Fundamental

Prime Rating Report V2.0

Protocol: Keep Network (KEEP)
Version: Initiating Coverage on Prime Rating Season One
Previous Report: n/a

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Reviewed by: 🐸 a Rating Pepe
Season 1

Instructions

Please go to files and make a copy of this template.
Fill in all questions with a written explainer, any relevant links, and score per variable. Insert the scores in the scorecard at the end of the report.
Please include your sources into the text (as a link), so others can follow your trail of thought.

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1. Value Proposition

The Value Proposition section describes the value a protocol delivers to its users. Based on the proportion of the problem the protocol aims to solve and the potential of the protocol to effectively solve the problem - better than other industry solutions - a Value Proposition rating is created.

a) Novelty of the solution (15 points)

This score evaluates the novelty (uniqueness) of the protocol. Has the protocol introduced any new innovations that help solve user's problems more efficiently? Is the project a fork? To what extent did they copy/fork the original?

Answer:

The Keep network aims to solve the challenge of transferring confidential data across a public blockchain. It does this by creating a privacy layer and off chain ‘containers’ that store private data, called ‘Keeps’. The goals of Keep Network include allowing dApps to use and manage private data without exposure to users of a public blockchain.

Keep does use an innovative approach to solve this using the following elements:

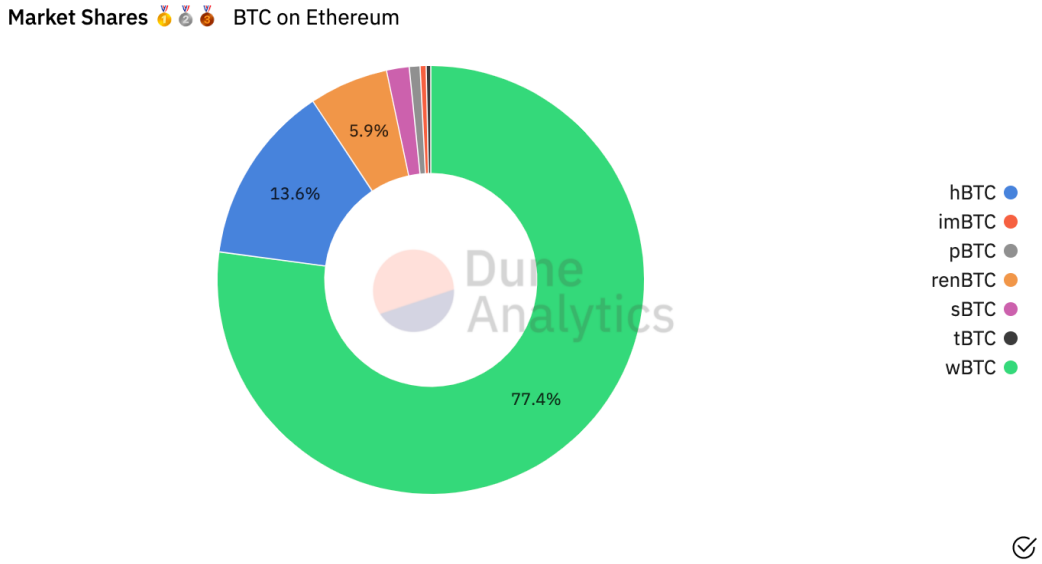
- Keep containers

- Keep Random Beacon Chain
- sMPC
- Elliptical curve digital signature algorithm

Combining these elements, it can store private information securely such as private keys in a trustless, decentralized manner. Keep uses their Random Beacon chain to randomly select signers for deposits of tBTC. This is their first use case for trading BTC on Ethereum using their tBTC product. It is the basis to explore other initiatives. Signers are randomly selected (although weight based on the number of Keep staked) therefore the whole network would need to collude to discover the identity and amount of the deposit.

The idea of trading BTC on Ethereum is not new with wBTC, hBTC and renBTC dominating the market as per Illustration A. However they are not able to be fully trustless and censorship resistant, which Keep Network aims to solve.

Illustration A: tBTC market share (Source: Dune Analytics)



The idea of privacy on Ethereum is not necessarily new with Aztec, Secret Network, Zether, Zcash and more. Starkware industries use their ZK-Stark technology to power scalability and privacy on Ethereum using Zero-Knowledge proofs.

Given they are not the only team attempting to solve the privacy problem, however, they provide a novel and advanced solution; they receive a score of 10/15.

Score: 10/15

Source: Messari, Gemini (article by Keep CEO)

b) Market fit/demand (15 points)

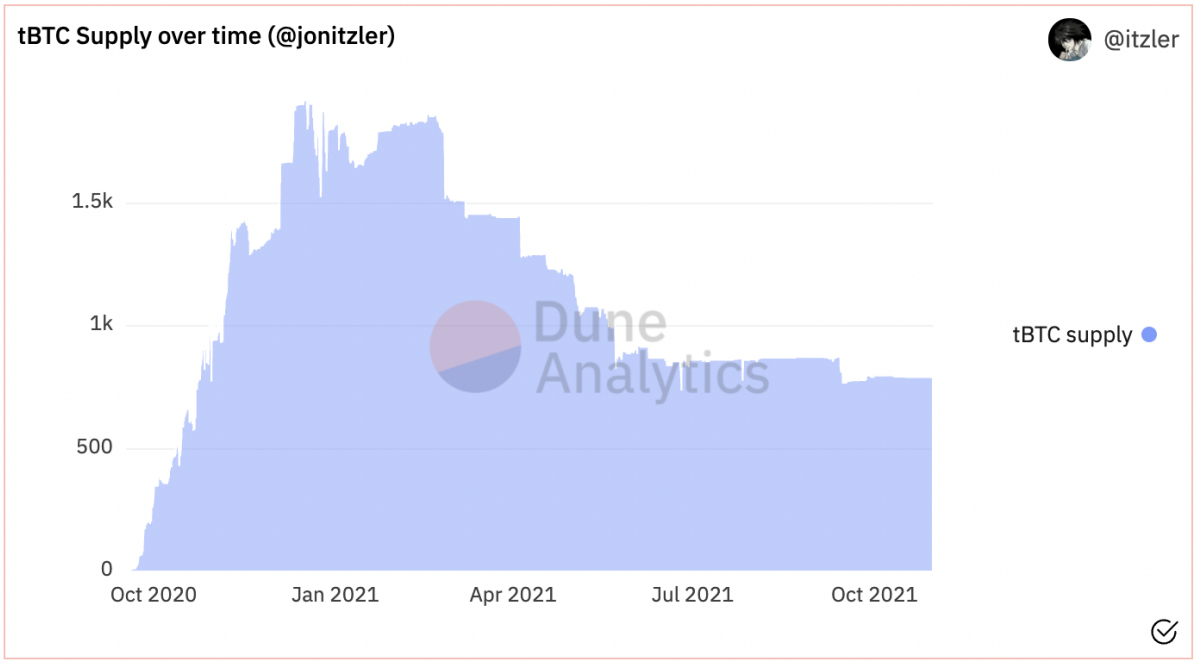
This score evaluates the degree to which the protocol satisfies a strong market demand. The market fit evaluates if the protocol is able to satisfy the needs of a specific market (can also be measured by user adoption/ #of users). To what extent has the protocol proven to meet the demand of a specific market? Is the timing of the product right for the market? Is the protocol targeting the right market?

Answer:

According to Verified Market Research, the Smart Contracts market size was valued at USD 144.95 Million in 2020 and is projected to reach USD 770.52 Million by 2028, growing at a CAGR of 24.55% from 2021 to 2028. Corporations and enterprises are eager to take advantage of blockchain technology, especially public blockchains, given their levels of decentralization. There are a number of factors that influence institutions' decisions to prefer private blockchains including scalability, smart contract risk and notably privacy. Lack of privacy and unabridged transparency of transactions is a prominent downside as referenced in this comparison. If we follow the thesis that contractual obligations between parties globally will use smart contracts in future and understand that much of the information within typical commercial contracts are confidential, then we can begin to paint the better picture of how big the market actually is. According to Research and Markets the global blockchain market should grow from USD6bn to USD57bn from 2021 to 2026. This is prudently based on estimated market values for the revenues of blockchain service providers.

Given that Keep Network's current use case that they are focusing on is transacting BTC on Ethereum (tBTC), we can consider this market in more detail. As of 30 October 2021, total BTC on Ethereum is estimated at 293 345 of which only 792 is tBTC. There is clear market demand which sustains strong growth as per Illustration F. They are satisfying a very small proportion of the market with this product. tBTC has fewer integrations than some of its competitors - it launched on Mainnet in May 2020 compared to wBTC which launched in January 2019. tBTC faces fierce competition and supply appears to have plateaued in recent months as shown in Illustration C, even as DeFI has grown over the course of 2021. Therefore given the right strategy, we can expect to see better market penetration of tBTC in this market over time.

Illustration C: tBTC Supply over time (Source: Dune Analytics)



They are currently targeting the right market because DeFi is the leading vertical in the movement towards broader blockchain adoption and Web 3. As the Keep team continues to develop privacy solutions for decentralized applications outside of DeFi, we can expect them to break different verticals in which the competitive landscape is relatively thin.

Score: 11/15

Source: [Research and Markets], [Flexiple], [Verified Market Research], [Messari], [Gemini]

c) Target market size? (10 points)

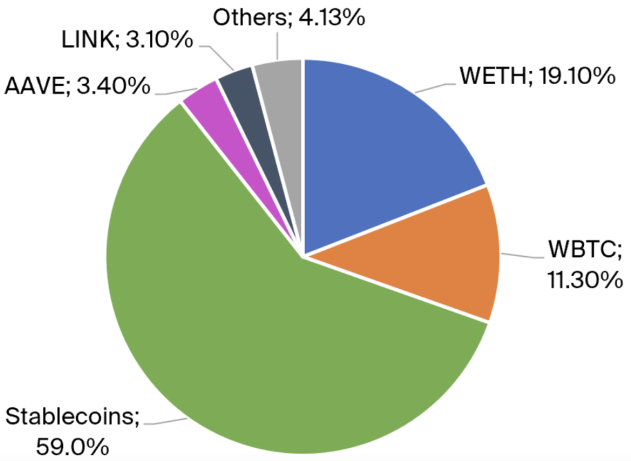
The target market size evaluates the current and future size of the problem the protocol is aiming to solve. The category of the Open Finance solution can be used as a reference to the target market (for example: Lending). Because Open Finance is by definition global, the global market for a specific problem equals the target market size.

Answer:

Keep Network's current and planned products aim to service a global market and are limited by the blockchain integrations that they work with. BTC has limited uses in its pure form but derivatives of it have strong uses as collateral in DeFi protocols. 11.3% of collateral on Aave is composed of WBTC, with other leading DeFi protocols like Maker and Compound having similar figures at 10.4% and 9.7% respectively.

Illustration D: Aave collateral share breakdown

Illustration 5: The picture for Aave is similar as for Compound, with roughly a 2:1 mix of stablecoins and ETH/WBTC as collateral. AAVE and LINK also represent significant parts of the total liquidity.



There are still risks that wrapping BTC and using bridges cause, including censorship and committing funds to an intermediary. Keep aims to unlock the potential flood of liquidity that BTC can bring to the DeFi ecosystem with tBTC, which has an upper limit of 1000 BTC. Therefore they have been working on tBTC v2. tBTC v2 is an upgrade that is secured by the Keep Network and collateralized by KEEP. tBTC v2 will be able to scale 100x from v1, to 100,000 BTC (or, 1% of the total supply) — matching the capability of custodial solutions like WBTC.

There is currently approximately USD102 billion of TVL in DeFi and MetaMask (a leading wallet provider) has surpassed 10 million downloads. According to a veteran crypto investor Matthew Roszak, this could grow to USD800 billion, which gives us a sense of potential market growth. Over the last 2 year, early adopters of DeFi have taken risks that have paid off and supported an ecosystem that shows promise. There are many smart teams working on the challenges that continue to prohibit mainstream adoption. Specifically for the biggest chain, Ethereum, as fees reduce, speeds increase and protocols become more user friendly with robust security; exponential growth in this space is likely.

Score: 10/10

Sources: Bitcoin Suisse, Keep tBTC v2

d) Competitiveness within market sector(s) (10 points)

This score evaluates the competitiveness of the protocol within the market sector(s) it operates in. This score offers a relative comparison of the protocol and other protocols operating in the same market sector(s). To evaluate this, metrics to directly compare with the competition can be used (e.g. TVL, trading volume, number of users).

Answer:

Who do we regard as competing protocols to Keep? Would these be other privacy-focused layers on Ethereum such as Aztec or Enterprise Ethereum? Or would they be BTC-ETH cross-chain bridges such as RenBTC or wBTC? Or, other crypto cross-chain bridges such as Solana Wormhole or Polkadot? For the purpose of this report, we chose a competitor set based on the features of Keep that are *currently* live and not based on the features that are *expected* to go live. This narrows our focus for the time being to other BTC to ETH bridges or asset tokenization protocols. Afterall, pegged BTC is the sole use-case being tackled by Keep for the moment. Our competitor set thus includes Ren BTC (renBTC), Wrapped Bitcoin (wBTC) and Synthetix (sBTC).

There are three points we base our evaluation on: centralization, scalability and market share capture.

Centralization

Keep is the most decentralized among its competitor set. This is because wBTC relies on a custodian, Bitgo, to manage BTC storage and pricing. sBTC, while being inherently non-custodial, is managed via a smart contract having a centralized admin key. And finally, while renBTC is algorithmically decentralized with sharded custodianship of the collateralized BTC, special hardware is needed to mint renBTC.

Scalability

We find that scalability is inversely related with centralization among Keep's competitor set. This makes wBTC the most scalable of the pack. renBTC and tBTC are limited in their scaling by the collateralization ratio demanded from participating signers. In the case of tBTC, this is approximately 150% of ETH that needs to be provided by Keep signers on the network. As we write this report, Keep is piloting the launch of a coverage pool concept to replace the collateralization model in it's smart contracts. This would shift the onus from Keep signers to Keep coverage providers (passive income holders of Keep token) to act as a backstop in case of network fraud or collateralization issues. This concept, while promising and with the ability to 10x Keep's scalability, has yet to be launched completely and remains untested in the market.

Market share capture

Data from Dune Analytics comparing market share capture (Illustration E) and balances of BTC on ETH over time (Illustration F) show that tBTC occupies a negligible part of the pegged BTC market at the moment. Currently, market share capture is less than 1% vs. wBTC at 77% and renBTC at 6%. Over time as well, tBTC has never been able to make a dent in the pegged BTC market so far.

Looking at the above, we assign full points to Keep on it's decentralized approach but find the project lacking any competitive strengths in terms of scalability or market share capture. We also see no compelling catalyst in it's future roadmap that would change this landscape to the upside. Therefore, a score of 4/10 is given to Keep in this section.

Illustration E: tBTC market share (Source: Dune Analytics)

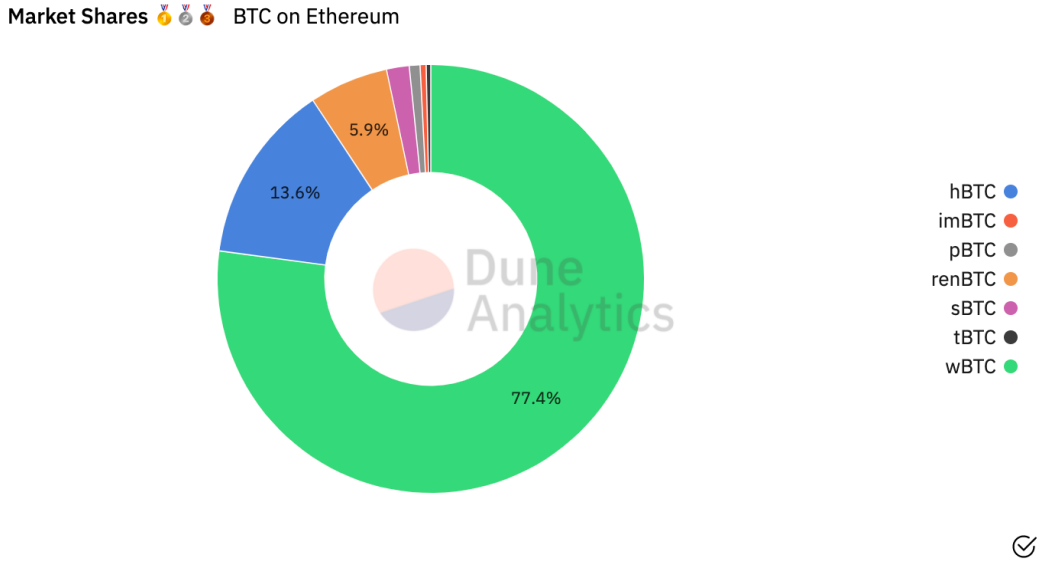
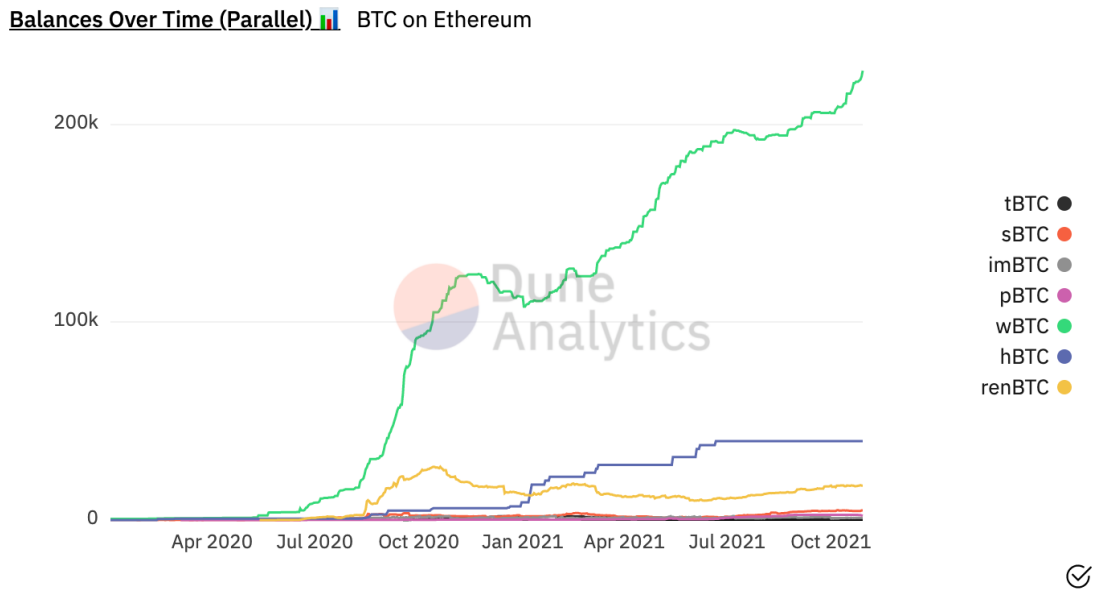


Illustration F: tBTC balances over time (Source: Dune Analytics)



Score: 4/10

Sources: Dune Analytics, renBTC wiki, wBTC whitepaper, Keep Medium article, Keep whitepaper

e) Integrations & Partnerships (15 points)

Due to crypto's open-source nature, the code of most protocols can easily be forked. This score represents a piece of "unforkable value". Some indicators to look at are the number of applications built on top of the protocol (vertical integration), other entities integrating the protocol's services (horizontal integration) or the number of relevant partnerships (be careful of logo collections/ partnerships without much purpose).

Answer:

Keep Network has integrations with the majority of DeFi decentralized platforms such as Compound, Aave and Uniswap. They have also partnered with Staking as a Service (SaaS) providers such as Figment, Coinbase Custody and Staked. To us, this shows a basic level of partner and exchange integration, earning Keep Network 6 points. The presence of well-known and established players partnering with Keep also allots them another 3 points.

Keep Network also relies on MakerDAO to act as its oracle and on Summa to power the Random Beacon Chain. While these are valuable partnerships, we see them also increasing the dependency risk of Keep Network where an outage in one of the dependent systems can result in issues with critical Keep Network functions. We therefore award no extra points on this, on balance.

Finally, Keep Network has joined forces in Q3 2021 with NuCypher. The idea here is to combine the token holder bench strength of both protocols to help scale tBTC. In other words, after the merger, both KEEP and NU tokens can be staked on Keep Network to collateralize tBTC. We see this as a positive catalyst for Keep Network's growth but have yet to see on-ground results (e.g. acceleration of tBTC adoption or supply increase, progress on tBTC v2 roadmap, etc.). This will be a close area of monitor in future reports on Keep. For the time-being we award Keep only 1 additional point for this development.

Score: 10/15

Sources: Keep Medium article, MakerDAO risk-assessment report, Figment report on protocol merger

2. Tokeneconomics

The Tokeneonomics section assesses the function of a protocol's token. This includes the token distribution, functionalities of the token, the ability of the token to incentivize positive behavior in the protocol, and the ability of the token to capture a portion of the value created.

a) Is the token sufficiently distributed? (15 points)

The token distribution can be an indicator of a healthy protocol. When the protocol tokens are widely distributed among different stakeholder groups and contributors, this genuinely improves the coordinating capability of the token and strengthens the resiliency of the protocol. Was the initial distribution balanced between relevant stakeholders? Are the tokens distributed over sufficient participants (10, 25, 100 largest addresses)?

Answer:

According to Messari…

Token Allocation Overview for Keep Network

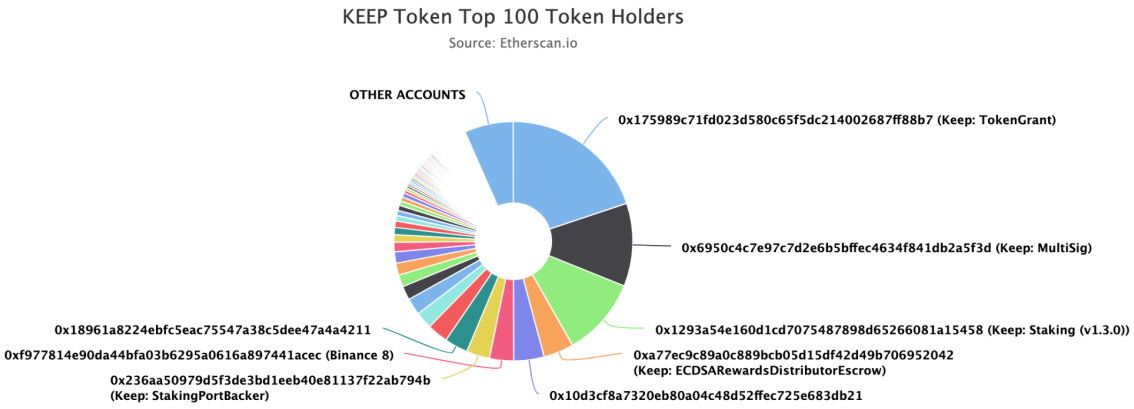
- *Private sale: 35%*
- *Early team: 10%*
- *Advisors: 5%*
- *Keep SEZC: 25%*

- *Staking and protocol incentives: 25%*

Currently there are approximately 10,000 token holders on Keep with top 100 holders owning 93.4% of all tokens. Among the top 100 are large holders such as staking service providers (Binance Pool, KuCoin, etc.), Keep Multisig & Keep Grant, and an escrow wallet for storing reward tokens (See Illustration G below). Top 10 token holders hold approximately 64% of all tokens. Given the number of token holders in the protocol, we find the high concentration of tokens among the top 10 and top 100 holders to be particularly high.

We would like to see a broader concentration of holding status by the community, especially by individual holders vs. centralized entities such as Binance and KuCoin. Due to this centralized distribution, we allocate 4 points to Keep Network on token distribution.

Illustration G: Keep Network Top 100 Token Holders (Source: Etherscan.io)



Score: 4/15

Sources: Etherscan.io, Messari

b) What is the extent of the token's capabilities? (10 points)

Is the token useful within the protocol? Does the token allow the holders to participate in governance or influence the protocol in any way? Does it serve any other purposes?

Answer:

From Messari…

The KEEP token is a work token. Work across the network is distributed to KEEP stakers, in proportion to their staked amount, by a random beacon. Misbehaving stakers have their KEEP slashed and are removed from the network, similar to other proof of stake mechanisms.

According to the Keep team, the random beacon (the core of the system used for work selection) cannot function without a network-specific token that grows and shrinks with the utilization of the

network. Using a network-specific token makes attacks from outsiders with large pools of capital much more expensive.

Staked KEEP holders earn revenue from operating the beacon and participating in work across the network, in the form of keeps. Keeps are multi-party computation setups that offer services to other smart contracts, including decentralized signing, encryption, and data storage.

Any dApps built on top of the Keep Network, such as tBTC, require operational keeps in order to function and thus staked KEEP. No other existing digital asset can serve as a replacement to the KEEP Token in the tBTC ecosystem.

Further, Keep is scaling up minting of tBTC by moving away from KEEP/ETH collateralization to a coverage pool model. This means KEEP token holders can also earn passive income going forward by providing insurance coverage for the KEEP Network. Current APY for KEEP holders locking their capital in the coverage pool is ±17%.

We thus award full points to KEEP Network on token capabilities given how KEEP provides revenue, utility and governance rights to the holder.

Score: 10/10

Sources: Messari, KEEP Network Medium article, KEEP Network token dashboard

c) Is the issuance/distribution model able to improve the coordination of the protocol? (10 points)

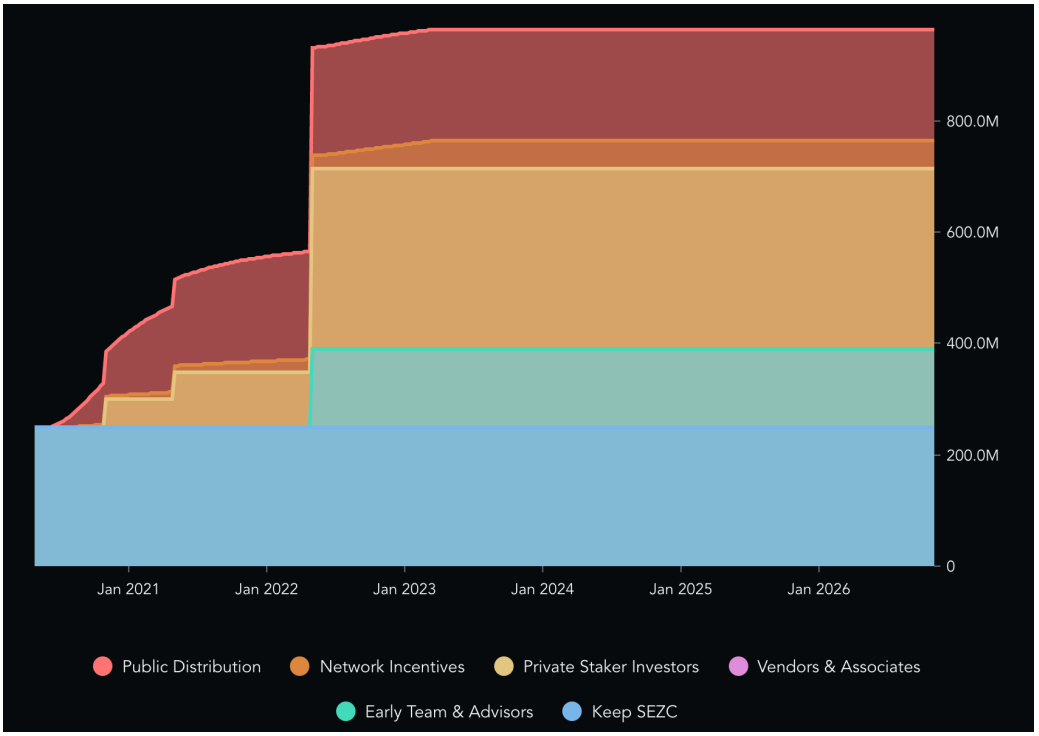
To what extent does the issuance of the token support the advancement and function of the protocol? Are the tokens justifiably being issued? Does the issuance model incentivize the right behavior? Are all relevant stakeholders benefiting from the issuance model?

Answer:

We study Keep Network's liquid supply curve and slashing model to answer this question. From Illustration H below, we see the allocation of KEEP token has been fixed and is allocated to various stakeholders. We find the tokens fairly distributed among various stakeholders and aimed at the long-term health of the protocol, especially on the vesting lock for early team & advisors, who can only redeem their tokens from mid-2022 (3 years post-launch). A concern for token holders may be the large supply of KEEP tokens (almost 2.5x from today's supply) that is due to come into the market by mid-2022. We deduct 2 points for this.

Keep Network relies on a slashing mechanism to ensure good behaviour on the protocol by all stakeholders. Unlike several other PoS networks which slash a part of stake, Keep slashes the entire stake for certain actions such as fraud, even if this occurs while acting as a group of signers. While this increases risks of staking with Keep, we find it in the best interest of the protocol. Full points.

Illustration H: KEEP supply schedule (Source: Messari)



Score: 8/10

Sources: Messari, Keep Network Gitbook

d) Is the value capture model able to accrue and distribute value? (10 points)

A value accrual and distribution mechanism can help improve the utility of a token and its ability to be used as an effective coordination mechanism. Does the protocol have mechanisms to distribute some of the value created to the token holders?

Answer:

We find four token-design factors driving up the value capture of KEEP tokens:

1. Requirement to own KEEP tokens in order to participate in the protocol's rewards: this incentivizes would-be signers to own KEEP tokens and creates upward price pressure.
2. Passing Keep Network's governance rights to token holders: this allows token holders to determine the destiny of the protocol. We remove one point here because the current voting mechanism is designed as one token = one vote which may dissuade smaller holders from voting in governance.
3. Burning slashed tokens: KEEP has a fixed supply schedule and burning slashed tokens for penalties leads to a drop in the overall supply of tokens.
4. Acceptance of (only) KEEP tokens into the coverage pool: passive income earners can currently only stake KEEP tokens to earn interest from the tBTC coverage pools. By design, a

21-day cool off period to remove tokens out of the coverage pool lowers token velocity and prevents speculative selling activity.

For the above reasons we allocate 9 points to Keep Network on token value capture.

Score: 9/10

e) Is the token sufficiently liquid to enable active use and trade? (5 points)

Is the token widely available and is there sufficient liquidity available to facilitate all protocol functionalities?

Answer:

KEEP token is traded currently on Kraken (CEX), and on Uniswap and Balancer (DEX's). It has a 24H volume of ±35 million though this can fluctuate by up to 80%. Volume/Market Cap ratio is 8%, which we see fluctuating by up to 70% (our guess is that this is due to whale activity in the open market given the token holder concentration). As such, we award the token 2 points for liquidity. There is enough liquidity to enable the protocol's functioning but whale activity can be seen as a key risk during liquidity events.

Score: 2/5

Sources: Coinmarketcap

f) Are there any extrinsic productivity use cases for the token? (10 points)

Besides the protocol's value distribution model as described in 2. d), can the token be used productively on other protocols (e.g. as collateral, for lending, LPing, yield farming, etc.)?

Answer:

Outside the Keep Network, KEEP tokens can be used for earning liquidity rewards on Uniswap in the KEEP/ETH and KEEP/tBTC pairs.

Score: 2/10

Source: Keep Network staking docs

3. Team

The Team section describes the quality of the team behind the protocol. The current version of Prime

Rating favors teams that are publicly identifiable. In the case of an anon team, the track record of the specific anons involved can be taken into account

a) Is the team credible and public? (15 points)

Are the identities of the core contributors and team publicly identified? In the case of anon team members, is there any way to track their background/record?

Answer:

The team is public and credible. Keep Network was founded by Matt Luongo and Corbin Pon in 2017. Prior to this, they both founded Bitcoin payments company Fold. It was during this time that they realised the need for a privacy layer on Ethereum and the opportunity how it may open the floodgates for using BTC on Ethereum in a truly trustless, decentralized and censorship resistant manner.

They also founded Thesis, which is a cryptocurrency venture production studio, with USD21 million in funding. Keep Network is run as part of the Thesis venture production studio.

Other key Keep Network team members include:

- Antonio Salazar Cardozo, Head of Engineering
- Laura Wallendal, Head of Growth
- Michael Gluzman, Head of Design
- Sloan Thompson, Head of DevOps
- Doug von Kohorn, Head of Product

The rest of the team can also be identified in the Business Primer

Score: 15/15

Source: Keep Website, Thesis LinkedIn

b) Does the team have relevant experience? (10 points)

Are there any documents or trails available to showcase the track record of the team? Do the team members have relevant backgrounds and skill sets?

Answer:

Yes, the founders of Keep Network (Corbin and Matt) previously founded Bitcoin payments and rewards company Fold, in 2014. It has raised USD16.3m to date and has partnerships with leading institutions including Visa. Before this they also worked together at Scholrly. They were computer science students at Georgia Institute of Technology together. They are both relatively young however both have experience across both technical knowledge and business acumen from having founded a successful blockchain startup prior to Keep.

Matt holds a computer science degree from Georgia Institute of Technology. He worked as a Software Developer for The Proven Method before becoming CTO at Scholrly. Matt also worked as Head of Research and as a technical advisor for Insight Pool (now Trendkite), which likely expanded his skillset to marketing. Given his technical expertise and leading positions in other startups, Matt appears to have the relevant experience to make Keep to succeed.

Corbin has a computer science degree from Georgia Institute of Technology and worked as a Software Engineer for Lockheed Martin before founding Scholrly, which aims to make it easier for academic writers and researchers to share relevant papers and research. With a strong technical background and considerable business experience, he is well suited to supporting Keep's growth.

Experience of the other senior team members from the Business Primer:

- ***Antonio Salazar Cardozo, Head of Engineering****: Antonio has crafted software across companies and open source projects for over 10 years, with a persistent emphasis on community, collaboration, quality, and usability.*
- ***Laura Wallendal, Head of Growth:*** *Laura has extensive experience with growth, sales, business development and marketing strategy at a variety of companies. She's worked with teams of all sizes and has founded several tech companies.*
- ***Michael Gluzman, Head of Design:*** *Michael heads design for Keep with a focus on delightful user-experiences and durable brands. Prior to Keep, he led design for Fold and a handful of note-worthy brands at The Coca-Cola Company.*
- ***Sloan Thompson, Head of DevOps:*** *Sloan is passionate about bridging operations and engineering practices, providing robust infrastructure, systems, and meaningful engineering experience. Prior to Keep Sloan worked in the supply chain, helping to bring aging systems and processes into today's IT landscape.*
- ***Doug von Kohorn, Head of Product:*** *Doug has been an entrepreneur and operator for over a decade, and most recently served as CEO of the ConsenSys oracle company, Rhombus, which was subsequently acquired.*

Keep also takes advantage of engaging with a team of experienced advisors across VC, blockchain and international finance. More information can be found here.

Score: 10/10

Source: Corbin's LinkedIn, Matt's LinkedIn, Keep Business Primer

c) Does the team participate and help shape the public debate? (5 points)

To what extent do the protocol contributors participate in the public debate around open finance? Are the team members giving presentations, sharing their thoughts and opinions, and do they help raise the collective intelligence of the industry?

Answer:

Matt is active on Twitter and provides insight into various projects that affect Keep. He also writes relevant articles on Medium which shape the public debate. He takes part as a speaker in global

conferences, including the World Festival. Corbin appears to be less active in sharing opinions and engaging in public debate. The rest of the

Keep Network has active Discord and Telegram channels. They have a reasonable Twitter presence of 28.2k followers who engage with the handle meaningfully.

Score: 3/5

Source: Medium, Twitter, LinkedIn, Discord, Telegram

d) Is the team able to effectively attract and coordinate resources? (10 points)

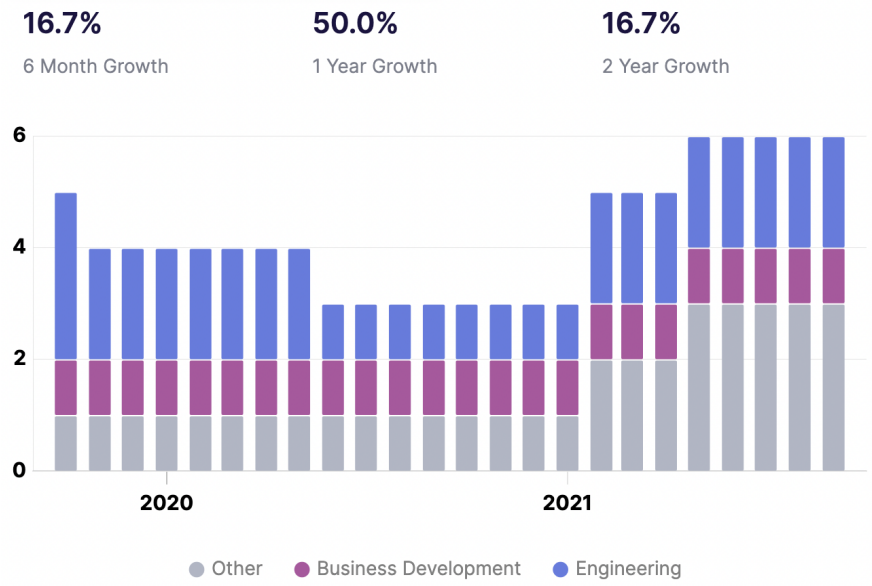
How effective is the team at attracting and coordinating resources for the benefit of the protocol? Has the team raised sufficient funding or are there mechanisms in place to attract resources when needed?

Answer:

According to LinkedIn, Keep Network has been able to attract and retain relevant staff with necessary expertise. Apollo data in Illustration I indicates that they have growth in staff over time.

According to Crunchbase, they have raised USD7.7m from leading VC investors including Andreeson Horowitz, Polychain Capital, Cypher and Dekrypt Capital. They are supported via their inclusion in Thesis Venture Studio - run by Matt and Corbin. Thesis have raised USD21m from leading investors including Polychain, ParaFi and Draper Associates.

Illustration I: Employee count (Source - Apollo)



Keep gets a full score for building and maintaining the right structures in place to support team growth.

Score: 10/10

Source: Keep LinkedIn, Apollo, Crunchbase

4. Governance

The Governance section evaluates how the protocol is governed and who the governors are. The different governance functionalities and processes are evaluated to determine to what extent the Protocol will be able to self-govern in a way that ensures the development of the protocols while respecting the needs of all current and future stakeholders.

a) Admin Keys (20 points)

Admin Keys allow some critical functionalities of a protocol to be controlled by an admin. This allows the developers to react to potential bugs, but also creates a risk as the developers could potentially misuse the admin keys to exploit the protocol. Does the protocol have admin keys and how are they managed?

Answer:

Keep are approaching governance as a progressive process and currently running what they refer to as v1. It attempts to streamline decision making processes at the expense of larger community involvement. Currently the core team, multisig and Keep SEZC have significant control through what they can propose and the voting system, however they do aim to decentralize this over time. The ability to enact changes to the code are reserved to Keep SEZC.

According to Messari…

"The registry owner account can propose new code by publishing to the registry. Today, the proposer account is held by Keep SEZC (the corporation behind the Keep Network), though the team expects it to be replaced with a more formal process as the project further decentralizes. No news regarding the timeline on this has been released.

The tBTC system, built atop Keep, has no mechanism for code improvements on mainnet. Governance of the contracts is limited to an emergency lever to pause operations for a fixed period of time in case of an exploit, as well as fee parameters. All are governed by the contract owner, currently Keep SEZC, rather than token holders. Any meaningful changes to tBTC will require a social upgrade, akin to a hard fork."

Keep SEZC is incorporated in the Cayman Islands. It is a centralized party ultimately responsible for changes in the governance structures to both the Keep network and its products. As such Keep SEZC is the gatekeeper for changes to the code and there is potential for mismanagement from a small group of insiders.

tBTC is the flagship product from Keep Network, which is designed to use BTC on Ethereum in a trustless, decentralized and censorship resistant manner. tBTC is an open-source project supported by groups including Keep, Summa and the Cross-Chain Group.

The tBTC development team maintain a “privileged key” with 5 capabilities, as per their website:

1. ***Updating the signer fee rate.*** *The privileged key can modify the fees signers charge for deposits going forward. The modification only impacts new deposits opened after a time delay. The maximum fee that can be set is 10% and the minimum 5bps (0.05%), preventing this ability from enabling an inadvertent kill-switch.*
2. ***Supporting additional lot sizes.*** *The privileged key can modify and add to the available lot sizes for new deposits. This modification only impacts new deposits opened after a time delay. The available lot sizes must always include at least a 1 BTC lot size, and lot sizes can’t be greater than 10 BTC or less than 0.0005 BTC (50,000 sats), preventing an inadvertent kill-switch.*
3. ***Modifying collateralization thresholds.*** *The privileged key can adjust the three collateralization thresholds enforced by the system. This modification only impacts new deposits opened after a time delay, preventing this call from forcing existing deposit liquidation. The lowest threshold is 100%, and the highest is 300%, preventing this call from acting as an inadvertent kill-switch.*
4. ***Adding a fallback price feed.*** *The privileged key can append new price feed contract addresses to the list of queried feeds. Because feeds are queried in the order they were added, and the first feed that reports without an error is used, this privilege can only be used to influence the reported price if the existing price feed has failed and stops reporting. This modification cannot disable the primary price feed without price feed operator collusion, and is only valid after a time delay.*
5. ***Pausing new deposits.*** *The privileged key can pause new deposits for 10 days, once, without a time delay. After this ability is involved, it cannot be used again. This approach was preferred to a kill-switch or other control mechanism, giving developers a chance to notify users in case of a 0-day exploit, allowing users to withdraw their deposits from the peg in the case of a catastrophic failure. As with all other privileged key capabilities, this does not affect open deposits, which can continue to be redeemed or used as normal.*

In order to get more input from the broader community beyond the Discord and forum, a Snapshot page was established and enables vote signalling from token holders. Keep aims to be decentralized but the team’s control over changes to the protocol detract from fully achieving this goal.

Score: 10/20

Source: **tBTC docs**, **Messari**

b) Extent of Governance capabilities (15 points)

Distributed governance allows the token holders to participate in the governance of open finance

protocols. How much influence does the governance mechanism have? Are the votes affecting on-chain changes or do they function solely as signals to the team?

Answer:

Anyone can suggest a Keep Improvement Proposal (KIP). However, only community multisig members and the Keep team can submit KIPs to go to voting. Anyone can participate in the community forums or on the governance section of the Keep Discord.

Once a KIP reaches the Keep community forums, anyone can debate and discuss the proposal directly. After 3 days the proposal will move on to a vote. The default voting mechanism is a direct community multisig vote in the Keep Discord channel, where multisig members have 24 hours to vote YES or NO on a proposal. A snapshot page was created with a voting strategy that weighted votes based on how much KEEP the voter had staked. It is mentioned that this was done in a way that was 'game theoretically strategy proof' however evidence to support this was difficult to find.

The Multisig was designated to 8 key members of the community. To choose the members of the multisig, a Discord poll was created. The rules were simple: each discord account that had been provably active before poll creation would get a vote, and the 8 most voted members would comprise the multisig. The poll was successful concluded and the winners included:

- shh
- state
- benlongstaff
- Evandro Saturnino
- corollari
- agoristen
- kferret
- nahuus

The team created a Gnosis safe and elected to use Keybase as the method of communication.

In order to include a broader part of the community in voting, Keep uses a Snapshot page. One needs 1k KEEP to submit a proposal on Snapshot. Therefore vote signalling - they do not use on-chain governance yet. There is no decentralized treasury. The fact that only certain people can actually submit proposals and only multisig members can vote keeps power to a select few.

Score: 7/15

Sources: **Keep Medium**, **DYOR Wiki**

c) Active Governance contributors (5 points)

Governance is a process that can be rather resource-intensive if executed well. To ensure good governance is practiced by the protocol, it's important to have a sufficient number of governors

allocate resources to the governance process of the protocol. How many individuals participate in the debate around the protocol? How active are voters?

Answer:

There are active debates in the Keep forum, meaningful engagement on certain topics. More viewed and discussed topics include new token proposals and mergers, like Nucypher. Below are the forum site statistics and most discussed topics.

Illustration J: Site Statistics

Site Statistics

	Last 24 hours	Last 7 days	Last 30 days	All Time
Topics	0	0	6	49
Posts	0	2	81	718
Users	0	0	13	211
Active Users	3	11	34	—
Likes	6	6	86	590

Token holders participate regularly in Snapshot voting. A risk in the concentration of holders is that wallet ending “2C91" holds 9.28m Keep tokens and becomes a key swing voter in the process. A good example would be the vote on collateralization ratios or whether they could change staker rewards. Voters are active but holders voting are concentrated.

Score: 4/5

Source: Keep Forum, Snapshot

d) Governance technology/infrastructure (10 points)

The Governance infrastructure relates to the technology, software, and models used by the protocol's governance. Does the protocol have a reliable and usable voting mechanism? Are there channels for governance debate? Is there sufficient documentation available?

Answer:

Keep uses Discord and Snapshot for governance discussions and voting processes. There is debate in both the Discord group as well as the forum online.

KIPs that are submitted are voted on by the Multisig in the Discord channel to maintain transparency.

In order to determine their voting process, information needed to be pieced together from various sources. Documentation could be more transparent and easy to find i.e. one direct link on their website for how KIPs are proposed, voted on etc. There could be a clearer map towards what v2 governance looks like, notably with regard to moving further towards a more decentralized system that distributes power to the community.

Score: 7/10

Sources: Keep Medium, Keep Forum

e) Robustness of Governance process (10 points)

This score requires documentation specifically on the governance process that sets the basic framework in terms of agreements, norms, and language for governing the protocol and to create social consensus. Does the protocol have a formal governance process? How robust is the governance process and does it promote good governance?

Answer:

The format to raise and submit proposals works in its current format. They have specified a template here.

The only place to find information on governance processes is in the Keep forum, where there is very limited information on processes and procedures. Else one Medium article which better articulates some governance processes.

They have a governance process however it is far from robust and only community multisig members and the Keep team can submit KIPs. This has been enforced to reduce spam deter governance exhaustion but it is also limiting proposals and changes to select members of the community, not all token holders. Only the multisig votes on whether KIPs get moved onto implementation with ⅝ votes. To improve this, the only thing said is “However, the Keep community decided to require a more broad constituency set to better reflect the will of all Keep community stakeholders. To address this, a constituency description section was added to the newly formed KIP template. The voting constituency of each KIP will therefore be determined on an individual basis.”

This system could be more transparently portrayed and include more voters for implementation. Snapshot only provides for vote signalling and done off-chain.

Score: 6/10

5. Regulatory

The Regulatory section describes the extent and quality of the regulatory environment that affects the Protocol. To be able to guarantee functionality, security, and legality the protocol should comply with regulatory requirements, or limit itself to facilitating services to users who are willing to operate outside of the traditional regulatory environment.

a) Does the protocol have any legal accountability? (15 points)

Does the protocol have any form of legal accountability? Can users and partners hold the protocol accountable in case of a breach of the agreement?

Answer:

It is evident that the Keep Network is heavily reliant on the decisions of the Keep team who are employed by Keep SEZC - registered in the Cayman Islands according to SEC filings. Filings also show relationships with other Keep group companies, registered in the USA.

Keep is part of the Thesis Venture Production studio. Both of these companies are venture backed with public investments from leading VC firms. The teams have fiduciary duties to the investors and one can assume that legal agreements between the entities and service providers dictate a certain level of accountability.

Score: 15/15

Source: SEC filings

b) What is the quality of the legal jurisdiction? (10 points)

If the protocol has a legal entity, what is the quality of the jurisdiction the entity is established in? Will the jurisdiction be able to facilitate the legal framework for the protocol to expand while remaining accountable.

Answer:

Keep SEZC is registered in the Cayman Islands but has transparent public connections to other entities and individuals from the USA. The substance and operations of the business appear to operate from the USA, which is a top tier legal jurisdiction.

Cayman Islands financial and legal system is considered to be well developed. It operates under English Common Law. Rationale for incorporating there is likely more for tax incentives rather than creating opaque legal accountability.

Score: 8/10

Sources: SEC Filings, Campio

Scorecard

1. Value Proposition	Points
a) Novelty of the solution	**10 / 15**
b) Market fit/demand	**11 / 15**
c) Target Market Size	**10 / 10**
d) Competitiveness within market sector(s)	**4 / 10**
e) Integrations & Partnerships	**10 / 15**
Total Points - Value Proposition	**45 / 65**

2. Tokeneconomics	Points
a) Is the token sufficiently distributed?	**4 / 15**
b) What is the extent of the token's capabilities?	**10 / 10**
c) Is the issuance model able to improve the coordination of the protocol?	**8 / 10**
d) Is the value capture model able to accrue and distribute value?	**9 / 10**
e) Is the token sufficiently liquid to enable active use and trade?	**2 / 5**
f) Are there any extrinsic productivity use cases?	**2 / 10**
Total Points - Tokenomics	**35 / 60**

3. Team	Points
a) Is the team credible and public? (No, Partly, Yes & Anon , Yes & Public)	**15 / 15**
b) Does the team have relevant experience?	**10 / 10**
c) Does the team participate and help shape the public debate?	**3 / 5**
d) Is the team able to effectively attract and coordinate resources?	**10 / 10**
Total Points - Team	**38 / 40**

4. Governance	Points
a) Admin Keys	**10 / 20**
b) Extent of Governance capabilities	**7 / 15**
c) Active Governance contributors	**4 / 5**
d) Governance infrastructure	**7 /10**
e) Robustness of Governance process	**6 / 10**
Total Points - Governance	**34 / 60**

5. Regulatory	Points
a) Does the protocol have any legal accountability?	**15 / 15**
b) What is the quality of the legal jurisdiction?	**8 / 10**
Total Points - Regulatory	**23 / 25**
Total	**175 / 250**

About the Authors:

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