

Mina as a lab for participation

Governance is crucial to the future of the Mina Protocol for key decisions to be made effectively while aligned with the wishes of the Mina community. This raises the question: how should Mina Protocol's governance be organized to harness the intelligence of individual community members to make the best decisions?

To answer this question, this is the third in a series of blogposts that explores how Mina's governance can learn from [collective intelligence](#) where groups of people are organized at scale to solve complex public problems in ways that often outperform individual people alone.

In this post, we begin by introducing sortition- a civic lottery that randomly selects people participating in decision making similar to the selection of jurors in the legal systems of various countries. Sortition is used in citizens' assemblies to select people who are broadly representative of a community or society to learn about; deliberate on; and make recommendations about an important public problem.

We then discuss how to design a citizens' assembly and key considerations to prepare beforehand; facilitate during; and follow up afterwards. Two key conditions for success include fairness and impact. Membership needs to be representative of the community or society at large and differing viewpoints need to be encouraged. The recommendations must also meaningfully affect policy making and wider public debate.

We explain how zkIgnite is inspired by citizens' assemblies, and how an upgraded Mina Improvement Proposal (MIP) process could be similarly inspired.

Finally, we present examples of relevant ideas that are already being proposed in the wider Mina community.

Creating opportunities for direct participation is a unique feature of Mina's governance compared to other blockchains where obscure decision making committees are often created. Involving community members in decision making that aligns with their wishes raises their stake in the ecosystem and makes it more likely that they will remain with Mina for the long term.

Mina could set an exciting example not just to the rest of the industry but even the wider world. Current systems of democratic decision making were designed in the 18th century yet they are failing to keep up with a rapidly changing world of the 21st century. Mina can demonstrate the novelty could be introduced into these stagnant systems.

Sortition as a civil lottery

In Ancient Greece, representation was not electoral; instead decision makers were selected by sortition- a civil lottery that selected certain citizens who could be broadly representative of the community or society. Although the Enlightenment revived many political ideas of Ancient Greece, this did not include using sortition to select the members of government in the American and French republics. However, sortition is still commonly used in the legal systems of various countries to select people to participate in juries. It is

also being used to select people to participate in citizen groups with political advisory power called a citizens' assembly or smaller citizens' jury.

Introducing citizens' assemblies

Sortition is used to convene a cross-section of a community or society to deliberate on a complex and important public question. For example:

- How should [the UK](#) meet its climate change targets?
- What should be the policy for end of life and assisted dying [in France](#)?
- How should the electoral system be reformed in [Canada](#)?
- What should be the future of AI in the [European Union](#)?

Citizens' assemblies have been used [over 600 times](#) at local, regional, national and international levels. Local ones may be smaller and involve 25-40 people while national and international ones may be larger and involve 100-200 people. Their size affects trade-offs between time and cost, deliberative quality and representation.

Promoting participation

[As explained in a previous blogpost](#), there is renewed interest in collective intelligence to respond to major societal challenges, including the declining confidence in representative democracy that could undermine the legitimacy of democratic decision making. Consequently, researchers, entrepreneurs and pioneers, including from the Mina community, are drawing on the methods of collective intelligence to test out viable alternatives to make democracy more meaningful and its outcomes more legitimate. These include direct democracy where people are more directly involved in decision making through participatory and deliberative processes (see Figure 1).

Empower citizens

Instead of feeling like passive spectators, citizens' assemblies empower people to be actively involved in decision making for their community or society.

Increasing the legitimacy of decision making

[There is also evidence that](#) involving citizens in a decision making process can increase the legitimacy of that process in the eyes of the wider community or society.

A structured approach to decision making

Citizen assemblies involve three main steps: learning, deliberation and recommendations.

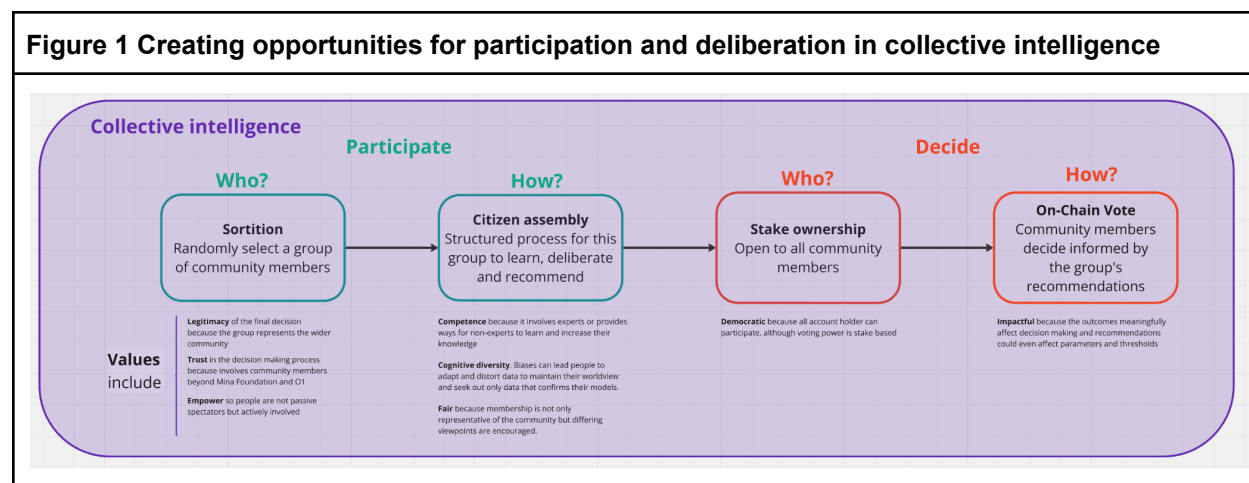
The members of a citizen assembly are presented with evidence, including inviting witnesses (experts) to explain the public problem. Presentations by witnesses should be accessible, avoid jargon and not assume prior knowledge.

Through listening, dialogue and debate, the full range of different arguments and opinions are considered, including trade-offs, while building trust between people who may have opposing views.

Sortition helps to select people who are likely to be cognitively diverse. Cognitive biases can lead people to adapt and distort data to maintain their worldview and seek out only data that confirms their models.

There are various examples where groups failed to make the right decisions even though they had all the information they needed. Encouraging competing and independent perspectives can overcome cognitive biases and challenge rigid ways of group thinking and feeling.

Citizens' assemblies can be used early on in the decision making process to understand public opinion on a problem and encourage wide public discussion about it or later on to examine or suggest specific options to be recommended to decision makers.



Designing Citizens' Assemblies

Criteria for success

Based on practical learnings from running citizen assemblies, widely agreed criteria have been identified that differentiate a citizens' assembly from [other participatory methods](#) and provide a standard for ensuring their success (see Table 1). [Two key conditions for success](#) include fairness and impact. Membership needs to be representative of the community or society at large and differing viewpoints need to be encouraged. The recommendations must also meaningfully affect policy making and wider public debate.

Table 1 Standards for citizens' assemblies	
Criteria	Standard includes
Clear purpose	There is a clear question to address that has a range of different possible solutions
Sufficient time	There is sufficient time for learning, deliberation and recommendations
Representative	A pool of potential members is created through random selection, from which actual members are randomly selected while ensuring they reflect the wider population
Inclusive	The members are reasonably reimbursed

Independent	The assembly is impartially facilitated by people who are well briefed and provided with any necessary training ahead of time, and key decisions about the citizens' assembly agenda and design are reviewed by an independent advisory group
Open	The following should be made public: • assembly design plan • member selection methodology • advisory group membership • meeting agendas and briefing materials • final recommendations • decision makers response to the recommendations
Generative learning	The members receive accurate information and evidence from diverse witnesses with a range of views, and determine their own questions to ask so that they lead the discussions (rather than the witnesses)
Structured deliberation	The members are supported through a facilitated process to consider different views
Collective decision making	The recommendations are agreed collectively by all members
Evaluate	The members are surveyed to collect feedback about their experience and the quality of the process

There are [three main stages to designing a Citizens' Assembly](#): preparation beforehand; facilitation during; and follow up afterwards.

Preparation beforehand

Constituent groups

Different groups of people play key roles in running a citizens' assembly (see Table 2).

Table 2 Key roles in a citizens' assembly and possible analogous roles in Mina processes			
	<i>Role</i>	<i>zkIgnite</i>	<i>MIP process</i>
Commissioner	Responsible for the public problem and initiates the citizens' assembly to explore it	Developers in the Mina community	Mina community
Operator	Independent of the commissioner, implements and funds the citizens' assembly.	Mina Foundation	MIP Author
Project team	Bridging the commissioner and operator, runs the process, including inviting expert witnesses to brief the Members	Mina Foundation's Community Team	Protocol Governance Facilitators
Members	The people who participate in the citizens' assembly	Cohorts of electors	Small groups of expert reviewers

Advisory Group	Reviews key decisions about the citizens' assembly's design and operation, and resolves disagreements between the other groups.	Committee of experts	Wider pool of expert reviewers
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Selecting members

Sortition often involves two steps. First, a large number of invitations are sent out to a randomly chosen group of people. Those who express interest then participate in a second lottery based on relevant criteria that ensure the final group broadly represents the community.

Reimbursing members for their time and providing necessary support, such as accommodation and travel expenses, makes it more likely that a wide range of people will take part.

Onboarding members

The project team needs to explain how the citizens' assembly will proceed. Criteria for decision making at the outset, including the values to guide how members will work together and resolve any disagreements.

Facilitation during

Facilitation is a specific skill so the project team needs to have received suitable training beforehand so that they can support the following activities.

Learning

Sufficient time is needed for members to learn about the public problem, become familiar with the evidence and learn from invited witnesses.

Deliberation

Members listen, discuss and debate to consider the full range of different arguments and opinions, weigh trade-offs and consider benefits, risks and other consequences.

Recommendation

Members consider different options and iteratively draft recommendations in the light of collective feedback. They vote on each recommendation to decide whether they will be included in the final report for the commissioner.

Support tools

Digital tools can support each stage. [AI tools have huge potential](#) to identify and visualize different perspectives, including where there is consensus and areas of disagreement, and support the transition from deliberation to drafting recommendations.

Follow up afterwards

The commissioner tends to publish a formal public response that explains which recommendations they intend to implement and those they will not. The implementation of the accepted recommendations should be monitored by the operator and project team with regular public progress reports. The commissioner and operator should also review their experience and how to improve it.

zkIgnite as a citizens' assembly

The [recently published governance proposals](#) stress the opportunity to increase Mina blockchain's mass deliberation capacity, including through citizens' assemblies. zkIgnite is already inspired by citizens' assemblies.

Preparation beforehand

Constituent groups

zkIgnite involves different groups of people that play similar roles to those in a citizens' assembly (see Table 2). For example, developers in the Mina community would be the Commissioner since they are invited to submit funding proposals. Mina Foundation's Community Team is the Project Team. The members are Electors- experienced builders, community members and zkApp users- who review submitted proposals. Unlike citizen assemblies they are not advisory and do not make recommendations but instead directly decide which proposals to fund.

The membership of each cohort includes 30 Electors- 15 for each of the [two tracks of proposals](#). The zkApp product track funds commercially oriented zkApps that bring users and transactions onto Mina Protocol. The dev4dev track funds tooling, services and infrastructure that develop Mina Protocol & o1js. For the zkApp product track, the ideal Elector is someone who wants and needs the functionality that a well designed zkApp can provide. For the dev4dev track, the ideal Elector is a zkApp builder who will benefit from the key primitives that they decide to fund.

One key learning from the first two cohorts was that Electors need support from experts with in-depth knowledge of the core protocol, o1js and zkApps. Cohort 3 introduced a Committee of Experts to provide a technical review through public feedback on each proposal, and determine if successful projects have hit their milestones.

Selecting Electors

Eligible electors are pre-selected and receive an invite in advance of the first week of the cohort to join a kickoff and Q&A call, after which they have the option to opt-in for the lottery that will select the electors and the results will be made public.

Onboarding Electors

Electors are onboarded and the process is explained to them. Criteria for decision making are agreed at the outset. Electors agree to follow [Mina's community guidelines](#), as well as bespoke Elector guidelines to ensure fairness, independence and confidentiality.

Facilitation during

Sufficient time is provided for Electors to fulfill their responsibilities, requiring 50+ hours across two months mostly spent reviewing, evaluating and voting on proposals. Electors review proposals and provide feedback and then share their perspectives during weekly virtual gatherings. Using the [zkIgnite platform](#), Electors evaluate and score proposals, and then crowd vote on them.

Once successful proposals have been funded, Electors will be compensated with a grant.

Follow up afterwards

The decisions are published on the discord channel by the Community Team. [Retros](#) are carried out after each cohort to consider how to improve the next one.

The Mina Improvement Proposal process as a citizens' jury?

The [recently published governance proposals](#) describe how the Mina Improvement Proposal (MIP) process could be upgraded. Three MIP categories would be created- engineering, economics and governance- and a small group of experts would review each MIP, according to their expertise and the MIP category. MIP Facilitators would help to run MIP (and other major decision) processes. This upgraded process could also be inspired by citizens' assemblies.

Preparation beforehand

Constituent groups

The MIP process involves different groups of people that could play similar roles to those in a citizens' assembly (see Table 2). For example, the Mina community would be the Commissioner since ultimately it is the community that would decide whether to accept the MIP or not via community wide, on-chain vote. The MIP Author would be the Operator since they initiate the process by submitting the MIP, although after consultation with the community (as the Commissioner) to gauge agreement about the specific problem and initial support for their proposed solution. MIP Facilitators would be the Project Team to ensure the process is followed correctly and coordinate the operations and communications between authors, reviewers and other stakeholders, such as the Mina Foundation.

The key Members would be the small group of expert reviewers who would attach a risk-benefit analysis to the MIP before a community wide, on-chain vote. This advice would help community members, especially non-experts, when they vote by informing them about what experts think about the MIP's benefits, risks and tradeoffs. Since these reviewers would already be experts, they would differ from citizens' assemblies where non-experts are briefed by expert witnesses.

Selecting reviewers

To bootstrap this process, Mina Foundation and O1 Labs could propose an initial group of experts but the aim is to grow a pool of reviewers from the community, from which small groups for each MIP would be selected. This larger pool of experts could play an oversight role and resolve disagreements. New mechanisms could be proposed for any community member to request to join the pool of reviewers by submitting their candidacy as a governance MIP and follow the MIP process, eventually leading to a community wide on-chain vote. The community could use a similar kind of process to propose removing a reviewer; perhaps a higher voting threshold could be required.

Onboarding reviewers

Reviewers would need to be onboarded and the process explained to them. Criteria for decision making would be agreed at the outset, including the values to guide how they would work together and resolve any disagreements. Publishing these criteria and values- perhaps as a code of conduct, charter or even a constitution- would improve the transparency of decision making and keep reviewers accountable to the Mina community.

Facilitation during

Reviewers would need sufficient time to fulfill all their responsibilities and be compensated for doing so. They would review a MIP and provide a risk-benefit analysis that could be explained and reviewed in an open debate so that different stakeholders have the opportunity to ask questions and present objections. This risk-benefit analysis informs the community when deciding whether to approve a proposal or not via on-chain voting.

Follow up afterwards

The results of each on-chain vote are [published widely](#). Mina Foundation's Protocol Governance Team continuously gathers feedback from the community through regular community Town Halls, governance Q&As, discussion channels and forums, and so these would provide opportunities to review each MIP process. Metrics for evaluating effectiveness should ideally be part of the MIP so that follow up could provide a quantitative answer to whether or not an implemented solution is being used or if key metrics have changed in the desired direction.

Similar proposals in the Mina community

Similar approaches are already being considered by community members

Beemocracy

[A previous blogspot explained how collective intelligence](#) draws heavily on research about swarm intelligence, especially about the decision making process of honey bees to select a new hive. Scouts leave the swarm to search for suitable sites and then return to report about them through their waggle dance- a series of movements that represent the direction and distance to a new site. Scouts report for longer and more excitedly about better quality sites so that other scouts will also seek them out and return with their own reports. Importantly, scouts report about a site only if they have first hand experience and have visited it themselves.

According to [beemocracy for Mina](#), an analogous process could be followed where community members would submit proposals, such as a MIP or ecosystem funding proposal, to be decided by a jury. Any Mina holder could be a 'scout' if they review proposals and provide a recommendation for how jurors should vote. Unlike a conventional citizen assembly, the jury is not advisory; like zkIgnite, the jurors would make the final decision rather than the wider community.

Each jury would consist of scouts randomly selected based on their reputation. Juries of scouts with higher reputation would make decisions on more important proposals and larger requests for funding. Juries of scouts with lower reputation would make decisions on less important proposals and smaller requests for funding. Maintaining or growing their reputation would incentivise scouts and jurors to be honest.

Socialcap

[Socialcap](#) provides a voting platform for community based decision making that can be customized to the specific needs of each community. Community members can participate directly and cast their vote themselves. Since this can be time consuming, slow and challenging for complex and urgent decisions, Socialcap allows community members to participate indirectly by delegating to elected representatives to

vote on their behalf. Built on Mina, the voting process remains confidential and private since zero knowledge proofs allow each vote to be verified without revealing the voter's choice.

Deciding and issuing credentials

The process begins when the community creates a credential campaign. Applicants can then claim their credentials by collecting and submitting evidence to support their claims. Electors are selected to vote on each applicant's claim. If approved, the applicant mints their credential on the blockchain to guarantee a transparent and immutable record of the consensus.

Organizing groups based on decision types

Electors can be randomly and anonymously selected from three groups of people:

- community members;
- 'validators'- a set of community members who others delegate to vote on their behalf;
- 'auditors (or judges)'- a subset selected from the validators to vote on more critical decisions (and monitor validators to avoid frauds).

Different types of decisions (credentials or proposals) can involve different numbers of electors and different combinations of community, validators and auditors (to comprise the electors). Some decisions may require experts and so involve more auditors while other decisions may be suited for broader community opinion and participation.

Mina as a democratic innovator

Researchers, entrepreneurs and pioneers, including those from the Mina community, are drawing on the methods of collective intelligence to test out viable alternatives of direct democracy. Involving people more directly in decision making through participatory and deliberative processes can help to make democracy more meaningful and its outcomes more legitimate.

Creating opportunities for direct participation is a unique feature of Mina's governance compared to other blockchains where obscure decision making committees are often created. Involving community members in decision making that aligns with their wishes increases their stake in the ecosystem and makes it more likely that they will remain with Mina for the long term.

Mina could set an exciting example not just to the rest of the industry but even the wider world. Current systems of democratic decision making were designed in the 18th century yet they are failing to keep up with a rapidly changing world of the 21st century. Mina can demonstrate the novelty could be introduced into these stagnant systems.

Mina Foundation's Protocol Governance Team hopes to inspire ideas from the community for how citizen's assemblies and other democratic innovations could be most effectively applied to Mina's decision making. Please connect with us on [Discord](#) at the following channels:

#protocol-governance-general-discussion

#protocol-governance-announcements

#protocol-governance-surveys