

Contribution Proposal System

A governance mechanism designed to ensure the security and integrity of Contribution Proposals

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1. Introduction	2
1.1. Definition of a Contribution Proposal	2
1.2. The Contribution Proposal Fund	3
1.3. Registering to Manage the CPS	3
1.4. Sponsor P-Reps	4
2. Application Process	4
2.1. Application Period	5
2.2. Voting Period	6
3. Execution and Progress Reports	7
3.1. Payment of the approved budget	7
3.2. Progress Reports	8
3.3. Budget Adjustments	8
3.4. Paused Contribution Proposals	9
3.5. Disqualifying Contribution Proposals	9
4. Conclusion	9
5. Appendix	10
5.1. Application Form	10
5.2. Progress Report Form	11
5.3. Assessment Framework for Registered P-Reps	11

1. Introduction

One of the most significant innovations by the ICON Project thus far has been the inception of Contribution Proposals. While on the surface level these appear to be ways to simply fund projects, the underlying decentralized, autonomous governance mechanism described in this paper allows for a level of human organization, funding and decision making that is only enabled by blockchain technology.

The importance of the Contribution Proposal System is two fold. For one, it allows for expedited growth of the ICON Network by giving entities the opportunity to receive funding from the network itself. Developers of decentralized applications and contributors to the growth of the ecosystem can submit their work or plan to the Contribution Proposal System, Public Representatives will vote on whether or not this is a legitimate project, and if approved, this project will be eligible to receive funding from the ICON Network. This system will turn the ICON Network itself into one of the first fully operational Decentralized Autonomous Organizations (DAO).

Secondly, and perhaps less obvious, the Contribution Proposal System plays a significant role in the distribution of wealth and power in the ICON Ecosystem. Many blockchain networks give rewards solely to those that produce & verify blocks, thus centralizing wealth & governance power and giving sole discretion of funding ecosystem growth initiatives to such entities. With the introduction of the Contribution Proposal System, anybody interested in contributing to the ecosystem will have the opportunity to accrue governance power and wealth within the network.

1.1. Definition of a Contribution Proposal

A Contribution Proposal is a request for funding submitted by an ICONist to fund a specific initiative in an effort to grow the value of the ICON Network. A Contribution Proposal has a broad range, including but not limited to: Community

building initiatives, non-profit infrastructure projects (analytics platforms, developer tools, ecosystem tools, loopchain core code enhancements, BTP bridges, etc.), educational projects, developer community initiatives, and bootstrapping for-profit businesses built on ICON

1.2. The Contribution Proposal Fund

Funding for contribution proposals comes from ICX held in the Contribution Proposal Fund (CPF), which is a smart contract on the ICON Network funded by block rewards. The amount of ICX is dependent upon governance decisions by ICON P-Reps. The maximum size of the CPF at any given time will be 1,000,000 ICX, however, this cap is subject to change by voting on a Network Proposal. If the CPF reaches the ICX cap, any additional ICX sent to the CPF will be burned.

Payments to approved Contribution Proposals will come from the CPF and will be made in monthly installments. The amount of ICX per installment and the number of installments is based on the length and budget of the approved Contribution Proposal. The CPF will set aside the entire budget upon approval of a Contribution Proposal, as the amount of ICX funding for the CPF from month to month is unknown. Contribution Proposals that would create a deficit in the CPF will be automatically rejected. Proposals will receive funding based on the order in which they were approved. Those that are approved first are those that are entitled to funding first, and if any of the remaining proposals would result in a deficit they will be automatically rejected.

1.3. Registering to Manage the CPS

The CPS will be managed by P-Reps that voluntarily register to do so. Any P-Rep in the top 100 may register to manage the CPF, giving them a voice in how network resources are allocated. Additionally, registered P-Reps will have the opportunity to be a Sponsor, which is explained in detail in the next section. P-Reps may unregister if they so choose.

Registered P-Reps that fail to submit a vote during a Voting Period will be unregistered from the CPS and must pay a fine by burning ICX in order to register again. The first offense will be a 500 ICX fine, second offense is 1,000 ICX fine, and the third offense will be a 2,500 ICX fine. Additional fines will not grow beyond 2,500 ICX.

1.4. Sponsor P-Reps

As part of the application process, applicants must find a P-Rep in the top 100 interested in “sponsoring” their Contribution Proposal. The primary responsibility of the Sponsor P-Rep is to stake 10% of the approved budget (“Sponsor Bond”) into a smart contract to be held for the duration of the Contribution Proposal and returned at the end of the project.

If the Contribution Proposal is approved and the Sponsor Bond is deposited, the Sponsor P-Rep receives 2% of the approved budget (“Sponsor Reward”) in exchange for the risk taken by providing the Sponsor Bond and the work done to research the Contribution Proposal. The Sponsor Reward will be paid in the form of installments. However, if the Contribution Proposal is disqualified prior to completion, the Sponsor Bond will be kept by the CPF and the rest of the Sponsor Reward will not be paid.

With a 10% Sponsor Bond and a 2% Sponsor Reward, this implies a 20% return on investment for the period of the Contribution Proposal. Since sponsorship can provide a meaningful return on investment, we hope to see P-Reps competing to sponsor good projects by offering additional services on top of the Sponsor Bond (i.e. strategic consulting, introductions to partners, marketing support, operational support, etc.).

The sponsorship process provides four key benefits:

1. It provides a level of trust associated with each Contribution Proposal because it implies a certain level of due diligence done by the Sponsor P-Rep

2. It gives P-Reps a direct economic incentive to research and support good proposals
3. It filters out lower quality applications because they must first find a Sponsor P-Rep; and
4. It allows ICONists to submit a Contribution Proposal without meaningful ICX holdings

2. Application Process

There are two periods associated with the application process, the Application Period and the Voting Period. These periods will be on an approximately 15 day (648,000 blocks) rotation. The Contribution Proposal System will accept applications only during the Application Period, then registered P-Reps will vote on pending Contribution Proposals and re-evaluate Active Contribution Proposals during the Voting Period.

2.1. Application Period

The Application Period is when ICONists have the opportunity to submit Contribution Proposals to the Contribution Proposal System and submit Budget Adjustment Requests for Active Contribution Proposals.

All Contribution Proposals will go through the following application process: publish & discuss on the ICON forum (recommended), write the Contribution Proposal, enter the requested budget amount, select the Sponsor P-Rep (the Sponsor P-Rep will then approve or reject the sponsorship), pay a 50 ICX fee to be burned, then submit the proposal.

The Application Process of a Contribution Proposal is best understood through example. See the below user flow of Bob, an ICONist looking to submit a Contribution Proposal:

1. Bob wants to submit a Contribution Proposal to get funding for his project
2. Bob writes his proposal and publishes it on forum.icon.community

3. P-Reps and ICONists all discuss the proposal
4. A few P-Reps volunteer to “Sponsor” Bob’s proposal
5. Bob visits the CPS Dashboard and writes his proposal. Bob requests 100,000 ICX for a 3 month project
6. Bob selects P-Rep ABC to be the Sponsor because this P-Rep has offered their resources to help Bob with the project
7. Bob submits his proposal and pays a 50 ICX fee for the proposal. The 50 ICX is burned
8. P-Rep ABC receives an alert that they have a Sponsorship Request
9. P-Rep ABC knows Bob is not a scammer and approves the Sponsorship
10. P-Rep ABC sends 10,000 ICX to a smart contract for the Sponsor Bond

Upon completion of the above process, Bob’s Contribution Proposal will be pending until the end of the following Voting Period.

2.2. Voting Period

The Voting Period is when all registered P-reps are responsible for evaluating and voting on pending Contribution Proposals and re-evaluating Active Contribution Proposals.

In order to pass a Pending Contribution Proposal, at least 67% of registered P-Reps must vote to approve and at least 67% of the stake-weighted vote of registered P-Reps must approve. Registered P-Reps will have the option to approve, reject, or abstain. The only difference between a reject vote and an abstain vote is to allow registered P-Reps to express a more specific opinion. Additionally, registered P-Reps will be required to type a brief explanation of their decision in a text box when submitting their decision to give more visibility into the decision making process.

We continue the previous example with Bob’s Contribution Proposal below:

1. Bob’s Contribution Proposal is currently pending and is being evaluated by registered P-Reps

2. Registered P-Reps vote on the proposal
3. 70% of registered P-Reps and 70% of the stake-weighted vote decide to approve Bob's Proposal
4. P-Rep ABC will receive the Sponsor Reward in monthly installments and Bob will receive the funding for his project in monthly installments
5. If Bob's proposal did not pass, Bob's proposal is moved to "Rejected" status. The Sponsor Bond would then be returned to P-Rep ABC
6. If approved, and later disqualified for being a scam, the 10,000 ICX from P-Rep ABC is kept by the CPF, no more funding goes to Bob's proposal, and no more Sponsor Rewards are paid to P-Rep ABC

In summary, the actions available to registered P-Reps during the Voting Period are listed below. Some of these items are discussed in more detail later in the paper.

Pending Contribution Proposals

- Approve
- Reject
- Abstain

Active Contribution Proposals

- Approve Progress Report
- Reject Progress Report
- Approve Budget Change Request
- Reject Budget Change Request

Paused Contribution Proposals

- Approve Progress Report (Resume Contribution Proposal)
- Reject Progress Report (Disqualify Contribution Proposal)

3. Execution and Progress Reports

All approved Contribution Proposals are expected to execute the project in accordance with the original proposal and are expected to start work upon receiving payment of the first installment. In order to prevent malicious actors from taking advantage of the Contribution Proposal System, approved Contribution Proposals must follow up with Progress Reports each Application Period. If a Progress Report is not submitted on time, the funding from the CPF will not be paid, the proposal will be disqualified, and the Sponsor Bond will be kept by the CPF.

3.1. Payment of the approved budget

Once a proposal is approved, funds will be released in the form of monthly installments, with the first installment being paid at the end of the Voting Period in which it was approved. For example, if the approved budget was 6,000 ICX over 6 months, 1,000 ICX will be paid at the end of each Voting Period for 6 months.

3.2. Progress Reports

In order to increase transparency, support active community engagement, and increase participation in the ecosystem, approved Contribution Proposals will be required to prepare Progress Reports. These reports will need to be submitted during every Application Period in which it is an Active Contribution Proposal. The submission cycle of Progress Reports matches the cycle of Application Periods.

Registered P-Reps will have the option to Approve or Reject the Progress Report. If a Progress Report does not receive enough Approval Votes, it becomes Paused. If a Progress Report is rejected, the Contribution Proposal will also become Paused.

The recommended requirements for each progress report are outlined in the Appendix section of this paper. Progress Reports are designed to ensure approved proposals are contributing in a satisfactory manner relative to ICONists' expectations. To this point, the proposer must submit a Progress Report every

cycle in order to claim funding from the CPF. Progress Reports provide registered P-Reps an opportunity to re-examine whether or not they would like to allow this project to continue to receive funding. Once submitted, an immutable record of each Progress Report will be saved on the ICON public blockchain.

3.3. Budget Adjustments

Proposers will have the ability to request an adjustment to the approved budget of a Contribution Proposal to account for changes in ICX price and/or changes in the scope of the project over time. A request for a budget adjustment will be submitted with their Progress Report during the Application Period.

During the voting period, registered P-Reps will review the budget adjustment request. A budget adjustment will require approval from at least 67% of registered P-Reps and at least 67% of the stake-weighted vote of registered P-Reps. If the budget adjustment request does not reach approval, the Contribution Proposal will continue with the original budget.

3.4. Paused Contribution Proposals

A Contribution Proposal becomes Paused if the Progress Report did not receive enough Approval Votes. Paused Contribution Proposals will not receive funding at the end of the Voting Period. During the next Voting Period, registered P-Reps will have the option to Resume the Contribution Proposal or Disqualify the Contribution Proposal.

If registered P-Reps reach consensus to Resume the Contribution Proposal, the Contribution Proposal will receive funding at the end of the Voting Period. If registered P-Reps reach consensus to Disqualify the Contribution Proposal, the Sponsor Bond will be kept by the CPF and the Contribution Proposal will no longer receive funding. If registered P-Reps can not reach consensus, the Contribution Proposal will remain Paused until the next Voting Period.

3.5. Disqualifying Contribution Proposals

Disqualifications can occur if a Progress Report is not submitted prior to the end of an Application Period or if registered P-Reps vote to disqualify a Paused Contribution Proposal. registered P-Reps can disqualify a Contribution Proposal to prevent malicious actors from taking advantage of the network. Disqualification should be used in situations of blatant scams or continued poor performance, while Pausing a Contribution Proposal should be used for projects that have temporarily halted work or projects that have submitted an unsatisfactory Progress Report. If poor performance continues, registered P-Reps can resort to a full Disqualification.

This vote will be made available during the Voting Period. In order to Disqualify a Contribution Proposal, 67% of the stake-weighted and non-stake-weighted vote of the registered P-Reps in the current Voting Period must vote to Disqualify.

4. Conclusion

The Contribution Proposal System combines decentralized, distributed, autonomous and meritocratic governance principles that could shape how organizations are structured and operated in the future. As a beta version of this novel governance design, the Contribution Proposal System eliminates the necessity of a central authority in decision making processes.

This implementation provides an opportunity for ICONists to pursue new initiatives and accrue governance rights within the network. These implementations are a first step towards the migration of the ICON Network into one of the first fully operational Decentralized Autonomous Organizations (DAO).

5. Appendix

This appendix includes the expected application format for Contribution Proposals, the expected Progress Report Format, and the recommended evaluation framework for registered P-Reps to evaluate pending Contribution Proposals

5.1. Application Form

The Application Form for a Contribution Proposal will include the following inputs from the proposer:

- Project Name
- Project Category
 - Infrastructure
 - For supporting the underlying code base of the blockchain - Infrastructure supporting tools, bug patches, node maintenance tools, etc.
 - Development
 - Developer support and product ideas - wallets, block explorers, dapps, developer documentation, etc.
 - Community Activities
 - Ambassador activities, public relations, meetups, educational content and activities, and web community development and management
- Project Description
- Project Start Date
- Project Duration
 - Maximum of 6 months
- Project Key Performance Indicators (KPIs)
- Project Milestones
- Monthly Budget Request
- Use of Rewards Breakdown
- URL of the project (Additional Resources)
- Team Name

- Team Contact Information
- Team Background
- Sponsor P-Rep

5.2. Progress Report Form

The progress report will include the following items:

- Report Name
- Reporting Period
- Report Description
- Project Completion Percentage
- Remaining Time to Completion
- Expected Results for the Next Period
- Materials Proving Progress on the Project
- Review of each KPI (Key Performance Indicator) or specific goal/milestone
- Budget Adjustment Request (optional)
 - Include reasoning of Budget Adjustment Request (i.e. change in scope of work, change in ICX price, etc.)

5.3. Assessment Framework for Registered P-Reps

ICON Foundation provides the “Assessment Framework” as a basic framework to registered P-Reps for an objective and accurate assessment process. registered P-Reps can review proposals submitted by referring to the items below.

- Proposal Overview
 - How does this benefit the ICON Network and/or community?
 - Does the proposal provide enough information?
 - Does this proposal pose any risks for ICON?
 - Is there overlap between this proposal and other initiatives?
 - Does this proposal have clear ways to grow ICON’s KPIs?
 - Does the project fairly justify its budget?
 - Are the deliverables and milestones verifiable and tangible?

- Feasibility
 - Is the roadmap reasonable?
 - Do the team members have a relevant background?