grant 186 is CHF 58k and CHF 72k on Grant 226 (total of CHF 130k)