COTI's Treasury 2.0 Litepaper

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1. Introduction

The COTI Treasury is a major pillar of the COTI ecosystem and provides a pool where users can deposit \$COTI and earn rewards for their participation. As the entire ecosystem generates fees, the Treasury grows, increasing the rewards for users who have deposited \$COTI.

In its current form, the Treasury is limited to \$COTI deposits only. Treasury 2.0 fosters a wider range of token deposits, thus increasing both the value of the Treasury and its use cases. In the coming months, new concepts and models will be introduced to improve the Treasury for all participants and support the growing demand for more use cases. These improvements will not only benefit existing Treasury participants but also expand the Treasury's reach to other network participants and token holders while maintaining stability and offering an attractive incentive and distribution model. We believe the improvements made with Treasury 2.0 and gCOTI, will grow both the Total Value Locked on the treasury and the rewards distributed to users.

2. Treasury Reserve Fund

As part of the new Treasury model and to better support the Treasury sustainability and stability, a new component is added to the ecosystem which will operate as the Treasury Reserve Fund. The reserve will be an essential component to better manage the Treasury liquidity and its redistribution model internally and externally, thus allowing us to expand the services offered.



Image 1 - Treasury Reserve Fund Flow

The Treasury reserve will be responsible for collecting fees from all Treasury components and minting new \$COTI tokens to maintain its reserve. All funds circulating in the Treasury will either be distributed by the Treasury reserve or sent back to it to maintain its liquidity. The Treasury reserve funds will also be used to incentivize Treasury participants as well as maintain the stability of the Treasury ecosystem.

3. Treasury Financial Models

3.1 cUSD - COTI USD LP Token

cUSD will be issued on top of the MultiDAG 2.0 Mainnet, based on the CMD standard. When a user deposits any different kind of stablecoin (USDC, USDT, DAI, DJED etc) an equivalent amount of cUSD will be minted and will represent a share of the user's deposits from the stability pool. When users withdraw their funds from the Stability pool, an equivalent amount of cUSD will be burned.

3.2 Treasury Stability Pool

The Stability Pool is the first line of defense in maintaining the Treasury system's solvency. It achieves that by acting as the source of liquidity to repay debt from liquidated funds, ensuring that the total Treasury supply always remains fully backed. When funds are liquidated, an amount of cUSD corresponding to the remaining debt of the funds is taken from the Stability Pool's balance to repay its debt. In exchange, a dynamic percentage (defined by the size of the stability pool)

of the collateral from the funds is transferred to the Stability Pool and redistributed to the pool participants.



Image 2: Treasury Reserve Fund Revenue Streams

The Stability Pool will be funded by Stability Providers depositing stablecoins into it. In exchange, those providers will receive the stability pool liquidity token cUSD. Over time Stability Providers can expect to lose a pro-rata share of their deposits, while gaining a pro-rata share of the liquidated collateral. However, the liquidated funds will offset this loss and can potentially gain an even greater dollar value of collateral.

3.3 Why Should Users Deposit Funds To The Stability Pool?

Liquidity Providers of the Stability pool will benefit from the liquidation gains and receive rewards in the form of gCOTI/\$COTI tokens. To support the stability of the pool the deposits are made with stablecoins (DJED, DAI, USDC, USDT, etc).

3.4 Liquidations Mechanism

To ensure that the entire stablecoin supply remains fully backed by collateral, funds that fall under the minimum collateral ratio of 110% will be closed (liquidated). The debt of the liquidated funds is canceled and absorbed by the Stability Pool and its collateral is distributed among Stability Providers (5% of the collateral liquidated is offered to gCOTI holders) while the remaining liquidated funds are transferred to the Treasury reserve.

3.5 Liquidators

Funds can be liquidated by stability pool, gCOTI liquidators, and the Treasury reserve as soon as it drops below the Minimum Collateral Ratio of 110%.

Liquidation distribution illustration:

- 5% to gCOTI liquidators (Can be offered as a Dutch auction)
- 1% goes to the Treasury reserve
- 94% goes to the stability pool participants

4. Tokens swaps

As the new Treasury reserve will have liquidity for several tokens, funded via liquidations + fees, the Treasury will offer users token swaps. The swaps supported are all tokens that are available in the Treasury reserve funds and reflect a predetermined percentage from the existing reserve funds. Each swap will incur a transaction fee.



Image 3: Token swap Mechanism

5. Treasury Fee Structure

5.1 Funding Fee:

All leverage positions in the Treasury will incur a Treasury leverage fee. The longer the position the higher the fee. Some of the fees collected will be redistributed to unleveraged Treasury participants. Leverage increases the fees a user pays because it increases the size of each position he opens. The more leverage used, the bigger the positions the user is capable of opening which in turn increases the overall fee they pay.

Where:

$$\begin{split} F_{L_{i}} & \text{ is the funding fees} \\ D_{t} & \text{ is the deposit time} \\ & \text{ if } D_{t} = 0 \text{ , then } F_{L_{min}} = 0\% \\ F_{L1_{max}} & = 0\% \text{ , } F_{L2_{max}} = 0.8\% \text{ , } F_{L3_{max}} = 1\% \text{ , } F_{L4_{max}} = 1.2\% \text{ , } F_{L8_{max}} = 1.6\% \\ F_{L_{i}} & = (\frac{F_{L_{min}}}{365}) * D_{t} \end{split}$$

As illustrated in the graph below:



5.2 Health factor:

The Health Factor calculation is used to determine the health of the deposit; if the health factor reaches 1.0 the deposit will be at liquidation risk which may lead to liquidation of the entire deposit amount. Health factors may increase and decrease based on COTI price fluctuations. When the COTI price increases that health factor will increase, if the price decreases, the deposit's health factor will decrease. The initial deposit health factor ratio is calculated based on the following calculation:

Deposit amount = a_i Price during Deposit time = p_i Current market price = p_c

$$Health Factor = \frac{multiplier}{(multiplier-1)_{i=0}^{\frac{\sum a_{i}p_{i}}{\sum a_{i}p_{i}}}}$$

5.3 Liquidation Risk Fee:

The liquidation risk fee applies only to those who added a multiplier factor to their deposits. Liquidation risk fees range from 1%-5%, and the amount charged depends on the deposits' health factor at the time of withdrawal.



gCOTI — Introducing COTI's Treasury Governance Token



gCOTI empowers community governance over COTI's Treasury while adding various utilities for Treasury users.

Governance

As a governance token, gCOTI grants its holders the right to debate, propose features, and vote on matters related to the management of the Treasury protocol. The influence of each user is determined by the amount of gCOTI they hold. This puts the power directly in the hands of the users and encourages proper governance for the future of the protocol.

APY Booster

In addition to receiving rewards for depositing \$COTI in the Treasury, gCOTI holders can also receive a higher APY by locking their gCOTI. The more gCOTI deposited, the higher the rewards.

Active Participation In Liquidations

One unique feature of gCOTI is that it enables holders to purchase other users' \$COTI deposits before they get liquidated. gCOTI holders will be able to use their tokens to purchase discounted \$COTI Treasury deposits from the Treasury itself. For instance, if a user has a deposit of 100,000 \$COTI in the Treasury, and the deposit is at the risk of liquidation, other gCOTI holders will be able to purchase certain portion of the liquidated \$COTI with their gCOTI tokens at a discounted rate.

gCOTI Airdrop: Distributing gCOTI to the COTI community

gCOTI will be fairly distributed to the loyal COTI community, at no cost!

An initial Airdrop of 10% of the gCOTI supply will take place in the coming weeks. We plan for this airdrop to apply to the wider COTI ecosystem: Treasury depositors, launch campaign promoters and COTI erc20 holders.

Over time, another 42% of the gCOTI supply will be distributed to Treasury users for their participation and continued support.

gCOTI Token Allocation

Total supply - 1B

• Community - 52%

- Airdrop campaign 10%
 The initial distribution of tokens will be to community members that lock their \$COTI for a long period of time.
- Treasury rewards 42% Once the campaign will end and full utility will
 - Once the campaign will end and full utility will be enrolled, treasury participants will receive gCOTI rewards on an ongoing basis, over an emission period of more than 5 years.

• **Development** - 18%

- 3 years linear vesting with 6 months cliff
- **Reserve** 30%
 - Will be distributed as per governance decision for the benefit of the Treasury.

More details on the tokenomics and emission breakdown will be published closer to the gCOTI launch.



Image 4: Allocation of gCOTI

Summary

COTI's Treasury 2.0 architecture introduces new concepts and models that improve the Treasury and benefit its participants. These improvements accommodate the increasing demand for more use cases, such as a new liquidation mechanism supported by gCOTI liquidators and a new stability pool. COTI will continue to create additional value and revenue streams for the Treasury and the entire COTI ecosystem by collecting fees from additional services. We expect the Treasury 2.0 to grow the Treasury's TVL while distributing greater rewards to participants.