

STIMA
CRYPTO VALUE STANDARD

WHITEPAPER v1.4

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STIMA

STIMA, was born thanks to the concrete possibility, guaranteed by blockchain technology, of innovating complex social processes dedicated to exchange value, allowing any person the possibility of having an independent evaluation of their assets recognized in STIMA-token, and then subsequently exchanging / selling them and finally convert them back into assets.

The embryonic idea of "asset pegged" tokens was initially popularized by NFTs, which allow you to hold value as a fraction of ownership, providing users with the ability to avoid volatility (or other traits) by holding / trading tokens of a fractional ownership, among the various limitations of this service we find hyper-targeting, which has limited the mass diffusion of the service.

STIMA, on the other hand, allows you to hold STIMA-tokens that can be converted into any asset that is part of the PROOF of RESERVE, subtracting personal taste from the equation and in this way increasing its user base and consequently its diffusion.

In this whitepaper we focus on processes and applications, where assets are stored and transmitted with opensource software, cryptographically secure, using distributed ledger technology, that is a cryptocurrency.

The goal of STIMA is to completely eliminate the requirement of trust, as the implementation of the classic exchange iterations are based on mutual trust or trust towards a trusted third party. However, it has technical, market or process limitations that STIMA solves through the implementation of the blockchain.

In our solution, the "asset-backed" cryptocurrency is called "STIMA", measured in "STIMA-tokens" issued on the ETHEREUM blockchain and therefore exist as a cryptocurrency token.

Each STIMA-token is generated locked and subsequently released into free circulation only if supported in an asset / x token number ratio (i.e. a certain number of STIMA-token equals an asset) and the corresponding asset is held in the vaults certified by STIMA SRL.

STIMA-tokens can be generated, exchanged, transferred, stored, spent, etc. just like bitcoins or any other cryptocurrency or finally redeemed with any asset pledged as collateral, in accordance with the terms & conditions of use of STIMA SRL.

In this way the "reserve assets" have acquired the functions of a cryptocurrency, whose minimum value is permanently linked to the total value of all the "reserve assets", as the only way to mint the STIMA-tokens is to convert an asset, and the only way to redeem an asset is to hold STIMA-token.

Some of the main advantages of STIMA are:

- Low transaction costs,
- International transferability and convertibility without borders,
- Ownership and exchange without the need for trust,
- Minimum exchange value,
- Pseudo-anonymity,
- Transparency in real time

immunity from the problems of the legacy banking system.

Our implementation has the following advantages over other cryptocurrencies:

- STIMA SRL uses a simple but effective approach to conduct the “Proof of Reserves” which significantly reduces our counterparty risk as custodian of reserve assets.
- STIMA-tokens will not face any market risk such as Black Swan events, liquidity crisis, etc. as reserves are held in an “asset value / x token number” ratio rather than relying on market forces.
- The implementation of STIMA's “asset value / x token number” system is easier for non-technical users to understand than collateralisation techniques or derivatives strategies.

At any time, the balance of the certified value of the assets held in our reserves will be equal to the total of the STIMA-tokens in circulation.

This simple configuration more easily supports a reliable Proof of Reserves process; a process that is fundamental to maintaining a minimum price value between the STIMA-tokens in circulation and the underlying properties held in the reserves.

In fact, every token in circulation is guaranteed by the assets placed as collateral.

We recognize that our implementation is not perfectly decentralized as STIMA SRL has to act as the centralized custodian of the reserve properties (although the STIMA-tokens in circulation exist as a decentralized digital currency). However, we believe this implementation lays the foundation for creating future innovations that will eliminate these weaknesses, create a solid platform for new products and services, and support the growth and usefulness of the Ethereum blockchain in the long run.

Some of these innovations include:

- Obtaining value for an asset without actually carrying out a trading process subject to the laws of supply and demand to which the exchange market is subject.
- Facilitating mobile payments between users and other parties.
- Instant or near instantaneous value transfer between decentralized parties
- Introduction to the use of smart contracts and multi-signature features to further improve the overall security process, Proof of Reserves and enable new features.

STIMA SRL is the company that administers the SMART CONTRACT of STIMA.

The company is governed by San Marino law with headquarters in:

Via Onesto Scavino N ° 10, 27891 SAN MARINO

Registered with the C.O.E. SM29758

Certified as a high-tech company by SAN MARINO INNOVATION.

ASSET

The minimum value of the STIMA-tokens is guaranteed by the assets in return for which they are issued, in fact STIMA, through an valuation process, offers an evaluation of the same to the owners.

Recognizing, through empirical procedures, a real and market value of the asset, and recognizing to the owner all the value in STIMA-token, based on the current value of the cryptocurrency.

Types of assets:

Art: Paintings, Drawings, Photographs, Engravings, Art Installations, Medals, Mosaics, Textile Art Objects, Altarpieces, Sculptures, Stuccos, Inlays, Stained Glass, etc.

Jewellery: Rings, Bracelets, Earrings, Precious Stones

Wine & Spirits

Vehicles: Vintage cars, motorbikes and boats; Collectible cars, motorcycles and boats, planes, modules, etc.

Watches: Vintage watches, collection and investment.

Books and documents

Collectibles

Copyright

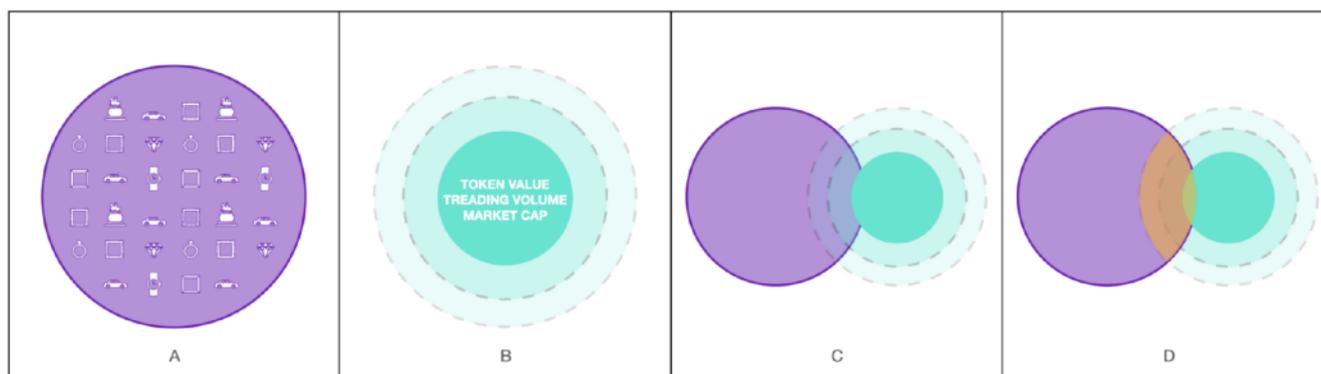
VALUE STANDARD

The “VALUE STANDARD” is a crypto-monetary system in which the monetary base is given by the value of the assets for which they have been issued.

This makes STIMA a fully convertible crypto-currency from and into assets.

The minimum capitalization value of STIMA is equal to the total value of the assets that are kept by “Stima SRL”.

The total value of the assets is fixed by the accepted value of the appraisals on the assets held in the “PROOF OF RESERVE”.



The main advantage in adopting the system consists in the stability of exchange rates, since the minimum value of the currencies does not depend on the supply and demand of the same, but on the overall value of the underlying assets.

Therefore, unless the currency is devalued, under the value system the economy will enjoy the advantage of a fixed minimum exchange rate.

Blockchain systems can and are innovating complex social interactions, making productive and social processes ever more diverse and secure.

Currently at the base of the Western system there is the “right of property”, exchanged through buying and selling processes regulated by the law of supply and demand, dictating or subjecting quantity and price.

STIMA aims to modify these processes, introducing new types of social iterations in which supply does not require demand to satisfy the buying and selling processes.

The VALUE STANDARD, which is based on 3 different principles and their intersection.

A) **PROOF OF VALUE:** is the total amount of all minted and still locked tokens.
 Each STIMA-token is generated when a valuable asset is placed as collateral, 90% is deposited in the wallet of the owner of the asset, This amount demonstrates the interest on the part of the owners to deposit the assets in the vault certified by STIMA to unlock tokens.

B) **PROOF OF LIQUIDITY:** the remaining 10% is retained in the form of a commission by STIMA SRL. This commission is sold through cryptocurrency exchanges, to generate trading volumes and a free market value of the STIMA-tokens.

The liquidity collected by STIMA SRL will be used to:

- Increase the PROOF OF RESERVE
- Increase the RESERVE of LIQUIDITY
- Cover management costs

The PROOF OF LIQUIDITY is the demonstration of the liquidity parameters of the tokens measurable through the following market data:

- Market value of the token,
- Market cap,
- Trading Volume.

C) the intersection between PoV (PROOF OF VALUE) and PoL (PROOF OF LIQUIDITY) is due to trust in the system.

D) The PROOF OF RESERVE is generated by the intersection between PROOF OF VALUE and PROOF OF LIQUIDITY.

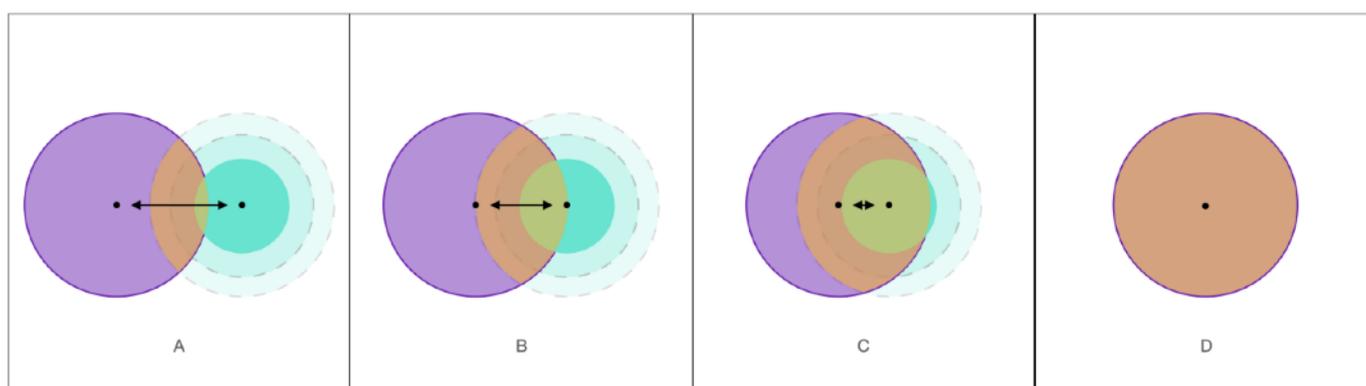
In fact, when the PROOF OF LIQUIDITY reaches the necessary performance, the owner of the assets that hold frozen tokens that are part of the PROOF OF VALUE, empirically evaluating the possible risks of the market, and when deemed acceptable, deposits the asset in the vaults accredited by STIMA.

The combination of PROOF OF VALUE and PROOF OF LIQUIDITY generates the PROOF OF RESERVE, the latter representing all the assets that can be redeemed with STIMA-tokens and actually guarantee the minimum value of the STIMA-tokens.

In the ecosystem regulated by STIMA SRL, an offer does not need a demand to be fulfilled, as the offer itself generates the liquidity necessary to be satisfied, in fact, STIMA users buy the STIMA-tokens and not the asset placed in warranty.

STIMA SRL plays the role of a fiduciary third party, the trust placed in the ecosystem is expressed through the following activities:

- AML processes
- Selection of valuable assets



- Empirical evaluation through a college of impartial experts
- Flawless asset management.

The intersection between PROOF OF VALUE and PROOF OF LIQUIDITY is due to the trust that people place in the quality and consistency of the work carried out by STIMA:

A) The greater the confidence in STIMA, the more the quantity of assets in the PROOF OF VALUE increases.

B) The higher the quality of the assets placed as collateral, the greater the liquidity that people can bring into the PROOF OF LIQUIDITY.

C) The greater the numbers of the PROOF OF LIQUIDITY; token value, footfall volume and market capitalization, the greater the confidence of the asset owners, who will consequently deposit the assets in the vaults to unlock liquidity

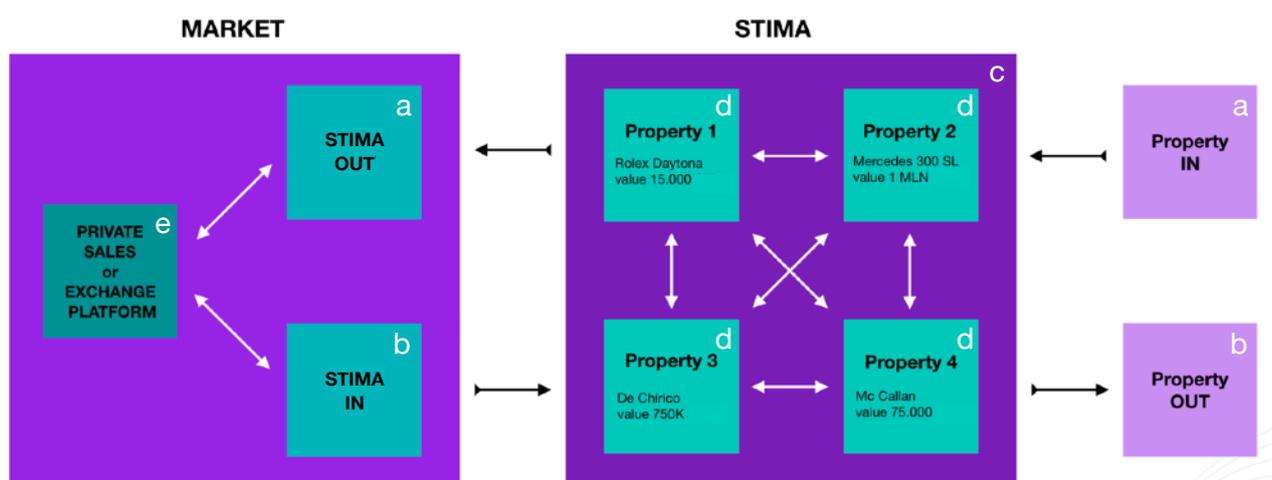
D) In a system where all parties have confidence in the ecosystem, the RESERVE PROOF grows.

CROSS PROPERTY SHARING

STIMA offers a CROSS PROPERTY SHARING service, developed on blockchain, "an electronic exchange and / or payment system based on cryptographic proof instead of trust, which allows two willing parties to transact directly with each other without the need for a third party trusted ".

CPS (cross property sharing) is a process based on the VALUE STANDARD principles, which as in the GOLD STANDARD, the value of the unit of measurement (STIMA-token) is given by the value placed as a guarantee, in the case of an estimation by the value of the assets.

Each unit of STIMA obtains its value from the quantity and quality of the assets placed as collateral, which stimulates the presence of a minimum exchange value.



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The diagram explains the iterations foreseen by CROSS PROPERTY SHARING.

A. Any person can "mint" any asset that meets the selection criteria of STIMA SRL,

- B. The obtained STIMA-tokens can be used to redeem any assets that have been minted and deposited in the vaults, the mined properties can be redeemed exclusively in STIMA-token.

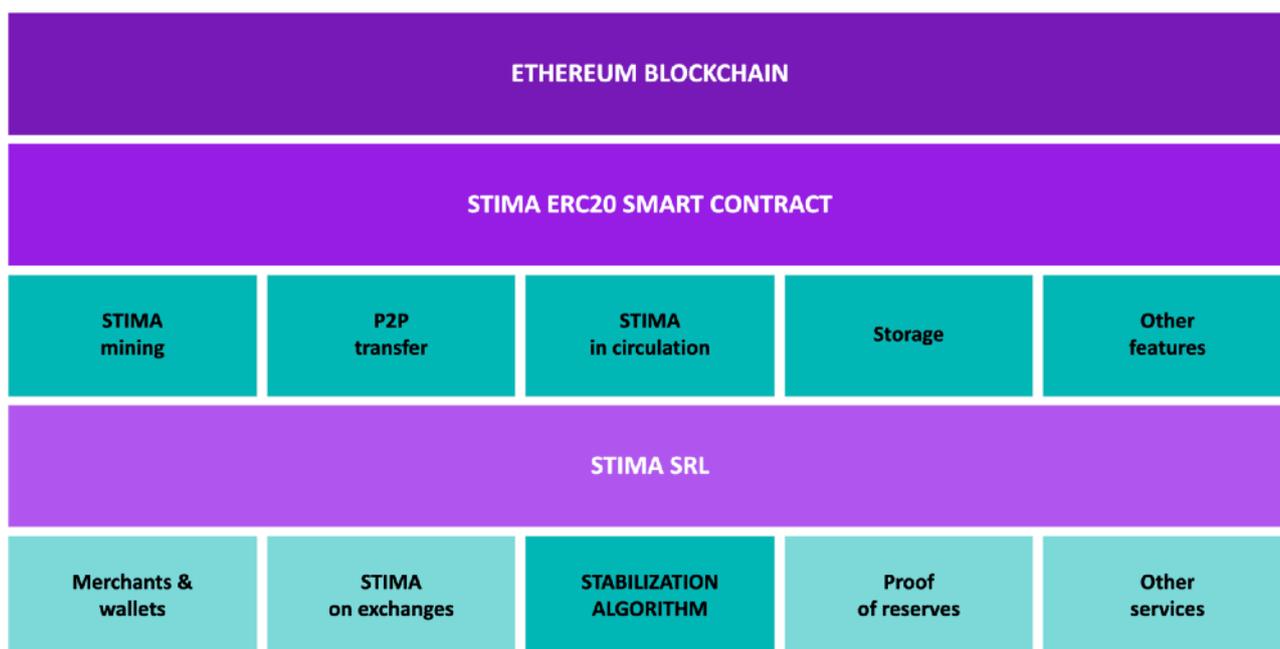
There is no other way to "mint" STIMA-token, other than transforming an asset and only STIMA-token holders can redeem the properties held by STIMA SRL.

- C. STIMA SRL offers an innovative exchange service called CROSS PROPERTY SHARING, which allows users a new kind of commercial exchange, no longer subject to the laws of supply and demand:
 - i) STIMA-tokens play the role of unit of measure to quantify the value of a given assets, going beyond the simple monetary value.
 - ii) This process allows people to trade assets, without actually having to sell them according to the rules of the buying and selling process.
 - iii) Any person who has bought STIMA-tokens issued for various assets can withdraw one in particular if it reaches the STIMA-token value indicated to start the process of withdrawing the asset from the ecosystem.

In fact, STIMA simplifies difficult buying and selling processes such as: negotiation, evaluation, subjective value and market accessibility, allowing you to enhance, exchange, sell and buy assets quickly and transparently.
- D. The value of each asset is evaluated through an evaluation process, and the owner is recognized the full value in STIMAT-token.
- E. The STIMA-tokens can be exchanged and sold on the EXCHANGE platforms that accept them and through private negotiations.

TECHNOLOGY

Each STIMA-token issued in circulation will be supported in a "asset / token number" ratio, the assets are held in the reserves by STIMA, as the custodian of the supporting asset, we act as a trusted third party responsible for that asset. This risk is mitigated by a simple implementation that collectively reduces the complexity of conducting audits, while increasing the security, provability and transparency of these audits.



Description of each level:

- 1) The first level is the ETHEREUM blockchain, in fact the STIMA transactional ledger is incorporated into the ETHEREUM blockchain as metadata via the built-in consensus system.
- 2) The second level is the ERC20 protocol, it is a fundamental technology capable of:
 - a) Grant (create) and revoke (destroy) digital tokens represented as metadata embedded in the ETHEREUM blockchain; in this case, “asset backed” digital tokens: STIMA-token.
 - b) Track and report token circulation via etherscan.io.
 - c) Allow users to transact and store STIMA-tokens and other assets / tokens in a:
 - i) p2p environment, pseudo-anonymous, cryptographically secure.
 - ii) encrypted, opensource, browser-based web wallet.
 - iii) support system for multi-signature and offline cold rooms.
- 3) The third level is STIMA SRL, our commercial entity mainly responsible for:
 - a) Acceptance of ownership and issuance of the related STIMA-token.
 - b) Sending of ownership and revocation of the corresponding constraints
 - c) Custody of the properties supporting all STIMA-tokens in circulation
 - d) Public reporting of evidence of reservations and other audit results
 - e) Starting and managing integrations with existing wallets / blockchains, exchanges, and merchants
 - f) Allows the use of any web wallet, which allows users to send, receive, store and convert.

SMART CONTRACT

Descrizioni delle funzioni:

1. **Mint:** available only for accounts with the MINTER_ROLE role (by default, to the contract owner). takes as parameters the address on which the tokens will be created and the total number of tokens to be created. As long as the tokens are not transferred they are registered on the blockchain as "mined", after the transfer they will be considered legitimate tokens ". During the “minting” process a part of the tokens generated, as per the contract settings (by default after the distribution is 10%) will be automatically transferred to the wallet indicated by the contract owner.
2. **HoldOf:** it is a public function that generate only “hold” tokens tokens, in practice the wallet cannot do anything with this category of tokens, any kind of operation will be denied.
3. **BurnFromHold:** available only for accounts with the MINTER_ROLE role. created to "burn" only “hold-tokens”, accepts as parameters only the address from which to "burn" and how many tokens. It CAN NOT be used to "burn" more than what is "hold", that is, if the tokens have appeared on the address using a transfer (the transfer function is only available for non “hold-tokens”) the administrator cannot "burn" them with this function, ie legitimate tokens cannot be affected in any way.
4. **ReleaseBalance:** available only for accounts with the MINTER_ROLE role. Created to unlock tokens from "hold", it accepts as parameters the address from which to release the tokens and how many “unhold”. After this function, the administration will no longer be able to influence the unheld tokens in any way and the owner of the tokens will be able to transfer them immediately.
5. **getNumerator, getDenominator:** public functions, return the numerator and denominator of the fraction indicating how many issued tokens the contract holder receives. the default is 10 and 100.

6. **SetMinterPart:** available only for accounts with the role DEFAULT_ADMIN_ROLE (by default only to the contract holder), it allows you to set the numerator and denominator of the fraction that sets the holder's quota. that is, if you transfer, for example, 8 and 100, the owner will receive 8% of the issued tokens.
7. **Snapshot:** This contract extends an ERC20 token with a snapshot mechanism. Create a snapshot; of the balances, the status and the total recorded in the blockchain at that time. This can be used to create a security mechanism based on empirical information such as:
 - Total "hold-token" balance,
 - Total "miners" balance,
 - Total released STIMA-token balance,
 Snapshots is used to make the state of the STIMA blockchain transparent at any time.
8. **Compound-like voting and delegation:** system of proxies and votes for the management of the blockchain.
9. **flashLoan:** A flash loan is a smart contract transaction in which a lender smart contract lends assets to a borrower smart contract with the condition that the assets are returned, plus an optional fee, before the end of the transaction. This ERC specifies interfaces for lenders to accept flash loan requests, and for borrowers to take temporary control of the transaction within the lender execution. The process for the safe execution of flash loans is also specified.
Flash loans allow smart contracts to lend an amount of tokens without a requirement for collateral, with the condition that they must be returned within the same transaction.
By default there is no fee, but this can be changed by overriding flashFee.

PROCESSES

Automatic processes:

- **TOT N ° STIMA-token = All the properties held by STIMA SRL:**
At any time, all the STIMA-tokens issued by STIMA SRL during the "minting" process are divided among all the properties held by STIMA SRL, without any exclusion .
- **X N ° STIMA-token = Determined asset:**
This correlation is determined by the stabilization algorithm.
- **Asset value = appraisal accepted:**
On a periodic basis, determined by the terms of use of STIMA SRL, the accepted appraisal is renewed, quantifying the value of the assets at present.

Evaluation processes:

Before being placed in the STIMA system, every object of value must pass a complex and careful evaluation process:

- **SELECTION:**
The assets must comply with the parameters established by STIMA SRL: a) clear provenance
b) detailed documentation
c) KYC, KYO
The owners of the selected assets will not be subject to any cost, in fact the appraisals, insurance and more will be charged to of STIMA.
- **EXPERTISE:**
To evaluate the assets, STIMA will consult the best specialists in the sector to obtain a clear and objective evaluation.

- NEGOTIATION:

The goal of the STIMA team is to reach a good agreement, which satisfies the owner of the asset based on the parameters dictated by the expertise.

- MINTING:

The owner "mint" STIMA-tokens locked on his wallet by certifying the asset.

- UNLOCKING:

The tokens are unlocked when the asset is deposited in the vaults certified by STIMA SRL.

Arbitrage processes:

In order to guarantee the minimum value of the STIMA, and to avoid that the intrinsic value of the STIMA-tokens is higher than the market value, two containment mechanisms have been created:

- Strategic liquidity reserves:

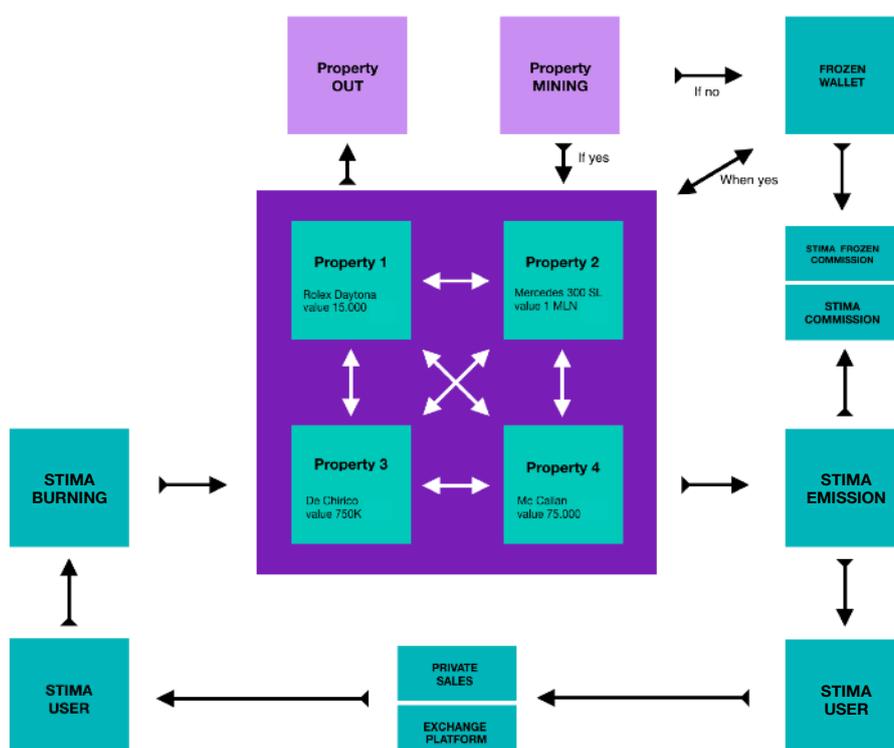
STIMA SRL sets aside part of the liquidity collected from the sale of its STIMA-tokens, to implement arbitrage policies in case the value of the STIMA-tokens on the exchanges becomes lower than the intrinsic value.

- Strategic reserves of assets:

STIMA SRL can exempt from the conversion process up to 30% of the total value held in assets, this with the aim of:

- Protecting the smaller holders of STIMA-token from the possible outflow of more prestigious assets in favor of the largest holders
- To be able to transform them into liquidity to increase strategic liquidity reserves and implement arbitrage policies.

FLOWS



There are various stages in the life cycle of a STIMA-token best understood through a diagram.

Assets minting:

any person in possession of an asset, who passes the certification and validation process, will be credited with a certain number of STIMA-tokens.

On the blockchain this action is qualified with mint, the sender of the contact tokens is 0xD6eE0C91eeb3b89ecbD9238c29e6d86519AC088

The availability of the STIMA-tokens issued occurs when the asset is delivered to the place indicated by STIMA SRL.

The quantity of STIMA-tokens issued locked and those unlocked is visible on the TOKENOMICS page of the website www.stima.io

Commission on MINTING:

STIMA SRL, automatically retains, at the moment of minting, 10% of the total generated, which is sent to the following wallet:

0xD6eE0C91eeb3b89ecbD9238c29e6d86519AC088.

Exchange:

Any STIMA-token holder has the possibility to exchange the tokens privately and on any exchange that accepts them.

Burning:

Any holder of an STIMA-token, once the token value calculated by the stabilization algorithm has been reached, can start the collection process to redeem any assets pledged as collateral.

Commission on BURNING:

To redeem any assets you must have accumulated the value indicated in the STIMA-token on the STIMA SRL website, the value is composed as follows:

- value of the asset
- commission on the sale of 10%, which is retained by STIMA SRL

Right of first refusal:

The original owner of the asset, the one who mounted the tokens by placing the asset as a guarantee, if provided for by the Terms & Conditions of use of STIMA SRL, retains the right of first refusal on the purchase of the asset.

This right provides for the payment of the amount in STIMA-token obtained at the time of minting + the commission on the sale of 10% accrued.

Income:

If possible, STIMA SRL undertakes to generate profits through the assets (exhibitions, catalogs, image rights, etc.), to pay the management and administration costs

Sale:

The fund reserves the right, having accrued the value of the object to sell it, all the value obtained must be immense again in the fund through the purchase of other objects.

OPERATION

Stabilization's algorithm:

In order to distribute the capitalization value of STIMA-tokens on the assets that have allowed their minting, an algorithm has been developed that plays the role of stabilizer, which equally distributes the added value that has accrued at the time of the last minting.

In practice, it carries out a re-balancing between Assets Value, N ° STIMA-tokens issued, STIMA Capitalization, Current STIMA-token Value, stabilizing the minimum value of the currency.

The algorithm is based on the distribution of the total STIMA-tokens based on the incidence of each assets on the total value in FIAT.

Data:

% IT: % incidence on the total Fiat value

TVFR: Total Recognized Fiat value

VFR: Recognized Fiat Value

VSA: Updated STIMA-token value

TSE: Total STIMA-tokens Issued

VSE: STIMA-tokens value at issue

VFA: Updated Fiat value

Algorithm:

$\% IT = (VFR * 100 / TVFR)$

$VSA = (TSE / 100 * \% IT)$

$VFA = (TSE / 100 * VSA) * VSE$

If this algorithm were not implemented, an overestimation of the value of the initial properties would occur, in this way instead the STIMA-tokens N ° is divided according to the value.

The advantages of implementing this algorithm allow you to set the minimum value of an STIMA-token each time based on the current market value of the STIMA-token.

TRANSPARENCY

STIMA SRL, to create a fully transparent mechanism, provides for the following procedures:

- Newly issued controlled system,
- Processes of AML, KYC and KYO,
- College of experts
- Scheduled lock up,
- External audit on assets,
- Clear asset management,

Controlled issue system:

New issues can only be made in the correlation "X N ° STIMA-token / assets", the blockchain guarantees full and transparent control of the times and amounts of issue.

Processes of AML, KYC and KYO:

Any new user to have access to the services offered by STIMA, must successfully pass the AML checks, which include: KYC: control of natural and / or legal persons
 KYO: Asset control.

College of experts:

The valuation of the assets is entrusted to a college of experts external to STIMA SRL, with the aim of obtaining an impartial and independent valuation.

Scheduled lock up:

The tokens will be "defrosted" only when the asset is delivered to STIMA SRL.

Weekly / monthly audit:

An external company, based on the timing dictated by the terms of service of STIMA SRL, will perform audits on the presence and value of the properties.

Clear asset management:

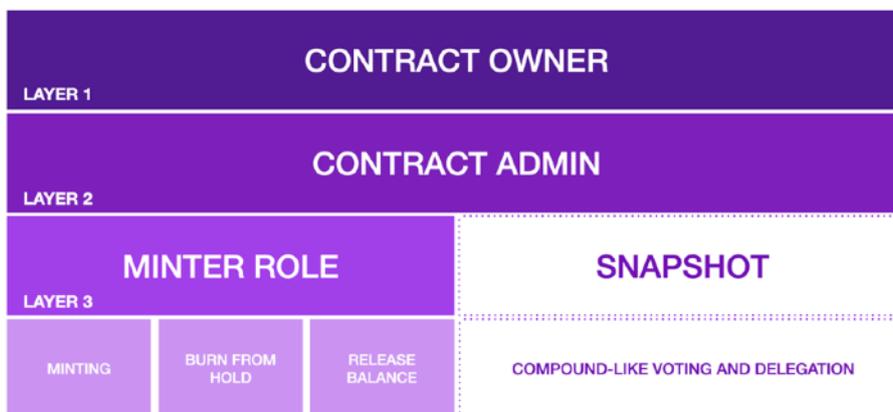
Each issue, acquisition or asset management activity is reported in the blockchain and supervised by industry experts internal and external to our Team.

CONTROL CHAIN

STIMA was born as a not completely decentralized system, as STIMA SRL itself plays the role of third-party trustee, in order to guarantee the maximum security parameters, a distribution hierarchy of the fundamental roles envisaged by the smart contract has been implemented.

For this purpose, blockchain-based external systems have been introduced:

- DEFENDER: administration panel (<https://docs.openzeppelin.com/defender/>)
- Gnosis Safe: multi-sign wallet ([https://gnosis-safe.io /](https://gnosis-safe.io/))



The STIMA control chain is spread over 3 layers represented in the diagram:

Layer 1 - CONTRACT OWNER:

Contract ownership is entrusted to a multisign portfolio, representing corporate shareholders, which requires a 2/3 vote to confirm transactions.

This role performs the following functions:

- Appoint the contract administrator (Layer2)
- Receives commissions

Layer 2 - CONTRACT ADMIN

The administration of the contract is entrusted to a multisign wallet, representing the corporate shareholder, which requires a vote of 2/3 to confirm the transactions.

This role performs the following functions:

- appoint Snapshot role (Level 3.1)
- appoint the role of MINTER (Level 3.2)

Layer 3 - ROLE OF MINTER The role of MINTER is entrusted to a multi-sign wallet, which requires a 2/3 vote to confirm transactions.

This role performs the following functions:

- MINT: generates tokens on the indicated wallet
- BURN FROM HOLD: Can only burn frozen tokens
- RELEASE BALANCE: allows you to defrost the tokens

To refine decentralization, the SNAPSHOT function is provided within the SMART CONTRACT, this implementation extends an ERC20 token with a snapshot mechanism. When a snapshot is created, the balances and total supply at that time are recorded for later access.

This can be used to safely create mechanisms based on token balances such as trustless dividends or weighted voting. In naive implementations it is possible to perform a "double spend" attack by reusing the same balance from different accounts. By using snapshots to calculate dividends or voting power, these attacks no longer apply. It can also be used to create an efficient ERC20 bifurcation mechanism.

Snapshots are created by the `_snapshot` internal function, which will issue the Snapshot event and return a Snapshot ID. To get the total supply at the time of a snapshot, call the `totalSupplyAt` function with the snapshot id. To get the balance of an account at the time of a snapshot, call the `balanceOfAt` function with the snapshot ID and account address.

The SNAPSHOT feature keeps a history (checkpoints) of each account's voting power. Voting power can be delegated by calling the `delegate` function directly or by providing a signature for use with `delegateBySig`. Voting power can be requested via the `getVotes` and `getPastVotes` public accessors.

By default, the token balance does not take voting power into account. This makes transfers cheaper. The downside is that it requires users to delegate themselves to activate checkpoints and track their voting power.

COMPOUND-LIKE VOTING AND DELEGATION::

Example: Suppose we want to create a proposal to give a grant to a team, in the form of an ERC20 token from the governance treasury. This proposal will consist of a single action where the target is the ERC20 token, call-data is the encrypted call transfer function (`<team wallet>`, `<grant amount>`) and with 0 ETH attached.

Generally a proposal will be created with the help of an interface such as Tally or Defender. Here we will show how to create the proposal using Ethers.js.

PROOF OF FUNDS

Proof of Solvency, Proof of Reserves, RealTime Transparency and other similar phrases have grown and resonated in the cryptocurrency industry.

Exchange and wallet audits, in their current form, are very unreliable and insolvency has occurred numerous times in the Blockchain ecosystem, through hacks, mismanagement or fraud.

Users must be diligent with the selection of exchanges and vigilant in their use.

Again, an experienced user will not be able to completely eliminate the risks. Also, there are exchange users such as traders and companies who have to maintain non-trivial fiat balances in exchanges in every day.

In financial parlance, this is known as "counterparty risk" while it retains value with a third party.

We believe it is safe to conclude that exchange and portfolio audits in their current form are not very reliable.

These processes do not guarantee users that a custodian or exchange is solvent.

The STIMA Proof of Reserves configuration is new because it simplifies the process of demonstrating that the total number of STIMA-tokens in circulation (liabilities) is always coupled to the value of the assets held in reserve (assets).

In our configuration, each STIMA-token in circulation represents a unit of measurement, which means that the system is completely confidential when the sum of all the existing STIMA-tokens (at any time) is exactly divided among all the properties held in our reserve.

Since the STIMA-tokens exist on the ETHEREUM blockchain, the provability and accounting of the STIMA-tokens at any given time is trivial. Conversely, the correspondent of the properties held in our reserves is demonstrated by publishing the catalog on the STIMA website (www.stima.io) and undergoing periodic checks by professionals.

- A. STIMA releases all STIMA tokens through the ERC20 protocol. ERC0 operates on the ETHEREUM blockchain and therefore all STIMA tokens issued, unlocked and in circulation, including the transaction history, are publicly verifiable through the tools provided on etherscan.io.
- B. STIMA generates the STIMA-token directly on the owner's wallet, in a correlation "X N° STIMA-token / asset", then the owner's wallet will carry out a transaction for the payment of the STIMA commission.
- C. Each STIMA token issued is a unit of measurement, which once the necessary quantity is reached, the exchange with one of the properties will be guaranteed (a certain number of STIMA-tokens is equivalent to an asset). By combining the aforementioned cryptocurrency and assets accounting processes, we conclude that the "Solvency Equation" for the STIMA system is simply:
 - "X N ° token STIMA = asset" and / or "TOT N ° token STIMA = all assets".
 - Each STIMA-token unlocked for which in free circulation is publicly registered by the ETHEREUM blockchain, so it corresponds to the possibility of withdrawing an asset.
 - The proof of the existence of the STIMA-tokens is on the ETHEREUM blockchain as discussed above.
- D. The creditworthiness test of the STIMA tokens is based on several processes:
 - We publish the balance sheet / catalog of assets on the official website.
 - Auditors will regularly check, sign and publish our financial statements.

Users will be able to view this information on our Transparency page on the official website.

For clarity, we would like to recognize that the STIMA blockchain is different from the STIMA catalog by structure, in fact each STIMA-token plays the role of cryptocurrency / voucher, which can be converted into an asset on the official website.

WEAKNESSES OF IMPLEMENTATION

We understand that our implementation does not immediately create a fully reliable cryptocurrency system. Mainly because users have to trust STIMA SRL.

However, almost all exchanges and wallets (assuming they hold fiat / crypto or otherwise) are subject to the same weaknesses.

Users of these services are already subject to these risks. Here is a summary of the weaknesses of our approach:

- We could go bankrupt,
- The local authority could freeze or confiscate the properties,
- Assets could be damaged / stolen,
- We could escape with the properties,
- Risk on a single point of failure of the ETHEREUM blockchain,

Note that nearly all digital currency exchanges already face many of these challenges. Therefore, the users of these services are already subject to these risks. Below we describe how each of these concerns are addressed.

- A. We could go bankrupt In this case, the commercial entity STIMA SRL would go bankrupt but all the assets would be safe and, consequently, all the STIMA-tokens will remain redeemable. Most of the security breaches in "Bitcoin-companies" have targeted cryptocurrencies rather than physical assets. Since all STIMA-tokens exist on the ETHEREUM blockchain, they can be stored by individuals directly through the protection of their private keys.
In the worst case scenario, the judicial authority will liquidate the assets, repaying the holders of STIMA-token with assets or FIAT.
- B. The local authority could freeze or confiscate the funds: Our KYC / KYO / AML processes that we perform are also used by other digital currency exchanges, this ensures that all participants in STIMA SRL services are in full compliance.
- C. Assets could be damaged: All assets are stored and preserved according to the highest security standards, to reduce the possibility of damage and insurance costs. If even with all these precautions, the assets should be damaged or stolen, each asset is covered by the insurance police.
In the event of such an event, STIMA SRL will use the capital obtained from the insurance companies to buy new assets, to replace the damaged or stolen ones.
- D. We could escape with the reserve resources:
The company statute is public as well as the names, positions and reputation of the owners of the company. The assets are legally bound to STIMA SRL. Any bank transfers into or out of the current account or asset purchase processes will have the relative traces and will be bound by strict internal policies.

- E. To avoid problems of failure of the blockchain system, we have chosen as a service provider, one of the largest and most recognized blockchain operators in the sector: ETHEREUM.

APPLICATIONS

In this section we will summarize and discuss the main applications of STIMA-tokens in the ETHEREUM ecosystem and for other consumers globally.

We divide the beneficiaries into four user groups: Minters, Exchanges, Individuals and Merchants.

The main advantages, applicable to all groups:

- Token ownership vested in other asset classes,
- Less volatile and familiar unit of account,
- World resources migrate to the ETHEREUM blockchain

For the Minters:

Traders understand that the classic buy / sell process can be slow, risky and unprofitable, some of these problems include:

- The offer must match the demand,
- The negotiation process may not meet expectations,
- High brokerage costs (10% brokers, 30% auction houses, other),
- To obtain payment guarantees, it is necessary to run into difficult legal contracts,
- Bad faith of the other party,

STIMA partially resolves and simplifies all the impediments listed above.

For exchanges:

Traders understand that accepting fiat / crypto deposits and withdrawals using legacy financial systems \ can be complicated, risky, slow and costly..

- Some of these problems include:
- Identify the right payment providers for your exchange: irreversible transactions, fraud protection, lower fees, etc.
- Platform integration with API-free banks
- Work with these banks to coordinate compliance, security and build trust
- Prohibitory costs for small-value transfers
- Possibility of canceling international transfers
- Low and unfavorable currency conversion fees

By offering ties, an exchange can alleviate the aforementioned complications and gain additional benefits, such as:

- Accept cryptocurrencies as a deposit / withdrawal / storage method rather than using a bank or legacy payment provider: allows users to enter and exit the fiat / crypto exchange more freely, quickly and economically,
- Outsource legal custody risk to STIMA and manage cryptocurrencies only,
- Easily add other fiat currencies such as trading pairs to the platform,
- Protect customer assets exclusively through accepted cryptographic processes: Multi-signature security, cold and hot wallets, HD wallets, etc.,
- Conduct audits more easily and securely in a purely cryptographic environment.

Anything that can be done with Bitcoin as an exchange can be done with Stima.

Exchange users know how risky it can be to hold fiat currencies in an exchange. With the growing number of insolvency events it can be quite dangerous. As mentioned above, we believe that using STIMA-tokens exposes users of exchanges to lower counterparty risk than continuously holding fiat / crypto on exchanges.

For individuals:

There are many types of single blockchain users in the world today, looking to make a profit every day; to long-term investors who wish to keep their cryptocurrencies securely; to tech-savvy shoppers looking to avoid credit card fees or to maintain their privacy; to philosopher users seeking to change the world; to those who want to make payments globally more effectively; to those seeking access to financial services for the first time in third world countries; to developers who wish to create new technologies; to all those who have found many uses for cryptocurrencies.

For each of these individuals, we believe that ties are useful in similar ways, such as:

- Transactions in fiat assets / value, pseudo-anonymously, without intermediaries,
- Store the value in cold wallets, protecting your private keys,
- Avoid the risk of archiving non-stabilized fiat / crypto,
- Avoid having to open a fiat bank account to hold the fiat value,
- Everything that can be done with Bitcoin or any other cryptocurrency as an individual can also be done with Stima.

For traders:

Merchants want to focus on their business, not payments. The lack of inexpensive, ubiquitous, global payment solutions continues to plague merchants across the globe, both large and small. Traders deserve more.

Here are some of the ways Stima can help them:

- Price of goods in fiat value instead of Bitcoin (no conversion rate),
- Prevent chargebacks, reduce fees and get more privacy,
- Provide new services thanks to the “X N ° STIMA-tokens / certain assets” features: Micro-tipping, gift vouchers, more,
- Everything that can be done with Bitcoin or any other cryptocurrency as a merchant can also be done with STIMA.

FUTURE INNOVATIONS

Category Token:

issue of tokens by product category, accessible only by converting STIMA-tokens into CategoryToken.

Multisignature:

Digital signature system for the decentralization of the role of STIMA.

Smart Contracts Proof of Solvency:

implementation of a system that tests the reserves automatically and certified within the blockchain.