CIP-1694 & Cardano Governance Workshop

Module 1

Overview of Cardano and Blockchain Governance

Module 1

This module introduces Cardano's journey into the Voltaire era, exploring its three pillars: decentralized governance, treasury management, and voting mechanisms. We'll examine how different blockchain governance models compare and what makes Cardano's approach unique through CIP-1694.

By the end of this module, you'll understand:

- Cardano's roadmap and Voltaire's significance
- Core governance mechanisms and features
- Different governance models and Cardano's approach
- How to participate in governance

Features of Voltaire era in Cardano

Module 1

Understanding Cardano's Roadmap

A Journey of Innovation and Growth

Cardano’s development has been strategically planned across five eras, each building upon the last to create a robust and evolving blockchain ecosystem:

- **Byron:** Established a secure foundation with the initial release, creating a reliable and functional blockchain network.
- **Shelley:** Marked the era of decentralization, enabling individuals and stake pools to take control of network security.
- **Goguen:** Brought programmability to Cardano by introducing smart contracts, paving the way for decentralized applications.
- **Basho:** Focuses on scalability and performance, optimizing Cardano to handle growth and support widespread adoption.
- **Voltaire:** Empowers governance by transitioning decision-making to the people, fostering a truly decentralized and sustainable future.

Why Voltaire Matters

Voltaire is not just another upgrade—it’s about transferring the power to you. Through governance, ADA holders will have a direct say in shaping Cardano’s evolution, making the blockchain truly decentralized and community-driven.

Three pillars of Cardano governance in the age of Voltaire

Institutions

Strong institutions drive good governance. Intersect, as a member-based organization, creates an enhanced framework for the community to continue its role in developing and improving Cardano.

Constitutional Representation

The Constitution and the Constitutional Committee play a key role in the stability and security of the network.

Delivered throughout 2024, Cardano's constitution will evolve from an interim to a fully ratified version on-chain.

Democratic Consent

Cardano Improvement Proposal-1694 (CIP-1694) describes a governance system to bring decision making for the Cardano network on-chain.

It seeks to advance the current governance system ensuring every ada holder has a voice in Cardano's evolution.

Features of Cardano Governance

Decentralized Governance:

- Community-driven decision making for network changes and improvements

Treasury System:

- Sustainable funding mechanism from transaction fees for ecosystem development

Voting Mechanisms:

- Flexible participation through direct voting or delegation to DReps

How will it work?

- You'll be able to propose changes to Cardano
- Vote on proposals that matter to you
- Delegate your voting power if you prefer
- Help decide how treasury funds are used

The key is that everything will be transparent and verifiable on the blockchain.

Basics of Blockchain Governance

Module 1

What is Blockchain Governance?

System for managing and updating blockchain networks

Decision-making processes for:

- **Protocol changes**
- **Technical upgrades**
- **Resource allocation**

Community participation and consensus

Governance Models Compared

Off-chain Governance

- Social consensus
- Core team decisions
- Informal community input

On-chain Governance

- Automated execution
- Transparent voting
- Verifiable decisions

Cardano's Governance Approach

Hybrid Model Benefits

- On-chain voting & execution
- Constitutional principles
- Formal community input

Key Innovations

- DRep system
- Integrated treasury

Interactive Quiz : https://quizizz.com/join?gc=41481664

Module 2

Understanding CIP-1694 and DRep system

Glossary

To fully understand the concepts and mechanisms covered in the next module, it’s essential to get familiar with some key terms and definitions specific to Cardano governance. We will look at explanations of some foundational terms. These terms will not only help you follow the upcoming content more effectively and deepen your understanding of how Cardano’s governance model operates.

Glossary - 1/3

- **DRep** (shorthand for Delegated Representative)
  - A person or entity who is given voting power by way of delegation from other wallets.
- **Delegator**
  - A person or entity who decides to delegate their voting power to a DRep.
- **Ada Holder**
  - A person or entity in possession of any amount of ada cryptocurrency.
- **CIP-1694**
  - CIP-1694 introduces a new on-chain governance model for Cardano. This CIP seeks to advance the current governance system ensuring every ada holder has a voice in Cardano's governance.
  - The proposal outlines a tricameral model consisting of stake pool operators (SPOs), Delegated Representatives (DReps), and a Constitutional Committee (CC), each with distinct responsibilities and roles.

Glossary - 2/3

- **Governance Actions**
  - A governance action is an on-chain event triggered by a transaction. Governance actions have an expiration period, after which the action cannot be enacted.
  - Any ada holder can submit a governance action for a vote on-chain. Once the action is recorded on the ledger, voters submit voting transactions.
- **Metadata Anchor**
  - In the context of CIP-1694, metadata anchors are a mechanism to attach contextual data to on-chain governance artifacts. These anchors include a URL pointing to metadata plaintext and a hash of the plain text metadata hosted at the metadata URL.
  - The hash can be used to verify the integrity of the metadata hosted at the URL. These can be attached to on-chain DRep registrations to allow DReps to share profile information hosted off-chain. Such metadata should conform to the structure defined by CIP-0100? | Governance Metadata or subsequent CIPs.

Glossary - 3/3

- CIP-30
  - This CIP defines communication between web-based stacks and Cardano wallets.
  - This API offers base, generic functionality to allow DApps to query wallet information such as wallet balance, network connection, and UTXOs owned.
- CIP-95
  - This CIP extends the CIP-30 API to add specific support for governance functionality.
  - This allows sharing of DRep identifying keys between wallets and DApps to allow DApps to identify users who have registered as DReps on-chain.

CIP-1694

Module 2

Introduction to CIP-1694

Cardano Improvement Proposal 1694: Governance Evolution

- **Definition**: A comprehensive governance framework proposal for Cardano's next era
- **Purpose**: Transform Cardano's on-chain governance to enable sustainable decision-making
- **Key Innovation**: Moving from informal off-chain governance to formal on-chain mechanisms
- **Timeline**: Proposed in 2023 as part of the Voltaire era preparations

Core Components of CIP-1694

Key Governance Mechanisms

1. **Constitutional Committee**
   - Elected group overseeing governance
   - Constitutional compliance checks
   - Term-limited positions
2. **Voting Structure**
   - DReps (Delegate Representatives)
   - Direct voting mechanisms
   - Stake-based voting power
3. **Governance Actions**
   - Constitutional changes
   - Hard fork initiations
   - Treasury movements
   - Network parameter updates

Governance Roles

There are five roles describing community member participation in governance

Delegate Representative (DRep)

Directly casting votes on all governance actions, DReps represent those ada holders delegating stake to them.

Constitutional Committee (CC)

Voting only on the constitutionality of actions, if the CC oversteps this bound, the role can be revoked with a no-confidence action. The role is also revoked automatically when terms expire.

Stake Pool Operator (SPO)

SPOs vote only on specific governance action types.

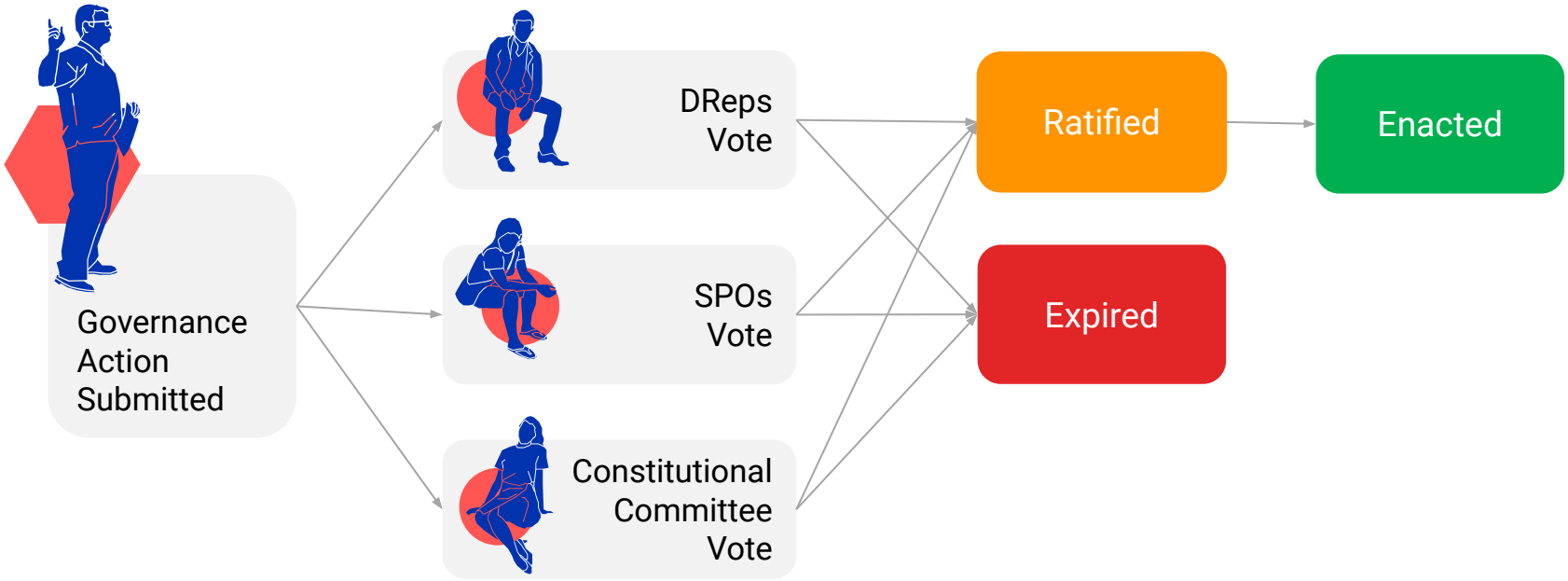
Delegating ada holders

Ada holders who do not become DReps can delegate voting stake to the DRep of their choice, so the DRep may vote on their behalf.

Non-delegating ada holders

Ada holders who do not delegate their voting stake to any DRep automatically fall into this category.

Overall Governance Action Enactment Process



Any Ada holder can submit ----> Specific Groups Vote ----------> Automated Ratification and Enactment

Governance actions

		Ratification requirement for each governance action scenario		
Governance action type	**Description**	**CC**	**DReps**	**SPOs**
Motion of no-confidence	A motion to create a state of no-confidence in the current constitutional committee	-	✓	✓
New constitutional committee and/or threshold and/or terms	Changes to the members of the constitutional committee and/or to its signature threshold and/or terms	-	✓	✓
Update to the Constitution or proposal policy	A modification to the Constitution or proposal policy, recorded as on-chain hashes	-	✓	-
Hard-Fork Initiation	Triggers a non-backwards compatible upgrade of the network; requires a prior software upgrade	✓	✓	✓
Protocol Parameter Changes - network / economic / technical / governance group	Any change to one or more updatable protocol parameters, excluding changes to major protocol versions ("hard forks")	✓	✓	-
Treasury Withdrawals	Withdrawals from the treasury	✓	✓	-
Info	An action that has no effect on-chain, other than an on-chain record	✓	100	100

Lifecycle of Governance Actions

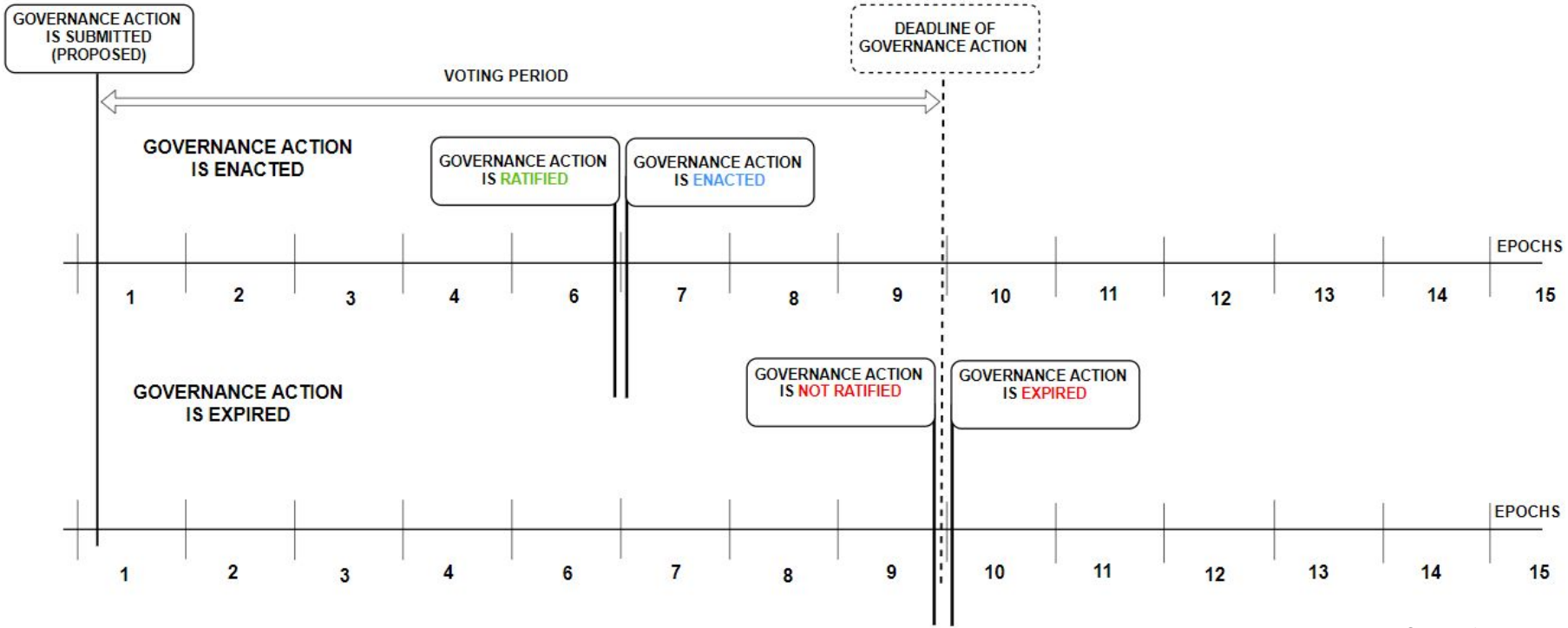


Image courtesy of Jaromir Tesar

Image courtesy of Mike Hornan & Summon Associations

Major Changes & Implications

Transformative Elements

From Current System:

- Informal Project Catalyst → Formal on-chain governance
- Limited participation → Broader stakeholder involvement
- Project-focused funding → Comprehensive governance scope

Key Improvements:

- Clear delegation mechanisms
- Structured proposal categories
- Transparent voting thresholds
- Automated execution of approved changes

Community Feedback & Discussion

Engagement Points

Key Community Concerns:

- Decentralization balance
- Committee power scope
- DRep accountability
- Voting threshold appropriateness

Discussion Questions:

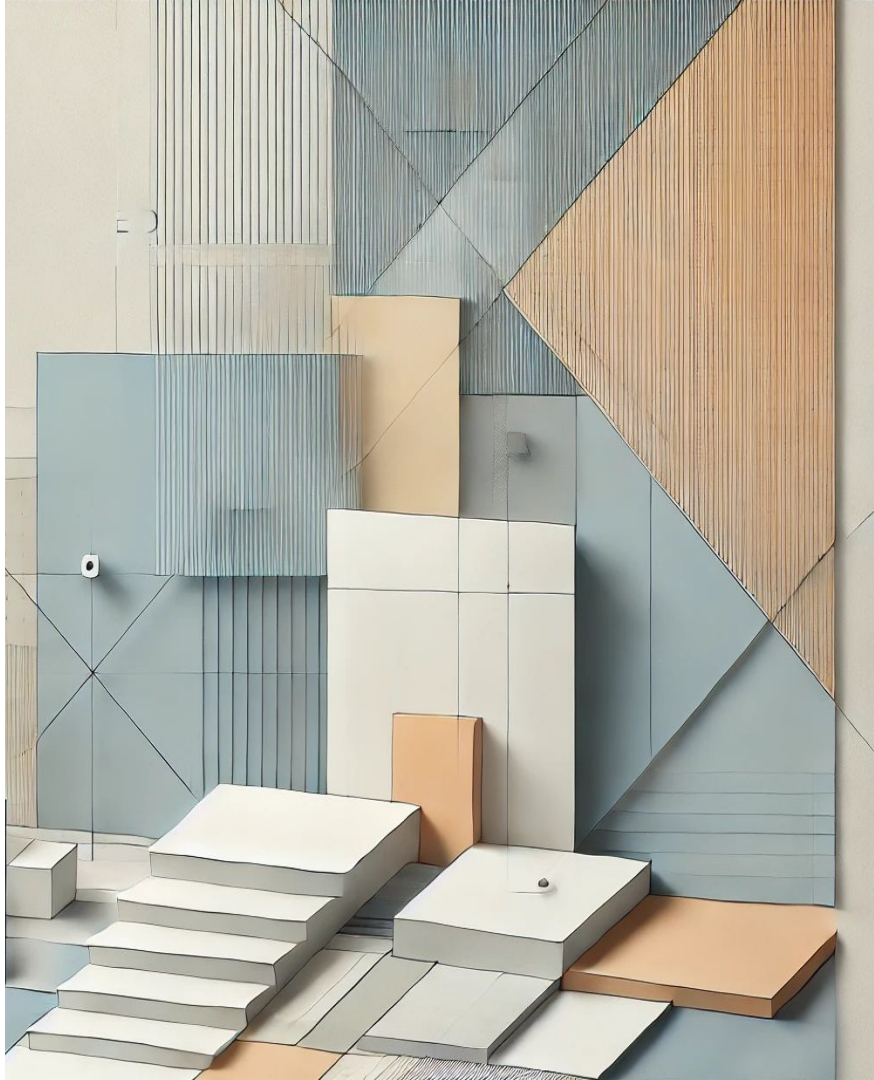
1. How can we ensure broad participation in the new system?
2. What safeguards are needed for committee oversight?
3. How should DRep performance be measured?
4. What role should SPOs play in governance?

DReps in Cardano

Module 2

The DRep role

A DRep represents the community, voting on governance actions and advocating for their delegators' interests. DReps play a key role in voting on system updates, with approval depending on the governance action type and votes from SPOs, the constitutional committee, and DReps. As a DRep, you'll vote 'yes,' 'no,' or 'abstain,' with your vote reflecting the collective voice of ADA holders in the decentralized decision-making.



Role of DReps

1. **Governance Participation:**
   - DReps enable decentralized governance by representing the interests of ADA holders in decision-making processes.
   - They participate in on-chain voting for Cardano Improvement Proposals (CIPs) and other governance matters.

2. **Delegated Voting Power:**
   - ADA holders can delegate their voting power to DReps, allowing for more efficient and expert participation in governance without requiring every holder to vote directly.
   - DReps are trusted to make informed decisions on behalf of those who delegate their votes to them.

3. **Proposal Evaluation:**
   - DReps are responsible for evaluating and voting on various proposals, including technical upgrades, funding allocations, and protocol changes.
   - They provide informed assessments and contribute to the overall health and progression of the Cardano ecosystem.

4. **Community Representation:**
   - DReps act as intermediaries between the wider community and the governance system, ensuring that the voices and concerns of the community are heard and addressed.
   - They help maintain a balanced and fair governance process by representing diverse stakeholder interests.

5. **Transparency and Accountability:**
   - DReps are expected to operate transparently, providing regular updates and rationales for their voting decisions.
   - Their performance and decisions are subject to scrutiny by the ADA holders who delegated their votes, promoting accountability in the governance process.

DRep Must Vote To Remain Active

- **Retaining Active Status:** Registered DReps need to vote regularly to maintain their active status. Inactive DReps do not contribute to the active voting stake, and they must resume voting to regain their active status.
- **Maintaining Voting Power:** If a DRep does not submit any votes for a specified number of epochs (drepActivity), they will be considered inactive, and their delegated stake will no longer count towards the active voting stake.
- **Preventing Governance Deadlocks:** If DReps are not marked inactive, it can potentially lead to a state where no governance action can pass due to insufficient active voting stake.

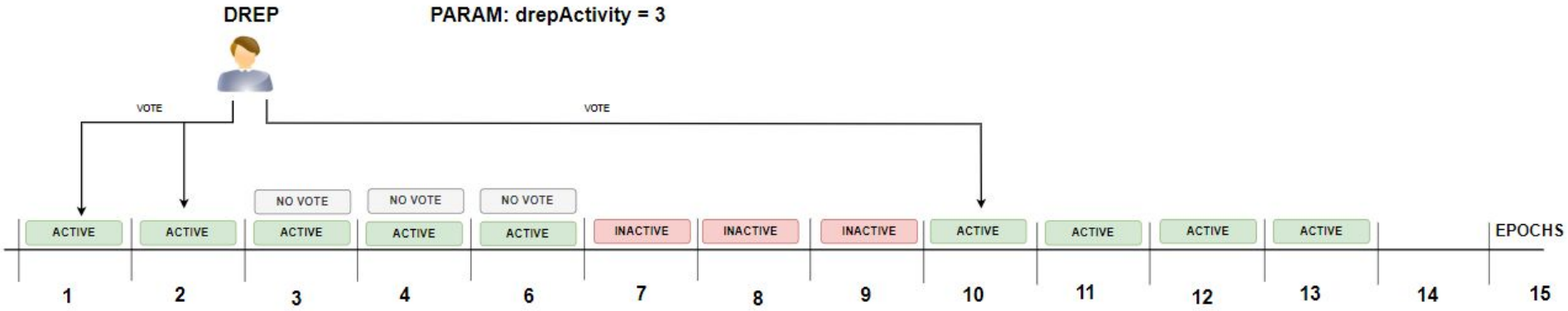


Image courtesy of Jaromir Tesar

DRep Code of Conduct

Code of Conduct		What each DRep should define	Minimum items required of all DRep
1) Establishment of disclosure rules and operational methods	1-1) Disclosure information	[Competence]Have the knowledge & abilities to cast a vote 1) Areas where you have knowledge and ability. 2) Minimum hours allotted to governance individually or as a team (resource hub).	1) Whether you have knowledge and skills in the area of each type of governance action. 2) How much resources are available to consider voting on governance actions.
		[Identity]You are not running multiple DReps under cover with any possible extended measures 1) Valid contact information for communication. 2) Identity information (if possible, use DIDs, issue VCs, and selectively disclose information that you feel is important) for disclosure depending on their risk tolerance	1) Your valid email address (If there is no response within one week, it is generally considered not “valid”.) 2)One account for the platform most active online.
		[Interests and Alliances] 1)Interested organizations and voting policies for them and 2)other organizations that influence voting behavior. About 1). To verify there is no corruption or bribery, disclosure should include policy on voting decisions for DReps with conflicting or any potential economic interest by being part of team or projects. About 2), Lobbying rules, the DRep's role in that organization, how it may influence the DRep's voting behavior, should also be disclosed.	1) At a minimum, if you or your relatives receive income((including other financial relationships such as debts) from an entity in the Cardano ecosystem, including a proposer-affiliated company, disclose that entity. 2) It then articulates the voting policy for governance actions relevant to that organization.
		[Voting process]The voting behavior rules are open to the public, and it can be verified that voting is not done arbitrarily. 1)Policy on Voting coverage (In other words, your criteria for abstaining) 2)Policy on Voting Decision disclosures	1)Policy on Voting coverage (In other words, your criteria for abstaining) 2)Policy on Voting Decision disclosures (This includes the application of the Constitution, the use of experts, and the application of the minimum policies required by the Catalyst/CIP1694 platform.)
	1-2) How to update disclosure information	1) The frequency of regular information updates, 2) The timing of information updates before voting, and 3) The notification method when information is updated.	1)Regular updates: at least once every three months 2)Pre-voting update: 2 weeks before voting 3)Notification method: Notification by email to those who requested notification
2) Execution and feedback collection and improvement with respect to 1)		Define how you will collect feedback and how it will lead to improvements.	1) Prepare a feedback form. 2) Have a process in place to see if the feedback led to improvements or if it was rejected.
3) Actions that are universally required		If you have something you want to define, please declare it.	You will of course abide by the "Community Code of Conduct" as defined by the Cardano Foundation. This is so obvious that we won't copy-paste it here, but please always be polite and avoid harassment of any kind.

What DReps should define

1. **Disclosure information**
    - **Competence:** Areas of knowledge/ability to cast votes, and the minimum hours allotted for governance work individually or as a team.
    - **Identity:** Confirmation of not operating multiple DRep identities, providing valid contact information for communication, and selectively disclosing identity details based on risk tolerance.
    - **Interests and Alliances:** Disclosure of organizations influencing voting behavior, policies to prevent conflicts of interest or corruption. Lobbying rules of an allied org and how the DRep's role may influence voting.
    - **Voting Process:** The voting rules should be public and voting must not be done arbitrarily. DReps must disclose policies on voting coverage (abstaining criteria) and voting decision disclosures.

2. **Updation to disclosure information**
    - The frequency of regular information updates,
    - The timing of information updates before voting, and
    - The notification method when information is updated.

DReps must also establish processes for feedback collection, defining how they will collect feedback and utilize it for improvements.

Minimum requirements from a DRep

- Specifying knowledge/skills for governance actions, available resources for voting, a valid email for contact, an account on the most active platform, disclosure of financial relationships that could influence voting, policies on voting coverage/abstaining and decision disclosures per the Catalyst/CIP1694 platform requirements.

- Provide regular updates at least once every three months, pre-voting updates, and email notifications to those requesting updates. They must prepare a feedback form and have a process to evaluate if feedback led to improvements.

- Adherence to the Cardano Foundation's Community Code of Conduct is expected, aiming to be polite and avoid harassment.

Rewards for DReps

Ongoing Debate

- Recognizes time and effort involved in governance roles.
- Potential for monetary rewards to increase engagement, especially among smaller stakeholders.

Importance of Rewards

- Appreciation for Effort: Acknowledges DReps' time and contributions.
- Incentive for Expertise: Encourages skilled, lower-stake holders to engage.
- Community Engagement: Motivates DReps to interact with and represent stakeholders.

Proposed Reward Scheme

- Based on Delegated Stake: Rewards tied to the total ADA delegated to each DRep.
- Snapshot Simplicity: Easy to measure at set epoch intervals.
- Flexible for Future Adjustments: Potential to evolve with community feedback.

Module 3

Governance participation and Tools

Module 3

This module aims to help individuals navigate the process of joining the DRep ecosystem. It provides key insights into becoming a DRep, exploring ways to actively participate in the community, and reviewing tools that support engagement.

- Becoming a DRep
- Engaging with the community
- Exploring tools for participation

ADA Holders’ participation

Module 3

ADA Holders' Role in Governance

Who are ADA Holders?

- ADA holders are stakeholders in Cardano who play a key role in governance.
- Importance of Their Involvement: Their participation supports the network's decentralization, security, and adaptability.

Direct Voting vs. Delegation

Why Not Direct Voting?

- System Overload: Risk of high transaction volumes if everyone votes at once.
- Complexity: Not all holders are familiar with technical governance proposals.
- Time Constraints: Many may find it hard to prioritize voting regularly.

Delegation as a Solution:

- Delegation provides an efficient way to ensure informed participation without overwhelming individual ADA holders.

Delegation

The What and the Why?

What is Delegation?

ADA holders assign voting power to DReps to represent their interests in governance.

Delegation in Practice

Used in liquid democracy, allowing efficient voting power delegation in organizations and platforms like Liquid Feedback.

Does Delegation Work?

- Effective when DReps are engaged and ADA holders trust their representatives.
- Disengaged DReps can undermine delegation's effectiveness.

Conclusion on Delegation : A flexible governance model that allows ADA holders to influence decisions, dependent on active participation from both sides.

Mechanisms for ADA Holder Participation

Voting Processes

- Direct Voting: ADA holders can participate in specific votes on governance proposals.
- Indirect Voting (Delegation): ADA holders may delegate voting power to trusted representatives (DReps).
- Importance: Voting empowers ADA holders to have a say in proposals impacting Cardano’s technical and community directions.

Delegation allows more passive participants to influence Cardano's governance.

Importance of Participation

Empowering the Ecosystem: Active participation sustains Cardano's decentralization, preventing central control.

Influence Over Future Developments: ADA holders shape the future of Cardano through governance decisions, impacting upgrades and funding.

Strengthening Security & Stability: Broad participation enhances network resilience, reducing vulnerability to centralized control or attacks.

Tools for Governance

Module 3

How to become a DRep

In this module we will focus on how to become a DRep in a practical and easy-to-understand way, through a demo.

Step by step

Any member of the Cardano community can register and be identified by their DRep ID. This means they can receive voting power delegated to them by ada holders.. Registration is the only requirement to become a DRep and what determines the influence of any one DRep is how much voting power is accumulated by them.

This means there is no set number of DReps although details are subject to discussion. At any point, the number of active DReps can increase or decrease, as ada holders migrate their voting power from different representatives.

GovTool and Community Governance

Empowering Ada Holders:

- Register as a Delegated Representative (DRep).
- Delegate voting power to DReps.
- Review and vote on governance actions.

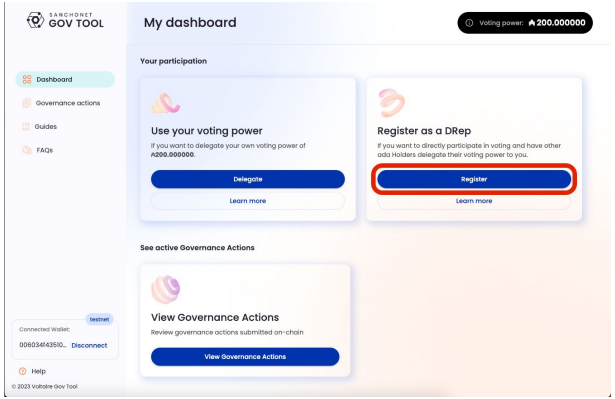
Community Ownership and Management:

Owned and maintained by the community: Intersect, with community backing, oversees governance tools, fostering community collaboration for their development. These tools, supporting both off-chain and on-chain processes, align with CIP-1694. Once established, the community can enhance them further, independently or with Intersect's support

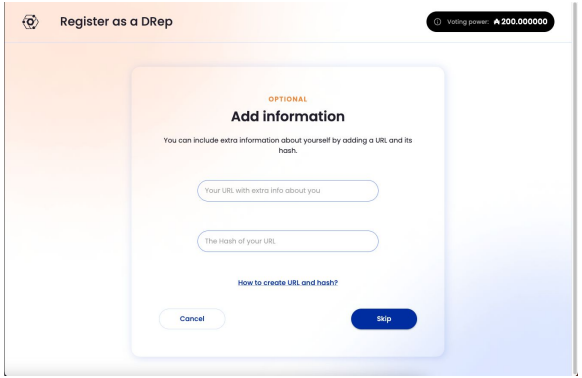
SanchoNet GovTool is the testnet version for Voltaire GovTool.

To register a DRep, follow these steps:

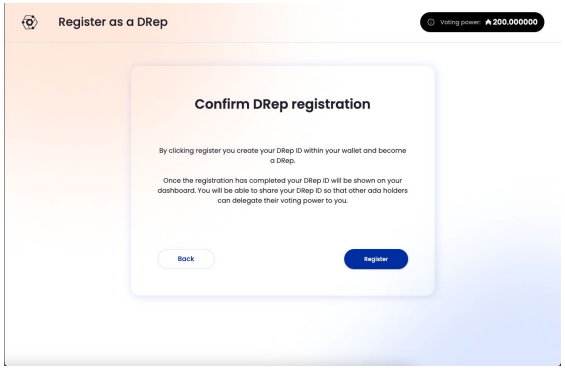
1.Dashboard: From the dashboard, click "Register" in the "Register as a DRep" panel:



2. Metadata: This page is for DReps to share info about themselves. It is currently (for the beta) not fully implemented, so you can just click the "Skip" button to progress your registration.

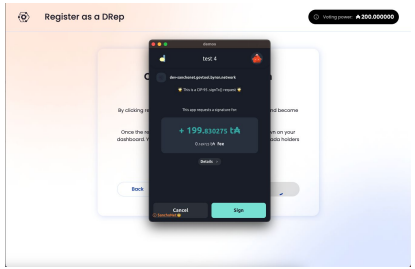


3. Registration confirmation: In the following screen, click "Register"

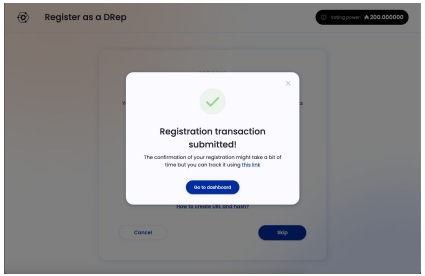


To register a DRep, follow these steps:

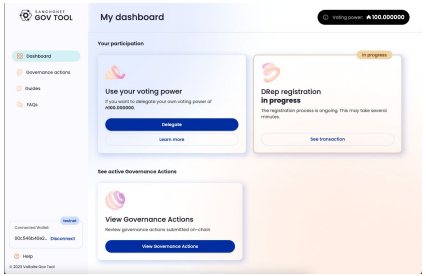
4.Wallet Confirmation: Sign and approve the transaction in your wallet.



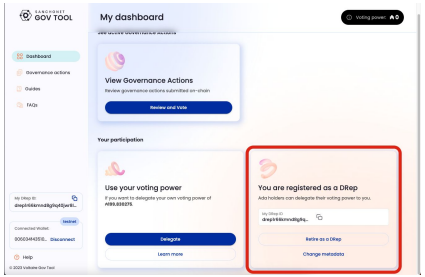
5.Transaction Submission Confirmation: You should see a success message. Click "Go to dashboard".



6.In-progress state: The transaction might take a bit of time to get completed. An in-progress state will be shown to keep track of that.



7.Registration complete: Once the transaction it's completed, the page will refresh automatically, your dashboard will show that you are now registered as a DRep. You can now share your DRep ID with others.



Gov tools documentation

https://docs.gov.tools/

How to become a Drep

How to engage with the community?

GovTool: The GovTool, empowers ada holders to register as delegated representatives (DReps), delegate voting power to DReps, and review and vote on governance actions.

DRep campaign platform: a tool to enrich the vital role DReps and delegation play in Cardano's on-chain governance. This tool is an excellent way for ada holders to identify a representative's domain of expertise, their perspective and interests, how they voted in the past, and many more things. Equally, DReps need a place where they can share their profile and credentials, and campaign for ada holders to delegate their voting power to them.

Cardano Forum:

Social media



Chang Hard Fork

Module 3

Overview of the Chang Hard Fork

Critical upgrade marking Cardano's transition to decentralized governance, named after IOG developer Philip Chang

First Chang hard fork (Sept 1, 2024)

- Core governance foundation:
  - DRep (Delegate Representative) system
  - Constitutional framework
  - Basic voting mechanisms
  - Committee structures

Chang+1 Phase (90 days after first phase)

- Advanced features rollout:
  - Treasury management
  - Enhanced voting systems
  - SPO voting capabilities
  - Complete governance controls

Challenges & Implications for Cardano's Governance

Major transition points:

- Shift from centralized to community-driven decision making
- Need for active participation from ADA holders
- Learning curve for stakeholders in new governance processes

Key considerations:

- Balancing decentralization with efficient decision-making
- Ensuring proper representation of all stakeholder groups
- Managing transition period risks
- Maintaining network security during governance changes

Open floor

Survey

https://forms.gle/1eiUsM9Dhbu87Fw8A