As many of you know, Taiko's alpha-2 testnet featured permissionless proving—a property of the network we were excited to share with the community, and that is core to Taiko's vision of a decentralized ZK-EVM. The community did not disappoint, and came out in force to run provers. Though the competition was fierce and only the most efficient prover could succeed in proving each block first, 195 unique provers managed to generate a valid ZKP for the network.

Proof generation is not free, so at the launch of the alpha-2 testnet, we created a reward program to reward provers for these expended resources in a testnet environment.

The program can be seen in the testnet release announcement: https://taiko.mirror.xyz/A6G6TNN-CXDAhl42k bNHg 20fyGcT0xH-LBBSOPNzU. The details were:

[

image

1378×1280 159 KB

1(https://global.discourse-

cdn.com/standard17/uploads/taiko/original/1X/e07d5cd7fd5013244bdcc153e6f6bb83566fce88.jpeg)

The testnet was a success in many respects, but also exposed several flaws we were able to learn from. Some of these are explained in the testnet deprecation announcement:

https://taiko.mirror.xyz/EM1IEpF_Pd9_WuPxw3EQPHNHmaXzh7kljMSoIP754AI

Notably, the protocol economics issue effectively obsoleted the particulars of the prover reward program, in that prover rewards in the form of TTKO (which would be redeemable for USDC) were not meaningful as a measure to map rewards to. Specifically, we found the issue that when blocks were proposed with fixed intervals, the prover rewards monotonically increased. This would benefit provers that proved blocks later in the network's life, and be unfair to earlier provers. The mechanism meant to mediate TTKO proposer/prover fee/rewards for the benefit of the rollup ceased to be effective.

Of course, we will still reward provers, and simply seek to do so in the most fair way possible to all provers. This is what we've come up with:

- Number of blocks proven is a better measure than TTKO to reward provers for the reasons mentioned above.
- 140,404 blocks out of the 300,000-block planned duration were created before network was deprecated due to some of the issues. This includes all blocks and all provers that proved the blocks. We will round up the rewardable amount to assume that 150,000 blocks proven, equalling a total available reward pool to provers of 25,000 USDC.
- 25,000 USDC will be distributed to the prover addresses in proportion to the number of blocks they proved, relative to the total blocks proven (base of 140,404).
- The 195 prover addresses and how many proofs they each submitted is verifiable on chain, reading from Sepolia. We share the data, scripts, and output here: https://github.com/taikoxyz/operations/tree/main/askja-provers. Please see output.json

for the results of blocks proven per prover, and USDC per prover.

USDC will be distributed to the addresses no later than May 30, 2023 23:59 UTC.

Thanks very much again to all who participated—provers and community at large. Hope to see you on the next testnet :).