TheStandard

White Paper

A proposal for the ultimate decentralized Lending Protocol backed by rare assets

V2.5 (**2023**)

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Abstract

The Standard Protocol is a next-generation DeFi lending protocol that unlocks the trillions of US Dollars worth of rare assets, such as gold, cryptocurrencies and ingame item NFT’s, secured in digital wallets worldwide. Users can borrow stable cryptocurrencies pegged to their local fiat currency by locking up assets as collateral. All collateral is securely stored in decentralized smart contracts, known as "Smart Vaults." The users maintain full control of their private keys throughout the process, ensuring no 3rd party can speculat with users collateral. This innovative approach allows users to access the value of their assets without selling them, enabling 0% interest borrowing without trusting a third party.

Initially, users can borrow "Standard Euro (sEURO)," a fiat Euro pegged stablecoin, with sUSD, sYen, and others to follow. The protocol supports multiple collateral types in a single vault, allowing locked assets to be traded in the smart vault while maintaining their locked collateral status. Furthermore, smart vaults and associated debt can be sold as NFTs, providing flexibility in debt management.

Governance of the protocol lies with the community of Standard Token ("TST") holders, forming the Standard DAO - a Decentralized Autonomous Organization. The Standard DAO manages the protocol through smart voting mechanisms. TST holders can benefit from staking rewards and income derived from the protocol's global lending and other fees.

The Standard Protocol distinguishes itself from failed stablecoins like Terra Luna, Waves, and Bitshares by being overly backed by real-world value and not an algorithm. The Standard smart contracts operate on a decentralized Layer 2 solution for Ethereum, utilizing zero-knowledge proof (zkEVM) technology for trustless and secure transactions.

Drawing inspiration from the historical Gold Standard, The Standard ushers in a new era of privatized and decentralized stable virtual currencies backed by valuable rare assets while offering unprecediented flexibility and security for the borrower.

> “You never change things by fighting the existing reality.
> To change something, build a new model that makes the
> existing model obsolete.”
> **— Buckminster Fuller**

The Standard DAO

1. Problems Worth Solving

2.1. Problems Worth Solving

Current DeFi lending platforms face several challenges, including:

- Variable interest/stability fees, complicating long-term financial planning*.
- Rigid collateral management, forcing unnecessary liquidations due to the inability to exchange locked collateral without debt repayment*.
- Limited asset types as collateral, restricting lending options for users*.
- Centralization risks, as seen with MAKER allowing USDC as collateral, resulting in DAI's unpegging from the US dollar due to Silicon Valley Bank's collapse*.
- A singular focus on one fiat peg, disregarding the global need for diverse blockchain-based FX markets*.
- High transaction fees on Layer 1 Ethereum, excluding users unwilling to pay excessive costs*.

These challenges warrant innovative solutions to improve the DeFi lending ecosystem.

Tether (USDT) and USDC, (known as stablecoins) hold federal reserve-issued currency in a bank account. They supposedly mint one token for every dollar they hold in the bank. The ‘peg’ is held by guaranteeing to always buy and sell one token for one US Dollar. The transparency of the blockchain enables anyone to audit how many stablecoins have been issued; however, it’s still difficult to audit the bank holdings of the underlying asset.

While this does create a sense of stability, the fiat-backed stablecoin solutions have multiple problems:

- Bank accounts can be closed or frozen
- The Bank holding the funds could go bankrupt as we saw with Silicon Vally Bank which was holding 3.3 Billion dollars for USDC.
- The issuer could spend (or lose) the funds required to peg the token
- The issuing company could be declared bankrupt
- The user is effectively holding a currency that is being affected by inflation
- The bank that holds the underlying fiat is speculating with the funds without transparency
- The banks are only insured to a tiny fraction of the fiat being held
- Stablecoin issuers have intransparent revenue structures
- The issuing company could easily counterfeit stable coins to buy cryptocurrencies or other rare assets without US Dollar backing

1.1. Solution

We propose a new global standard for decentralized lending and stablecoins backed by tokenized physical and blue chip crypto assets like Bitcoin and Ethereum. The Standard Protocol aims to create a digital mirror of every fiat currency through a decentralized pegging mechanism. The stablecoins generated through The Standard Protocol are backed by a basket of underlying assets that users lock up in individual Smart Vaults.

The Standard Protocol addresses key challenges within the DeFi lending ecosystem, offering innovative solutions, such as:

- Stable 0% interest rates, enabling users to plan long-term financial strategies effectively.
- Enhanced collateral management, allowing users to swap locked collateral without repaying the debt, preventing unnecessary liquidations. Trade an asset with more upside potential or trade into tokenized gold when the market is crashing and prevent liquidations.
- Support for multiple collateral types, providing users with diverse and flexible lending options.
- No allowing centralized fiat coins like USDC to be used as collateral.
- Users can mint a stablecoin pegged to their local currency as The Standard focuses to build out a full blockchain FX market with a stablecoin for every major global currency.
- Layer 2 implementation, specifically zkEVM, for efficient transaction processing and reduced fees compared to Layer 1 Ethereum-based platforms*, making DeFi lending more accessible.

The Standard Protocol aims to create a more robust, accessible, and efficient DeFi lending ecosystem, catering to users worldwide.

2. The first stablecoin “Standard Euro”

The aim of The Standard is to issue a stablecoin for all the major fiat currencies, starting with the Euro. The Standard Euro (“sEURO”) will be minted by locking up tokenized hard and digital assets in a smart contract called a “Smart Vault”. This mechanism is similar to a traditional collateralized debt position, enabling users to keep their assets and borrow liquidity.

Soon after the release of sEURO, the DAO will decide on which fiat will be mirrored next (sUSD, sGBP, sAUD, sINR, sCHF)

For ease of readability, this whitepaper will only refer to Standard Euro (sEURO) stablecoin.

2.1. Launching sEURO

The research into why many stablecoins fail has found that they launched without deep liquidity on secondary markets. To ensure that The Standard is successful, the protocol will accumulate a sufficient amount of Protocol Controlled Value (PCV). Funds inside the PCV will be managed by the DAOs treasury and deployed on secondary markets as liquidity and serve as a stability pool, this pool serves as the first line of defence for the peg. There are four phases to the initial launch of sEURO and each subsiquent stablecoin launched by the protocol:

1. **Initial Discount Curve Offering**
   This phase will enable people to buy sEURO at a discount. The discount will start at 20% and decrease until the price reaches the 1:1 peg between sEURO and the fiat EURO. As soon as the sEURO reaches parity to the euro it will be pronounced a stablecoin. The more liquidity that moves into the pool, the less the discount becomes.

2. **Initial Bonding Curve**
   Users who participate in the IBCO are incentivized to bond their purchased sEURO with an equal amount of USDC into liquidity pools. The Standard DAO will offer a 7-day, 1, 3 and 6 month maturity bonds that will offer a 20% yield paid out in TST. The longer the maturity the higher the yield. All liquidity that is purchased will also go towards the PCV and be deployed in liquidity pools that were decided by the DAO. This phase will over-collateralize the sEURO stability pool.

3. **TST Staking**
   The PCV shall start generating an income, in particular through exchange fees collected by the DEX deployment. This income will be rewarded to users who stake their TST to limit the supply on secondary markets.

4. **Launching Private Smart Vaults**
   Private Smart Vaults will launch soon after enabling users to collateralize their crypto and gold holdings for sEURO with the other stablecoins to roll out soon after. Smart Vaults are multi collateral so people can lock up different collateral coins in the same vault. The Standard Smart Vaults also enable people to trade locked collateral to other tokens to protect themselves as well as try to gram moon shots. Smart vaults are also able to be sold as NFTs.

For more details please read the dedicated IBCO paper found on the website

2.2 Use Cases

The stablecoin economy has gone from a market capitalization of US-Dollar 1 billion in 2017 to over US-Dollar 200 billion in 2021. The projected market capitalization is projected to cross one trillion US-Dollar by 2025. The demand for stablecoins is growing continuously. There are many reasons for this, as they have all the benefits of

cryptocurrencies (programmable, Self-sovereign, borderless, secure, fast-transactions, peer-to-peer, transparent, etc.), but are stable, which makes them easier to account for, reliable, and better technology for payments. In particular, stablecoins are widely used in liquidity pools and the DeFi space, as impermanent loss is less risky due to the stability. Below is an outline of the use cases of The Standard Protocol:

For the users, it enables:

- Generating staking income
- Protecting savings against inflation
- Leveraging the devaluation of fiat currencies
- Making instant peer-to-peer payments in a stable asset,
- Participating in the DeFi space using physical collateral
- Saving mortgage and loan costs
- The goal is to enable more exotic collateral types like tokenized stock, real estate, in-game item NFT and more to unlock liquidity without selling or attracting capital gains taxes.

For gold/silver vaulting facilities, it enables:

- Unlocking new income streams by tokenizing their gold and offering users to borrow against it at Fixed 0% interest.
- Attracting new customers, adding DeFi use cases for their client's precious metals
- Unlocking the value locked up in hard assets

For DAOs, it enables:

- Paying DAO participants in their local currency
- Hedging for their native governance token
- Benefiting from a growing ecosystem
- Enabling Cross-chain payments
- Collateralising Smart Vaults with their governance token

2.3. Asset Custodians

Asset custodians are normally gold retailers that offer an allocated bullion product secured in a top-tier high-security vaulting facility like Brinks.

2.3.1 Commodity Tokens

Commodity Token projects are Web3 projects specializing in the tokenization of assets. It is the responsibility of The Standard DAO to evaluate the legitimacy of such projects. Once the DAO's security criteria have been met, The Standard will enable independent custodian tokens to be used as collateral in Smart Vaults. The Protocol does have specialists that can help traditional vaulting facilities to offer a tokenized version of gold and set up in a way that The Standard DAO will accept as collateral.

2.3.3 Requirements for Commodity Token Projects

A decentralized due diligence framework is used to ensure the security of the hard asset custodians. The Standard security framework is a dynamic concept that can be altered by a vote of The Standard DAO. An example of a proposal for onboarding a gold custodian is as follows:

- 99.99% minimum certified gold bars
- All bars have been manufactured under the LBMA Good Delivery Quality Standard
- Secured in a top-tier vaulting facility
- Insured to 100% by a reputable insurance company
- Audited by a globally recognized auditing firm at least twice per calendar year
- The custodian has been operating for at least five years
- Fully audited by the Standard DAO appointed or approved auditors

2.3.4 Becoming a Custodian

The Standard protocol has consultants within the community that can help the gold retailers offer a tokenized gold product. Please reach out to us on our official channels.

2.5. Protocol Fees (Revenue Streams)

The protocol's primary income streams come from fees and the deployment of the protocol-controlled value. Here's a simplified breakdown of the different fees:

Minting Fee: This one-time fee is charged when borrowers take out a loan. Set by The Standard DAO, it's a calculated percentage applied to each stablecoin minted through loans. The fee is automatically minted and sent to the drop pool, making the process less burdensome for the borrower.

Burning Fee: This fee is charged when people repay their debt. It serves to fine-tune stability and generate income for research, development, business expansion, and TST staking rewards.

Emergency Stability Fee: This fee functions like central bank interest rates to control the supply and demand of fiat currencies, ensuring price stability. By default, it's set at 0% and only increases as a last resort if the protocol's stablecoins fall significantly below their fiat pegs. Though highly unlikely, if this occurs, the fee incentivizes borrowers to repay loans and restores the price peg.

Additional fees, paid in TST are burned, this includes but is not limited to services like alarms, selling smart vaults as NFTs, and trading locked collateral. These fees help maintain the platform's functionality and stability.

In summary, The Standard Protocol charges various fees to ensure stability, generate income, and maintain the ecosystem. These fees, combined with additional services paid in TST, help drive the growth and success of the protocol.

2.6. The Primary Pegging Mechanisms

The price of The Standard Euro (sEURO) will be pegged to the price of the fiat Euro, issued by the European Central Bank, by placing the PCV collected in the IBCO in liquidity pools and

having a spread of 200 basis points around 1 euro worth of other cryptos. This means the pool shall aim to always sell for 1.01 euro and buy back at 0.99 euro cents.

The secondary pegging mechanism is founded on the principle of over-collateralization and debt management. In the event that the price of sEURO experiences a 10% decline, this would present an advantageous opportunity for debt holders to repay their obligations at a favorable 10% discount. Consequently, a significant number of individuals would likely purchase sEURO to settle their debts, and this increased buying pressure would subsequently contribute to the restoration of the price to 1 euro. It is essential to emphasize that, mathematically, the value of locked collateral consistently surpasses the circulating supply of stablecoins, thereby ensuring the stability of the peg.

The utilization of minting and burning fees empowers the DAO to regulate incentives for global users to mint and burn stablecoins. These fees serve as nuanced approaches to managing inflation and deflation within the stablecoin ecosystem.

S = stability of sEURO
M = minting fee
B = burning fee
D = outstanding debt
C = collateral value

$$S = (M + B) / (D - C)$$

Although this formula is rather simplistic, it is posited that the determination of fees will be the product of extensive, transparent discussions in community forums, ultimately culminating in a collective vote.

2.7. Closing a Smart Vault

A user may close a Smart Vault by transferring the equivalent amount of Standard Euro generated plus fees back to the Smart Vault contract. This action results in the burning of the stablecoins, subsequently rendering all collateral accessible to the user. This process can be

accomplished by directly sending the required amount to the Smart Vault contract. Upon full repayment, all collateral tokens are released from the Smart Vault and become available for the user to withdraw.

2.8. Liquidation of Smart Vaults

This section outlines the liquidation process for smart vaults, taking into consideration the distribution of assets, the liquidation bonus, and the accounting for gas fees during the liquidation process. This process is essential for maintaining the peg of sEURO to the Euro and ensuring that the system remains over-collateralized. The following sections will detail the liquidation process, the role of TST holders, and the calculations related to a fair distribution mechanism.

2.8.1 Liquidation Pool

A vital aspect of The Standard Protocol is the liquidation pool, where users can commit sEURO and TST (the governance token of The Standard Protocol) in equal proportions to acquire liquidated assets at approximately 10% below market value. The primary purpose of the pool is to purchase collateralized assets from smart vaults when their collateralization ratio falls under the 110% threshold.

The liquidation pool comprises sEURO and TST tokens staked by participants in a 1:1 ratio. This pool acts as a source of funds to buy the collateralized assets in a smart vault when the vault's collateralization ratio dips below the required level. The distribution of assets during the liquidation process relies on the proportion of each participant's combined stake (sEURO and TST) to the total combined stake in the liquidation pool. Participants can withdraw their TST and sEURO from the pool at any time, but they must always maintain an equal or higher amount of TST compared to sEURO staked.

The minimum stake for participating in the liquidation pool is 100 sEURO. This minimum requirement can be adjusted through a DAO vote if necessary, ensuring the system remains adaptable to changing conditions within The Standard Protocol ecosystem.

2.8.2 Distribution Calculation

To calculate the distribution percentages for each participant, the following formula is used:

Distribution % = (Participant's sEURO + Participant's TST) / (Total sEURO + Total TST)

This formula ensures a fair distribution of assets based on each participant's contribution to the liquidation pool in terms of sEURO and TST tokens.

2.8.3 Liquidation Bonus

When a smart vault is liquidated, the participants in the liquidation pool receive a bonus for purchasing the vault's assets. The bonus is equal to the difference between the vault's collateralization ratio and the minimum required collateralization ratio. In this case, the bonus is approximately around 10% of the value of the total assets at liquidation. (depending on when how fast the value of the contract is dropping a smart vault could potentially already be at 105% collateral by the time it is liquidated.

2.8.4 Accounting for Gas Fees during Liquidation

During the liquidation process, Ethereum gas fees are incurred for the execution of smart contracts. To account for these gas fees, a portion of each participant's profit is used to cover the gas costs. The gas fees are calculated based on the value of the total assets distributed to each participant and the prevailing gas prices. The profit percentage is then calculated as the

net profit (assets value received minus sEURO spent minus gas fees) divided by the sEURO spent.

2.8.5 Burning sEURO and Asset Distribution

When sEURO is sent from the liquidation pool to pay off the liquidated smart vault, the sEURO is burned, reducing the amount of sEURO in circulation. This process ensures that there is always more collateral backing the protocol than stablecoins in circulation, maintaining the system's stability.

The liquidated assets are then distributed among users participating in the liquidation pool based on their respective distributions. This distribution process further incentivizes TST holders to stake their tokens in the liquidation pool, as they receive a portion of the liquidated assets in proportion to their distribution.

In summary, The Standard Protocol's liquidation process maintains the system's stability and security by incentivizing TST holders to participate in the liquidation pool, ensuring over-collateralization, and burning sEURO to maintain a balanced collateral-to-stablecoin ratio. The revised distribution mechanism guarantees that all participants in the liquidation pool profit from the liquidation, fostering a more equitable and stable system.

2.8.6 Mitigating Flash Loan Attacks through Lock-up Periods

The lock-up period is a security measure designed to prevent users from instantly participating in the liquidation process with newly staked sEURO and TST. Under this mechanism, newly staked assets are required to be held in the liquidation pool for a minimum of 5 blocks before being eligible for participation in the liquidation process.

By implementing a 5-block lock-up period, The Standard Protocol effectively deters flash loan attacks. Since flash loans must be repaid within the same transaction, attackers would be

unable to use them to exploit the liquidation process as their newly staked assets would be ineligible for participation during the lock-up period.

2.9.2 Example of a liquidation.

The hypothetical value of the collateral in the multi-collateral smart vault is as follows:

- ETH worth 5K sEURO
- WBTC worth 10K sEURO
- PAXG worth 5K sEURO

The total value of assets in the vault is 20K sEURO.

Smart Vault:

Asset	Value (EURO)
ETH	5,000
WBTC	10,000
PAXG GOLD	5,000
TOTAL	20,000

Liquidation Pool:

Participant	sEURO Staked	TST Staked
A	1,000	1,000
B	20	20
C	5,000	5,000
D	10,000	10,000
E	20,000	20,000
POOL TOTAL	36,020	36,020

Step 1: Calculate combined stake for each participant making sure the participant has TST = > sEURO to participate in the current liquidation.

If Participant TST Staked < sEURO then void Participant else

Combined Stake = sEURO Staked * 2

Participant	sEURO Staked	TST Staked	Combined Stake
A	1,000	1,000	2,000
B	20	20	40
C	5,000	5,000	10,000
D	10,000	10,000	20,000
E	20,000	20,000	40,000
Total Combined Stake			72,040

Step 2: Calculate distribution percentages

(Combined Stake / Total Combined Stake) * 100

Participant	Combined Stake	Distribution % Calc	Distribution %
A	2,000	(2,000 / 72,040) * 100	2.78%
B	40	(40 / 72,040) * 100	0.06%
C	10,000	(10,000 / 72,040) * 100	13.88%
D	20,000	(20,000 / 72,040) * 100	27.76%
E	40,000	(40,000 / 72,040) * 100	55.53%
Total Combined			100%

Step 3: Total value of assets at liquidation is 20,000 sEURO.

Asset	Value (EURO)
ETH	5,000
WBTC	10,000
PAXG GOLD	5,000
Total Vault Value	20,000

Step 4: Calculate sEURO spent by each participant

sEURO Spent = (Distribution % / 100) * (Total Vault Value * 10 /100)

Participant	Initial sEURO Staked	Distribution %	sEURO Spent
A	1,000	2.78%	(2.78% / 100) * 18,000 = 499.68
B	20	0.06%	(0.06% / 100) * 18,000 = 10.80
C	5,000	13.88%	(13.88% / 100) * 18,000 = 2,498.40
D	10,000	27.76%	(27.76% / 100) * 18,000 = 4,996.80
E	20,000	55.53%	(55.53% / 100) * 18,000 = 9,993.60
Total Combined Stake			72,040

Step 5: Calculate asset value received by each participant

Participant	Distribution %	Assets Value Received Calc	Assets Received
A	2.78%	(2.78% / 100) * 20,000	556.00
B	0.06%	(0.06% / 100) * 20,000	12.00
C	13.88%	(13.88% / 100) * 20,000	2,776.00
D	27.76%	(27.76% / 100) * 20,000	5,552.00
E	55.53%	(55.53% / 100) * 20,000	11,106.00
TOTAL			20,000

Step 6: Calculate gas fees for each participant. Let's assume the gas fees are 0.5% of the value of their assets received.

Participant	Assets Received	Gas Fee Calc	Gas Fee deduct
A	556.00	(0.5% / 100) * 556.00	2.78
B	12.00	(0.5% / 100) * 12.00	0.06
C	2,776.00	(0.5% / 100) * 2,776.00	13.88
D	5,552.00	(0.5% / 100) * 5,552.00	27.76
E	11,106.00	(0.5% / 100) * 11,106.00	55.53
TOTAL			100.01

Step 7: Calculate net profit, bonus value, and profit percentage for each participant.

Net Profi = Assets Value Received - sEURO Spent - Gas Fees
Profit % = (Net Profit / sEURO Spent) * 100

Participant	sEURO Staked	sEURO Spent	Assets Value Received	Gas Fees	Net Profit	Profit %
A	1,000	499.68	556	2.78	46.99	9.41%
B	20	10.80	12	0.06	1.02	9.44%
C	5,000	2,498.40	2,776	13.88	234.96	9.41%
D	10,000	4,996.80	5,552	27.76	469.92	9.41%
E	20,000	9,993.60	11,106	55.53	939.83	9.40%
TOTAL						

3.0 The Standard Token

Introducing The Standard Token (TST), a powerful utility token at the heart of The Standard Protocol, a next-generation DeFi lending platform. TST comes with a range of compelling features designed to enhance the user experience and foster a vibrant, decentralized ecosystem.

One of the key benefits of TST is the allocation of minting and burning fees to stakers. Every time a loan is taken out or paid off by users worldwide, TST stakers receive a portion of the fees. This creates an ongoing reward mechanism, incentivizing active participation in the platform.

Additionally, TST holders gain exclusive access to liquidated assets at a 10% discount below market value. This not only provides an attractive proposition for those seeking unique opportunities but also reinforces the value proposition of the token.

The Standard Token also plays a crucial role in various platform functions, such as collateral alarms, trading locked collateral, and enabling the sale of smart vaults as NFTs. These utility-driven use cases result in the burning of TST, contributing to its scarcity and long-term sustainability.

As a governance token, TST empowers its holders to actively participate in key decisions that shape the future of The Standard Protocol. This community-driven approach ensures that the platform remains aligned with the interests of its users and continues to innovate in the rapidly evolving DeFi landscape.

Embrace the potential of The Standard Token and become part of a groundbreaking DeFi lending solution that aims to redefine the industry and deliver exceptional value to its users.

3.1 Staking Rewards

Securing staking rewards serves as a significant motivation for users to possess and retain Standard Tokens (TST). These rewards stem from the distribution of the protocol's income among TST stakers. Initially, the primary revenue streams for the protocol encompass:

Minting fees collected from all Smart Vault loans
Burning fees amassed when loans are repaid
Fees generated by the Protocol-Controlled Value (PCV) within liquidity pools
Exclusive access to the liquidation pool, allowing stakers the opportunity to purchase liquidated Smart Vault assets at up to 10% below market value.
To qualify for these rewards, TST stakers must engage in certain activities, such as voting on governance issues and promoting The Standard through sharing their affiliate link. These tasks not only help to maintain the platform's stability and growth but also ensure the stakers actively contribute to the ecosystem.

As the Standard ecosystem expands and incorporates new financial instruments like Multiply Vaults, additional income streams are anticipated to emerge. This growth aims to create sufficient incentives for TST holders to stake their tokens, subsequently reducing the available supply in secondary markets.

By participating in this innovative ecosystem, TST stakers not only contribute to the platform's stability but also seize the opportunity to reap substantial rewards. The Standard Protocol's unique approach to staking offers a compelling and potentially lucrative pathway for those keen on engaging with the future of decentralized finance while actively partaking in its development.

3.2. Governance Concept

The Standard Protocol's governance concept has been meticulously crafted to ensure the security, decentralization, and efficiency of the protocol. All Standard Token (TST) holders are granted the authority to participate in the governance system.

To engage in the governance process, we have chosen to use snapshot.org as the primary platform for off-chain voting. Voting power is directly proportional to the number of tokens held by a participant. This structure is grounded in the game theory principle that posits large token holders will possess fewer incentives to engage in detrimental actions that may compromise the system[6]. The protocol aspires to attain a critical mass of token holders, thereby safeguarding all stakeholders from the risks associated with centralization.

As active participants in the governance process, TST holders can shape the future of the Standard Protocol, fostering a robust and responsive ecosystem that effectively addresses the evolving needs of the decentralized finance landscape. This collaborative approach empowers stakeholders to contribute meaningfully to the protocol's ongoing development and success.

3.3. Voting Subjects

Standard Token (TST) holders possess the authority to cast votes on a variety of subjects simultaneously. Each Standard Token enables its holder to place one vote on multiple subjects.

For instance, if a user holds 100 Standard Tokens, they can allocate 100 votes to each and every open subject. In the beginning, there will be limited topics to vote on, as the core team will make initial decisions.

Subject 1: Adding and Modifying Features
The Standard Protocol is designed to evolve into an ecosystem encompassing diverse collateral types and hard asset custodians. The protocol also aims to explore new use cases and expand its feature portfolio. Governed by the Standard DAO, the protocol will adopt a decentralized model to introduce new features. Such features may include new collateral types or the capacity for Smart Vaults to generate additional stablecoins such as sUSD, sYEN, sGBP, and so forth.

Subject 2: Standard DAO Treasury
The DAO will oversee the Standard DAO treasury, ensuring no central point of failure by employing a gnosis-safe multi-signature wallet. This approach guarantees that no single treasurer will possess absolute control over the funds. The allocation of the DAO treasury's portfolio will be determined through the voting of TST holders and implemented by the treasury managers.

Subject 3: Emergency Shutdown
The Standard DAO can vote on emergency shutdowns to temporarily halt the system. Emergency shutdowns may occur in cases of severe market failure or when a malicious actor exposes a vulnerability in one of the smart contracts. Once the issue is resolved, Standard Token holders can vote to reactivate the platform.

Subject 4: Proposals
Standard Token holders can develop Standard Improvement Proposals (SIPs). The DAO will then discuss the proposal and vote accordingly. Section four of this whitepaper, "Proposal System of The Standard DAO," elaborates on the proposal system.

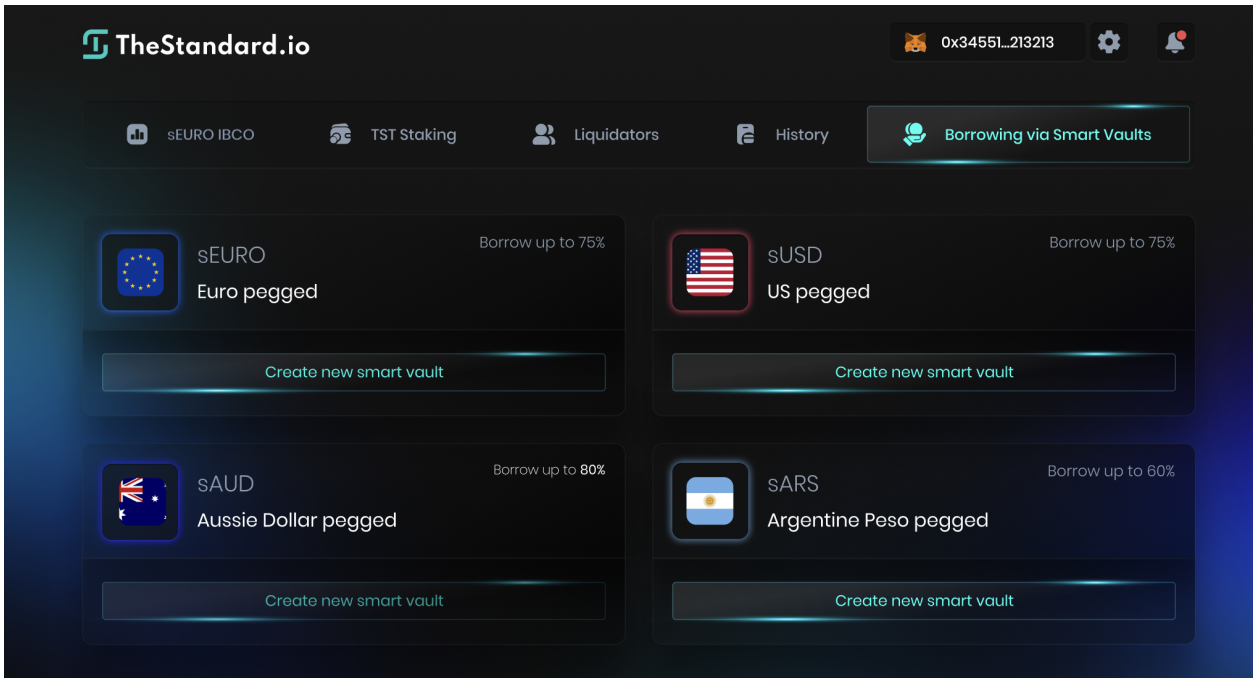
By participating in these critical voting subjects, TST holders can actively shape the protocol's future and contribute to its success, making the Standard Protocol a more attractive, resilient, and innovative ecosystem.

3.4. The Standard’s Interface

The Standard Protocol's interface is designed to provide users with a seamless experience while interacting with the platform. By offering a user-friendly and intuitive layout, the platform aims to facilitate the creation and management of Smart Vaults, contributing to the overall appeal of the ecosystem.

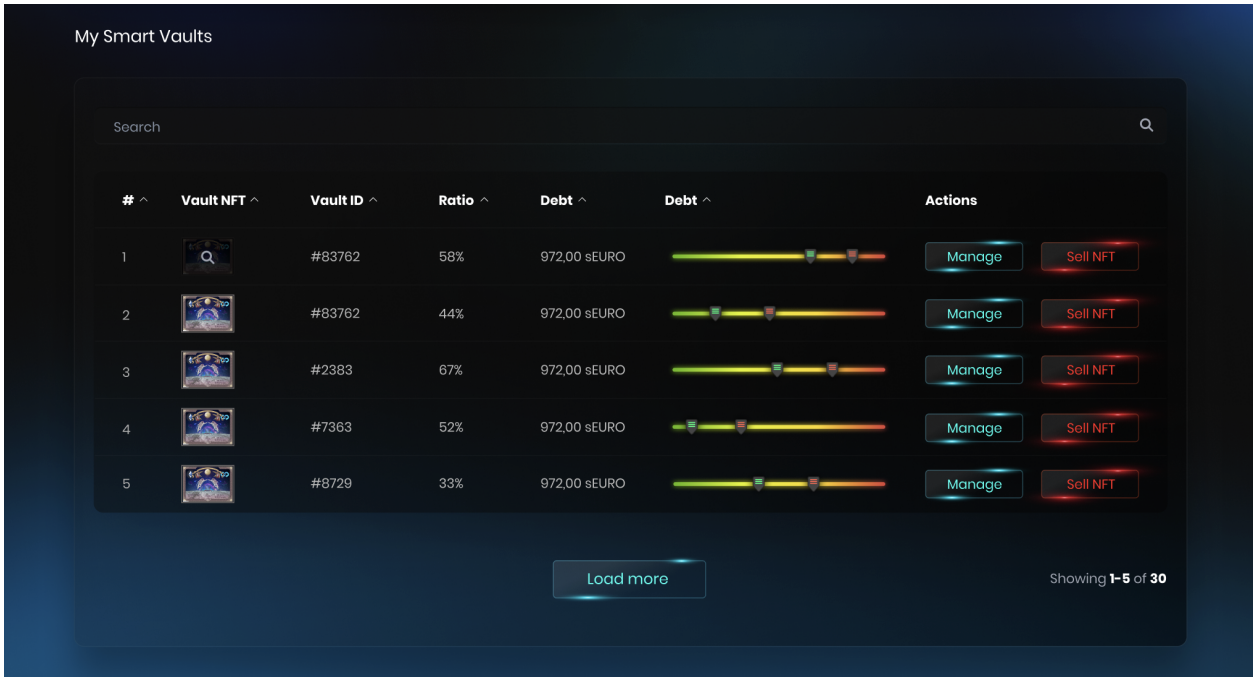
For Version One, the interface will include the following features:

Create New Smart Vault:



Users can create Smart Vaults based on their desired output stablecoin. For instance, if a user wishes to borrow sUSD, they would open an sUSD Smart Vault, whereas if they want to mint sEURO, they would select the corresponding vault. Each vault can only mint its respective currency, but users can deposit multiple collateral types into a single vault.

My Smart Vaults:



This section displays the user's currently open Smart Vaults, which can be considered as collateralized debt positions. Within this section, users will find:

Vault NFT: A cutting-edge NFT representing the key attached to the Smart Vault. This NFT allows users to sell their Smart Vault collateral and debt on OpenSea or other reputable NFT marketplaces. The NFT's ownership grants control over the Smart Vault.

Vault ID: The unique identification number assigned to each Smart Vault.

Ratio: The collateral-to-debt ratio, with a liquidation threshold set at 110%. Users should monitor this ratio closely to avoid liquidation.

Debt: The amount of debt taken out against the user's collateral.

Debt Visualization: A color-gradient line from green to orange to red, representing the user's collateral. Green and red arrows indicate the borrowed debt and liquidation points, respectively. This visual aid allows users to assess their liquidation risk at a glance.

Manage: Users can click this option to manage collateral, repay debt, or borrow additional funds.
Sell NFT: Users can choose to sell their Smart Vault, including the associated debt and collateral, on OpenSea. Ownership of the NFT provides control over the Smart Vault's collateral and debt, enabling users to sell the NFT if they cannot repay their debt but require liquidity.
By offering a comprehensive and user-friendly interface, the Standard Protocol empowers users to make well-informed decisions while interacting with the platform. This level of accessibility enhances the platform's appeal, encouraging wider adoption and increasing the value of TST holdings.

View Protocol Data

Users will be able to access The Standard Protocol’s data that is summarized in the dashboard. The data page can for example include the following information:

- Global income generated for TST stakers
- Detailed Information about collateralization levels
- Outstanding Standard Euro
- Number of Smart Vaults
- Total value locked (TVL)
- Price Earning Ratios
- Detailed Information about the DAO treasury
- Deployment of the PCV
- Current portfolio split of the PCV

4. Concept: Proposal System of The Standard DAO

In this section, we will outline The Standard DAO's governance process. Voting is an initial method of launching the DAO.

This guide will be useful to anyone wanting to take an initial idea to a full Standard improvement proposal (SIP). The document will also outline how the governance process works within The Standard DAO. The Standard DAO will use snapshot.org to start with to tally votes within the DAO.

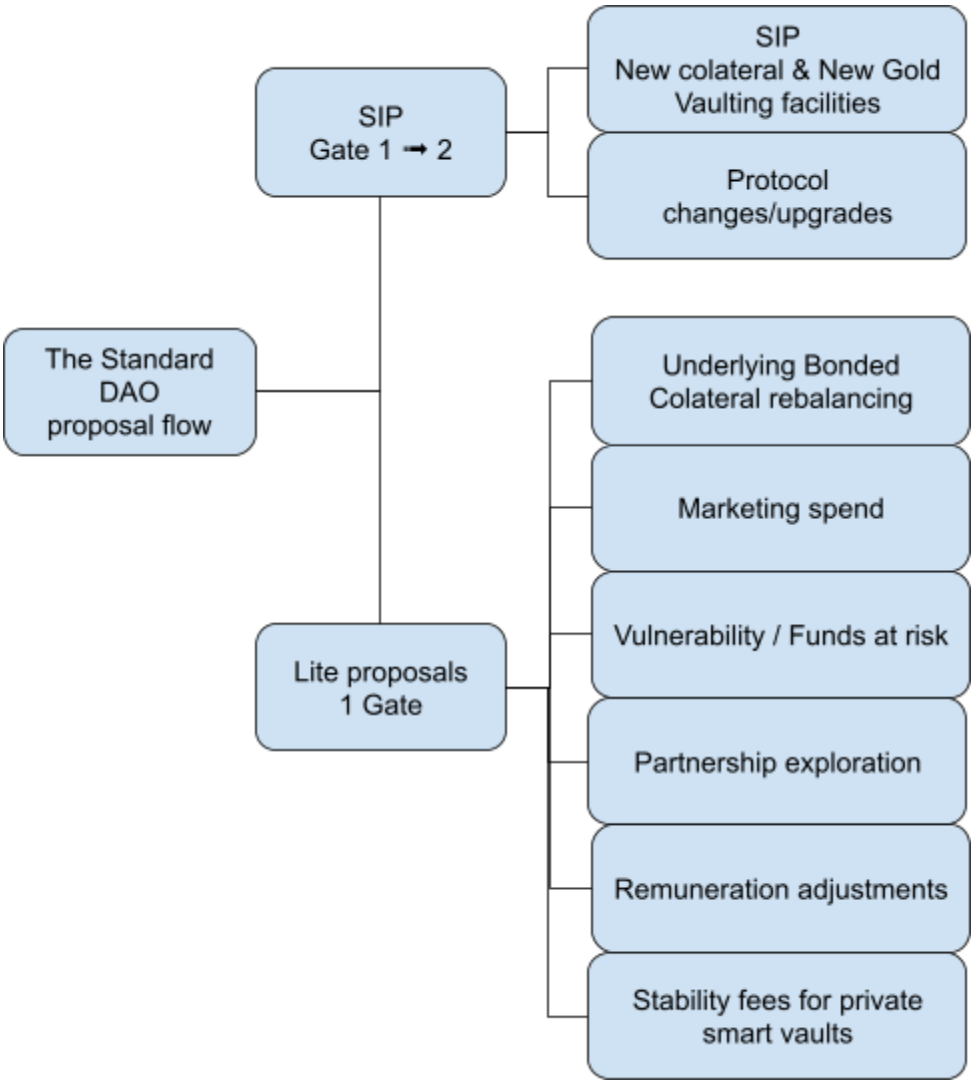
> **Note:**
> This is a first draft, the proposed system will be shaped by the community and TST token holders

4.1. Proposal Categories

There are two types of proposals depending on the level of approval required.

1) **Improvement Proposals** are called SIP (Standard Improvement Proposal). A proposal needs to pass through two gates before a SIP is executed into the protocol. SIP's are usually new improvements, features or adjustments that require complex coordinated efforts or have a large impact on the protocol's governance, functionality or treasury.

2) **Lite Proposals** only require one gate to be passed before execution. These proposals include issues that need swift actions in time-sensitive scenarios where funds are at risk, or any activity with a clearly defined scope. Non-time sensitive proposals are also in this section.



4.2. Voting Types

All votes cast in Snapshot.org should follow the following vote type timelines and consider the durations given below as the minimum required for their length. Types are categorized between "*Critical"* and "*Non-Critical"*. Each type is described in the table below:

	TYPE	CATEGORY	VOTE DURATION	DESCRIPTION
A	Funds at risk	Critical	0h to 24h	If there is an emergency, The Standard DAO multisig will act in the

				best interest of the DAO if treasury funds are at risk. The vote and gate makes sure that DAO members have transparency to the multisig's response.
B	New Precious Metals Vaulting Partners	Not critical	7 days	Used to connect new vaulting facilities into the protocol. They must pass all security and transparency guidelines set up by The Standard DAO
C	STANDARD IMPROVEMENT PROPOSALS (SIP)	Not critical	7 - 30 Days	Used to vote on the execution of a SIP's. Votes happen on gate one, then discussed again and final votes will happen to get through gate two.
D	Lite Proposals	Not critical	7 days	These proposals account for budget spend, UI / UX issues, community sentiment about an idea or partnership.

4.3 Gate Moderator

Gates need moderation to assure that:

- proposals are not spam
- discussion on open proposals stay on topic

Gate moderators are elected by the DAO. The DAO can also vote on dismissing a gate moderator.

4.4 Details on Voting Gates

Voting gates are checks and balances on a proposals life cycle.

- **Standard Improvement Proposals (SIP):** Idea >> Discussion >> Gate 1 >> Validation & Discussion >> Gate 2 >> Execution
- **Lite Proposals:** Idea >> Discussion >> Gate 1 >> Execution

4.5 Lite Proposal Gates

Idea discussion 1 to 3 weeks ➟	Gate 1 (one week) ➟	Execute / Reject

Lite proposals have a fast life cycle. They need a structured and well-defined scope of work that is derived from the forum discussion (minimum of 7 days if not critical). This forum discussion will give a sentiment check through a forum poll / pre-vote. If sentiment is positive (defined by Gate moderator), then it will be moved into the Proposals category in the forum on forum. A lite proposal vote will then be cast before execution or rejection. Voting will be open for 7 days if not critical.

4.5 Standard Improvement Proposals (SIP) Gates

Idea: 1 to 3 week discussion ➟	Gate1 (one week) ➟	5 - 15 week validation discussion	Gate 2 (one week)	Execute

Idea and discussion

A rough idea is first published on the Discord server and sentiment about the idea is discussed. Once the author and community are happy to formally submit the idea for a vote, it must be published in the official forum as a high-level overview without too much detail. The Standard's forum will be the main forum used for formal discussion on SIP's.

Once a proposal author is happy with community sentiment and some of the details have been fleshed out, they can submit an official high level proposal to the forum proposals category. This will be discussed further on the forum for a min of 7 days.

Gate 1 Signaling vote

The final draft is submitted to the first gate which is used to signal general approval for the Standard improvement proposal in question. The votes will happen on Snapshot.org and will

determine if the proposal goes through the first gate or is rejected. A minimum of 5 million tokens are needed to vote and 51% are needed to approve the proposal to open the gate.

Validation discussion

This is where the proposal gets fleshed out and all details are discussed in the forum. Members can assess technical feasibility, scope, timelines and expected deliverables, execution plan and where it fits into the schedule. A forum poll and SIP number is required before going on to gate two. The SIP number will be assigned after a forum poll returns positive sentiment to move forward.

Gate 2 The Standard Improvement Proposal SIP

Getting through the second gate will determine if a SIP is approved for execution or gets rejected by the DAO. This is done by a vote on a voting platform (for example snapshot.org). A minimum of 10 million tokens are needed to vote and 70% need to approve the proposal to go through to be executed.

Naming Convention

Proposals can or can not have a SIP number. It is expected that proposals follow the following naming structure to facilitate reading GATE # is the number of the gate they must pass through next

- Without SIP # → [Gate # of #] Proposal title
- With a SIP # → [SIP-#] [Gate #] Proposal title,

In any case, the title has to be meaningful and honor the proposal in the discussion.

5. Requirements for Mass Adoption

In order to achieve widespread adoption, the Standard Protocol has to meet the following requirements:

Liquidity for Stablecoin Markets and PCV

One of the biggest core success factors when it comes to stablecoins is deep liquidity. Without deep liquidity business development moves at a snail's pace.

Efficient Native Custodian Onboarding

The onboarding process for hard asset custodians has to be designed to be efficient and transparent. A team of business development professionals employed by the Standard DAO will lead the onboarding process.

Use of Standard Euro

The stablecoin Standard Euro (sEURO) is built for economic freedom as it can be minted, traded and exchanged without third party involvement. To facilitate the platform's mass adoption, an easy integration of Standard Euro as a payment method will be one of the aims of The Standard DAO. In particular, Additionally, merchants will be encouraged to implement Standard Euro as a secure payment method for online purchases.

Your Smart Vault, Your Terms

Smart Vault creators will enjoy a user-friendly dashboard to manage their assets. The dashboard facilitates a high degree of customization - users can set their own payment terms, collateralization levels, etc. The platform aims to make Smart Vaults transparent, secure and limit the credit default rates. With a mobile first philosophy for maximum inclusion.

Customizable Storage Fee

Native custodians can set their own storage fee to cover their variable storage costs. This is particularly important as costs vary per storage facility. A customizable storage fee will ensure that different custodians around the world can incorporate The Standard Protocol.

High Governance Turnout

Eliminating any form of centralized power will demand a high engagement of the community of Standard Token holders who will have to reach consensus on key voting subjects. Most blockchain protocols are based on voting mechanisms that usually suffer from a low voter turnout. It is the goal of the Standard Protocol to implement an innovative voting model that incentivizes community members to participate through monetary benefits.

Appendix

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