Dear Founding Cardano Entities,

Over the last two weekends, during the Saturday afternoon Catalyst Swarm Sessions on February 19 and 26, 2022, a diverse group of members from the community came together to discuss three critical issues regarding the transfer of management and oversight responsibilities from IOG to the community pertaining to the Catalyst fund:

- 1. Designated Representatives (dReps);
- 2. Treasury Structure, Control and functionality; and
- 3. Treasury Transparency.

We would like to begin this letter by welcoming the opportunity to provide our comments and questions on these three topics to IOG for consideration and discussion. Before us, stands one of the greatest opportunities in our present time, whereby groups of separate individuals from across the world come together to deliver the largest social innovation and engineering fund to date. Our commitment to Project Catalyst and the Cardano Community is ever present, growing with each passing day, and drives many of us to continue to push the boundaries of the possible. Opportunities like the one here, empower us to ideate and explore myriad paths towards progress and improvement for the entire Cardano ecosystem.

Each of the three issues highlighted above are deserving of their own streams and as we move forward will likely require a separation from each other, however, at this nascent stage, and for the purposes of this letter, we will address each one in sequential order. At the core of each issue, regardless of the challenges presented, we find the community's willingness to learn, its intention to become experts and leaders, and its desire to build the systems for the future.

As you make your way through each of the sections presented, you will see that we have sculpted this document as an engagement piece to begin the discussions. We are here to learn and see this as an iterative process. We have heard your intention to shift the management of Catalyst to the community and by having IOG directly engaging with the community to address our thoughts and concerns, we know we will be successful.

Designated Representatives

Overview

During the recent Project Catalyst town hall on February 17, 2022, Dor Garbash raised the idea of dReps to the community drawing on a paper from IOG, "A Treasury System for







Cryptocurrencies: Enabling Better Collaborative Intelligence"¹. Although the paper was published in 2019, it was largely unknown to the community, or at least had not been incorporated into community discussions, until now.

Based on that presentation, here is the community's current understanding of the d-rep proposal:

- The purpose of the d-rep system is to work towards "absolute direct democracy" which will be implemented over the next year.
- Through this process, the general community member will have the opportunity to do one of two things: 1) directly vote on proposals themself; or 2) elect representatives to sit in various cardano councils (dReps) who will take decisions for them.

Important note: Under this second option, if one has delegated their votes to a d-rep, it can be revoked at any time and be transferred to someone else.

- In addition to the d-rep roles, the community will elect "technical councils" composed of
 individuals with particular expertise in a given field, and who will work in conjunction with
 the Catalyst Circle. These two groups will form a bi-cameral system whereby both must
 agree to protocol changes, treasury transfers, and policy development/amendment.
- dReps are not merely experts who vote only within their own domain but instead are
 expected to create a strong layer of coordination, where dReps, circle members, and
 technical council members get to know each other, work together by building large and
 inclusive collectives of expertise which come together to discuss, coordinate, and reach
 high quality decisions based on the collective expertise: a paradigm shift from the siloed
 decision making commonly seen.
- The first cohort is an opportunity to support your future candidacy, to grow as leaders, to influence the process, and to develop the coordination methods and trust within the community. This should be considered as a focus group that can give us more input and insight to improve the process for the community, and is also a way to kickstart all the coordination methods and trust processes to build this coordination layer. While this is starting within Catalyst, this opportunity will eventually be implemented across the entire Cardano ecosystem.

¹ Zhang, B., Oliynykov, R., & Balogun, H. (2018). A treasury system for cryptocurrencies: Enabling better collaborative intelligence. Cryptology ePrint Archive. https://eprint.iacr.org/2018/435.pdf







Community Questions, Concerns and Possible Solutions

Throughout the swarm sessions, it became clear that the introduction of dReps requires a broader community discussion to address outstanding questions and concerns. While there appears to be a general sense of excitement regarding the introduction of dReps, the specifics and mechanics of what such a system entails remains unclear. Therefore, in this section we will try to outline those outstanding questions and concerns, and after doing so offer some potential solutions for consideration.

Questions

- 1. What opportunities will be created for community involvement in the dRep processes?
 - a. How does IOG envision community participation in developing and defining dRep criteria?
 - b. How does IOG envision community participation in the selection of dReps?
 - c. What tools and resources will be created in support of community education and capacity building related to the dRep processes?
- 2. What list of criteria must a d-rep meet to prove they are eligible/able to fulfill the role for which they have put themself forward?
 - a. What are the most important skills and traits that a d-rep member should have?
 - b. How will skills be identified and measured?
 - c. How will soft skills (speaking, support roles) be weighted against more technical skills (academic background, experiential background)?
 - d. Who will decide on those individuals that are eligible to hold this position?
 - e. Who will decide on the final list of active dReps?
 - f. What mechanisms will be put in place to deny individuals the option to be a d-rep if they do not meet the particular criteria yet to be developed?
- 3. Given that these individuals will have an outsized impact on the voting process, what are their roles and responsibilities?
 - a. Exactly how will the d-rep system operate?
 - b. How will dReps present themselves to the community so that individuals can decide whether to delegate to them or not?
 - c. What is the proposed interaction between the Catalyst Circle, Catalyst Technical Councils, and the dReps? How will dReps introduce their knowledge into these other groups and what role will they play in decision making?
 - d. What sort of accountability structures will be created to oversee the voting practices of dReps?
- 4. What processes need to be put in place to ensure the effectiveness of the d-rep system, that do not risk replicating historical challenges found in other forms of representative democracy?







- a. How can we facilitate the growth of the d-rep community in tandem with the increasing of funds during each round?
- b. What happens when a d-rep does not follow through on their voting intentions? What recourse does a voter have? What recourse does the community have?
- c. If splitting voting power among many dReps, what does this process look like, and what support will be made for the community to understand and participate in this action?
- d. Is a d-rep able to delegate all their voting power (including those delegated to them) to another d-rep in a different specialization? What are their obligations to the communities who delegated to the original d-rep in the first place?

Concerns

- The amount of work being expected of the dReps is large and will require extensive time and effort to appropriately interact with all the materials during each fund, and to develop the strong working relationships. What is missing from this discussion is adequate remuneration for dReps. If we are building a professional class, we will be required to pay professional wages, yet there has been no indication of what such a figure might entail. Identifying payment scales that are fair and equal will be necessary to ensure that all individuals, regardless of location can participate fully.
- Often, individuals who have the ability to speak up and put themselves forward are not necessarily the best individuals to fulfill a role, such as a d-rep. If this were the primary way that individuals are identified as dReps, we are concerned that the d-rep candidate selection will simply become a popularity contest, and not achieve the intended goals of this proposal.
- dReps are a form of centralization with the catalyst voting system and there are fears
 that this could lead to a lack of decentralization over time. As individuals fulfill these roles
 on an ongoing basis, there is a risk that this system could become ossified whereby it's
 always the same individuals fulfilling the same roles. How will diversity be built into the
 d-rep role so that it is an inclusive and open process?
- Currently, the identification of community needs is largely external, introduced and
 implemented by IOG, often with minimal community feedback prior to their introduction,
 and dReps are no different. What has not been identified is the level of expertise within
 the community to make the d-rep system feasible. We do not want to put the cart before
 the horse, in the sense of putting a system in place prior to getting the community well
 informed of its intention and operation.
- While the dReps as presented by Dor during the Town Hall are one step towards developing a professional class of experts within Catalyst, what is currently overlooked are informal dReps. For example, a community member has gotten their family members into Cardano, each has their own wallet with ADA inside, but they do not wish to







participate in Catalyst voting. Perhaps they would prefer to delegate to their family member rather than a domain expert d-rep, however this has not been considered.

Possible Solutions and Potential Alternatives

To facilitate the open and transparent development of the d-rep system, the community would like to propose potential solutions to some of the concerns and questions above, to help improve the legitimacy of the d-rep system overall.

- dReps should be required to be completely transparent. They should be required to be public facing figures that are open to questions and feedback from the community:
 - dReps must make themselves available for numerous After Town Hall sessions and other forms of AMAs (ask me anything) where community members can engage them directly to get a better sense of their expertise and knowledge.
 - dReps must be able to clearly show why they are suitable for specific domain-expertise, including any necessary documentation or related experience.
 - dReps must make their voting intentions public prior to officially casting their votes. If each d-rep does this, voters could identify which d-rep/group of dReps best represent their views, and then select the individual/group accordingly.
 - Once votes have been cast, the dReps should be obligated to share their voting record with those who delegated. This will help ensure that the voting intention matches the actual voting itself.
- Prior to finalizing the d-rep selection system, IOG should run a community feedback survey to identify which criteria are most important to the community for dReps.
 - o Criteria should be iterative and adaptive based on the community feedback.
 - All stakeholder communities (Western TownHall, Eastern TownHall, Pacific TownHall) must be engaged and provided ample opportunity to participate in the d-rep discussions.
 - The community strongly proposes that the Catalyst Voting App (or similar app) be outfitted with these goals in mind, to improve our data gathering and analysis from a broad range of sources.

Treasury Structure

Overview

A key focus on 2022 will be the transition of control and management responsibilities over the treasury from IOG to the community. While the community is very supportive of this transition







and is preparing the necessary governance and supporting components to facilitate this shift, there are many unknowns regarding the actual structure of the Catalyst Treasury.

On the surface, the community understands that every epoch (5-day cycles) 340ADA is collected from each stakepool (~3500) and entered into the treasury. This amounts to ~6.3M ADA entering the treasury every five days. However, once the money enters the treasury it is unclear how these funds are divided up between the three main entities within the ecosystem: IOG, Cardano Foundation, and Project Catalyst.

Questions

Given the size of the fund and the necessity for sound fiscal management, it is necessary that the Catalyst community be engaged in conversations with the other entities to address and understand the following questions:

- 1. When fees enter the treasury each epoch, are they entered directly into the total sum or are there other processes in place which require ADA to be spent?
- 2. When fees enter the treasury each epoch, is the structure of how they are stored, different from regular UTXOs?
- 3. How are the different shares of the treasury determined? How are totals reached for IOG, CF, and Project Catalyst?
- 4. When proposals are funded, what is the difference between how funds come from the treasury vis-à-vis a regular wallet?
 - a. Are there differences between what currently exists and what will be needed when fully decentralized?

Possible Solutions

We would like to propose that IOG create a workshop (series of workshops) that address each of the questions highlighted above so community members can get a deeper understanding of how the treasury is structured and where improvements can be made.

Treasury Transparency

Overview

There is a dearth of available information for the community regarding the treasury. Presently, the treasury is fully in the control of IOG and appears opaque to the community, other than the amount of available funding announced each round. What *is* known is that the treasury is







controlled by 3 separate entities, each holding a number of "Genesis keys": IOG (4), CF (2), Emurgo (2). To make a change, five keys must be used, and as no individual group holds 5 keys, there are checks and balances restricting unilateral actions.

However, even with such checks and balances in place, from the community perspective there are clear power differentials between these groups that may override such checks and balances. Based on publicly available information the amount of wallets created and \$ADA held by each group is as follows: IOG = 100 wallets with 3.3 million ADA; CF = 45 wallets with 15 million; Emurgo = [Find numbers if possible].

Questions

While some opaqueness was likely necessary for the treasury up until the point, as the seat of decision making shifts from these three entities to the community, it is important that the opaqueness be made transparent. By revealing the inner workings and controlling entities within the treasury, the community can begin developing the necessary expertise and processes to assume control.

To this end, the community is requesting answers to the following questions:

- 1. What technical details must be understood by the community that are used to transfer funds?
 - a. How are smart contracts used in the treasury?
 - b. How are multisig wallets incorporated into the treasury?
 - c. How does the treasury connect to the Catalyst voting app?
- 2. When the community takes over control, what does it look like in terms of ownership?
 - a. Who holds the private keys and who has access to them?
 - b. What are the public keys of treasury wallets and how will these be managed?
 - c. What safeguards will be put in place similar to the checks and balances within the genesis key regime?
- 3. What is the roadmap for the transferring of the treasury to the community?
 - a. What are the key steps that must be completed prior to the transfer?
 - b. What levels of expertise are required to manage the fund and how will this expertise transfer from IOG to the community writ-large?

Potential Solution

We would like to propose that IOG create a workshop (series of workshops) that address each of the questions highlighted above so community members can get a deeper understanding of the technical requirements for treasury management, the community ownership regime, and the roadmap for the transition to community control.







Conclusion

Highlighted throughout this letter are several outstanding areas that need to be addressed in order to equip the community with the necessary skills and resources to become the managing body of the Catalyst Treasury. As has been shown, there is extensive community engagement and input already on each and all of these individual issues. As a first tranche of community capacity building, we turn towards IOG, CF, and Emurgo to help develop the tools and mechanisms that are going to be required to truly make Catalyst a decentralized community fund.

We have tried our best here to articulate the key issues and initial community needs to achieve our mutual objectives. We hope that this letter relays our commitment to Project Catalyst and our desire to see it succeed, not just in the present day but for years to come. Together, we believe, we can truly change the world through Cardano.

We thank you for your time in considering this request for further engagement and information sharing.

In solidarity,

The Catalyst Community





