This proposal is to adjust BlocksPerYear parameter to normalize the inflation rate and reward rate.

BlocksPerYear parameter

● There is a parameter called “BlocksPerYear” in genesis file.

● The parameter estimates the “number of blocks in a year”

● It is used to calculate block provision, which is the inflation reward for each block.

● Current the respective “blocks_per_year” value is “5303798” on the Secret Network (May 5, 2021)

Proposal

● Adjust the BlocksPerYear parameter from 5,303,798 to 4,637,647 so that it aligns with current blockchain status and expected future expectation.

New Target Block Time of Secret Network

● 4,637,647 can be derived by below formula:

4,637,647 = 31,536,000 / 6.8

31,536,000 seconds in a year / block time we should target.

Why target 6.8 seconds instead of 6 or 6.5? With all the secret contract activity on the network it seems realistically we will remain in the 6-7 second block time range (and even as high as 8+ seconds). 6.8 was chosen through community discussion and rough consensus from technical minds in the community, we will go above and below 6.8 as an average value periodically as we have been for some time now.

Influence On Inflation Rewards

● block provision : total inflation rewards for whole chain for each block

● block provision is calculated as below formula : block provision = (inflation_rate / staking_ratio) / BlocksPerYear
staking_ratio = bonded SCRT amount / total SCRT supply

●Number of blocks produced in the current Secret Network is approximately 8.52% lower than the current BlocksPerYear parameter because of 6-7 second range for block time.

● Therefore, all validators, the community fund pool, and the foundation pool are receiving at least 13% less inflation rewards than theoretical reward rate.

Average block time of the network may vary from 6.8 in the future. If/when this occurs this parameter can be re-visited and re-adjusted through another governance proposal.