Address
BlockTransactionToken
Governance
Transaction

TxHash 0xcd7055153f777c3392f05c83c17e66207045f68b8504a36c07a459c706992dfetwitterReport scam
Status Success
Block Height 17,814,531(17,056,346 Confirmation(s))
Time Stamp 2020-04-22 04:52:28(UTC+2, 57 weeks ago)
From hxe05d71bea4ba3f11d2ee4bd7e98d9d6360542529
To hx0b047c751658f7ce1b2595da34d57a0e7dad357d
Amount 0 ICX
Step Price 0.00000001 ICX(10 Gloop)
Step Limit 4,425,600 Steps
Fee in Step 4,425,600 Steps
Fee in ICX 0.044256 ICX(0.0566 USD)
Data
IISS 3.0 Proposal
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This proposal is written in markdown - Copy and paste it into the Markdown Viewer.

Introduction

Since the inception of Delegated Proof of Contribution, the goal of IISS has always been to incentivize the behaviors we wanted to see: Active involvement in governance, rewarding those that contribute most to the network, and giving people another reason to buy/hold ICX.
While there have been some success stories with the current IISS design, ultimately there is always room for improvement.
One of the most exciting features of the ICON Public blockchain is its ability to remain flexible, with clearly defined governance rules from the start to prevent contentious chain forks.
Issues that have become apparent include vote buying attempts, voter apathy/stagnancy, excessive competition leading to emotionally charged infighting and instability in the social media communities, excessive advertising/self-promotion in the public channels, a lack of clear incentives to collaborate vs compete, and a lack of direct rewards for direct contributions.

We believe the adjustments mentioned in this proposal will significantly mitigate the negative impact of the aforementioned issues.
Such adjustments include a 5% minimum bond requirement to be posted by all P-Reps, the creation of the Contribution Proposal Fund, the removal of the B1 block production reward, an allocation to the Contribution Proposal fund from all P-Reps, slashing penalties for a lack of active on-chain governance, and a feature to allow P-Reps the option to stop additional delegation.

Bond Requirement

The minimum bond requirement of 5% of delegation received is intended to meaningfully lower the benefit of vote buying while also requiring P-Reps to have “skin in the game”. Additionally, this bond will be used to pay burn penalties; voters will no longer be affected.
Ranking, rewards, and governance power will be based on “bonded delegation” rather than the amount of votes received.

Bonded delegation is equal to the number of bonded ICX divided by 5%. This sounds like a big change, but in practice it is not; because maximum bonded delegation is directly tied to a team's delegation.

This system provides a way for P-Reps to ease into the bond requirement without needing the entire bond up-front. P-reps can earn and have access to their rewards, but must post the entire bond in order to maximize their rewards.
Please see detailed walkthroughs of rewards calculations using Bonded delegation in the Appendix section at the end of this paper.

Additionally, this stops a "delegation attack", which was brought up by a community member.
In the previous bond model, a whale could attack P-Reps by excessively delegating to them, thus stopping them from getting rewards for a period of time.
In this model, a delegation attack will have no effect because it will not affect bonded delegation.

The bond requirement, coupled with the other enhancements to IISS, will make vote buying far less profitable.
As nodes accrue more delegation, they must pay for a portion of this delegation by increasing the amount of their bond.
Teams engaging in vote buying will no longer be able to offer meaningful incentives to their voters because as their delegation grows, so must their own investment in ICX.

At its core, DPoC is a form of proof of stake. In our current design, there is no stake requirement by those securing the network.
This system creates a security hole, where teams can accrue a meaningful amount of votes without any requirement to invest in the network.
After meeting an acceptable return, malicious nodes could attack the ICON Network with no economic consequences.
With this new system, if a Main P-Rep (or any P-Rep) decides to sell all of their ICX and abandon the ICON Project they will now lose their ranking, governance power, and rewards cash flow.

Removal of the B1 Reward

The concept of the B1 reward for Main P-reps will be removed entirely. I_rep now simply represents the amount of rewards received per month for getting 1% of the vote.

B1 has been removed because it will always incentivize a Sybil attack (creating multiple nodes) on Main P-Rep slots.
Having any additional reward for being a Main P-Rep creates an incentive to create multiple Main P-Reps.
We believe B1 has no impact on the security or game theory of the network.
All Main P-Reps are still properly incentivized to produce a block. If they stop producing blocks, they will no longer receive rewards.
Main P-Reps will still always earn more income than Sub P-Reps, as Sub P-Reps will always have less votes than Main P-Reps. Server costs are not an issue either, as all Main P-Reps make more than enough income to incentivize block production and cover the additional server costs.

As a result of this decision, i_rep will be reset to maintain a relatively consistent inflation from IISS 2.0 to IISS 3.0.
The exact number will be determined closer to the time of launch, as it is not possible to forecast what inflation will be at that time.

Contribution Proposal Fund

The Contribution Proposal Fund ("CPF") is a smart contract that holds funding to reward direct contributions.
The purpose of the CPF is to create a mechanism where the most meaningful economic incentives are allocated to direct contributions approved by the network.
Further details of the functionality of the fund will be explained in the Contribution Proposal System paper.

The CPF will be managed by Main P-Reps.
The exact process of approving and receiving funding from the CPF will be detailed in a separate paper that is currently in progress.
Having said that, we expect it to function similarly to the current Network Proposal process.

The fund will have an initial cap of 1,000,000 ICX, but this cap will be adjustable using a Network Proposal.
After the cap is reached, all additional allocations to the CPF will be burned. The purpose of the cap is to encourage active management of the fund and to prevent the situation in which Main P-Reps are incentivized to steal the ICX held in the CPF.
If it were to grow too large, P-Reps would be in a situation where it is far more profitable to steal the ICX held in the CPF rather than use it to grow the network.

CPF Allocation

10% of all P-Rep inflation will be allocated to the CPF.
With the adjustment of how i_rep works, this will not materially impact any teams because of the increase in B2 rewards.
When teams have more than 1% delegation, the network will allocate more inflation to the CPF.

Here is the formula to calculate P-Rep inflation allocated to the CPF:

- Bonded Delegation % for Bob: Bob's Bonded Delegation / total votes on the network x 100
- If Bob's P-Rep has Greater than 1% Delegation: (Bonded Delegation % x i_rep) - ((Bonded Delegation %)^(¾) x i_rep) + (Bonded Delegation %)^(¾) x 10%
- If Bob's P-Rep has Less than or equal to 1%: Bonded Delegation % x i_rep x 10%

The many benefits of the CPF Allocation structure are outlined below:

- It incentivizes collaboration amongst P-Reps to decide on how to best use funding
- Overall resources available to fund network growth are not lowered
- The cap on the CPF will lower inflation if funds are not being spent
- If there are not many initiatives to grow the ICON Network, the burning mechanism automatically lowers inflation.
- More growth = higher inflation, less growth = lower inflation
- It lessens the amount of trust we must give to individual P-Reps to spend funds wisely
- It solves for the overlap between the role of P-Reps and the role of Contribution Proposals
- P-Reps that are more technical with less social media core competencies will now have the opportunity to earn meaningful rewards by applying to the CPF

- It sticks to the ethos of DPoC in that P-Reps with the most delegation have the most impact on how ICX is spent and which Contribution Proposals are approved
- Less inflation is given directly to P-Reps and more inflation is allocated directly to specific contributions. This is a more decentralized distribution of inflation
- It uses existing inflation to fund Contribution Proposals versus the previous design which required significant additional inflation

Governance Slashing

The purpose of adding a governance slashing penalty is to further deter exchanges and passive self-delegated nodes from running Main P-Reps and disrupting the governance process.
We don't envision any active P-Reps ever suffering this penalty.

With the addition of governance slashing, we must make some small changes to the governance process.
The timeframe to vote for Network Proposals would be increased from 1 day to 5 days to give teams enough time to submit a vote, there would be an additional step to submit a Network Proposal in order to stop malicious nodes from submitting proposals in hopes of catching teams off guard, and votes will no longer close upon reaching majority in order to allow all teams to vote.

The new proposed penalties are as follows:

- Missed Network Proposal vote: burn 10% of bond
- Missing a Contribution Proposal Vote (not currently live): burn 10% of bond
- Submitting i_rep outside of range: No burn, just rejected by the network
Range = 50% (+/-) from current i_rep

Stopping Additional Delegation

With the addition of the bond requirement and governance slashing, it will be essential for nodes to more closely manage the amount of delegation they receive.
Some P-Reps may want to permanently stay out of governance in fear of getting slashed and others may not want to continue increasing their ICX bond.
This is currently a requested feature by Tezos Bakers. The option for a P-Rep to stop additional delegation would be included in this update.

Appendix

These examples are based on the following network conditions:

- Bob is running a P-Rep with 4,000,000 ICX of delegation
- Bob's Bond Requirement is 200,000 ICX (4M x 5%)
- Main P-Rep #22 has 3M ICX of Bonded Delegation
- There are 250,000,000 votes on the network
- I_rep = 26,500

Scenario 1: Bonded Delegation = Actual Delegation

- Bob posted a 200,000 ICX bond

- Bob’s Bonded Delegation: 200,000 / 5% = 4,000,000 ICX
- Bob’s Rewards: (4M/250M x 100)^(3/4) x 26,500 x 90% = ~33,930 ICX per month
- Bob is a Main P-Rep

Scenario 2: Bonded Delegation < Actual Delegation

- Bob posted a 50,000 ICX bond
- Bob’s Bonded Delegation: 50,000 / 5% = 1,000,000 ICX
- Bob’s Rewards: (1M/250M x 100) x 26,500 x 90% = ~9,540 ICX per month
- Bob is a Sub P-Rep

Convert to HEX