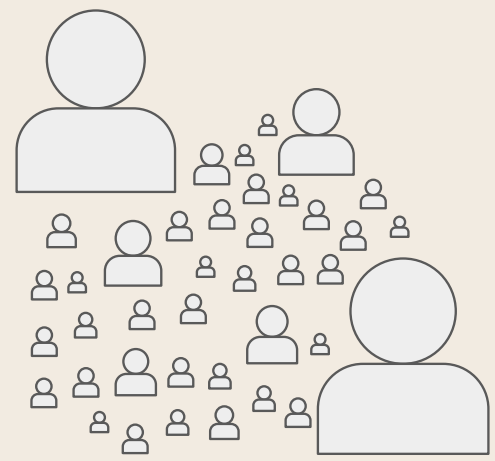


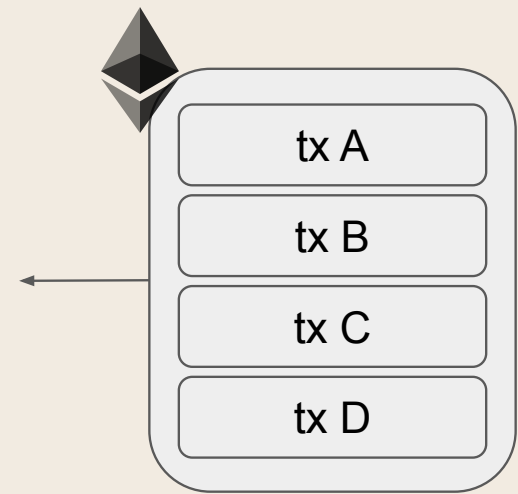
FOCIL Implementation Status

Jihoon Song

@jih2nn



Validators



Slot N-1

Slot N

t0

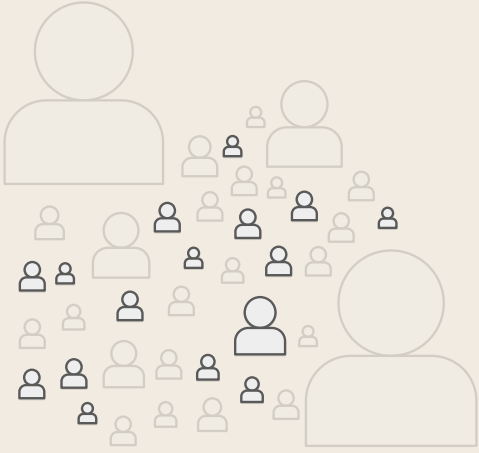
t8

t9

t11

t12

t4



Validators



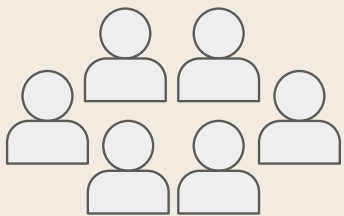
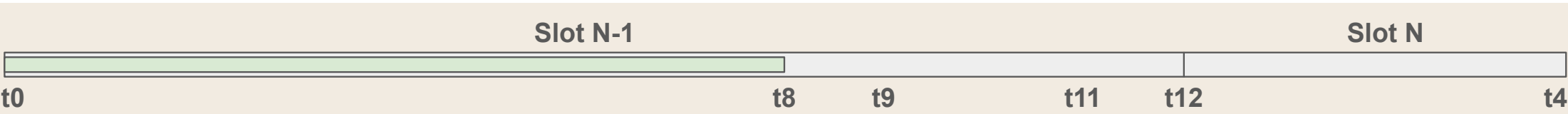
tx A

tx B

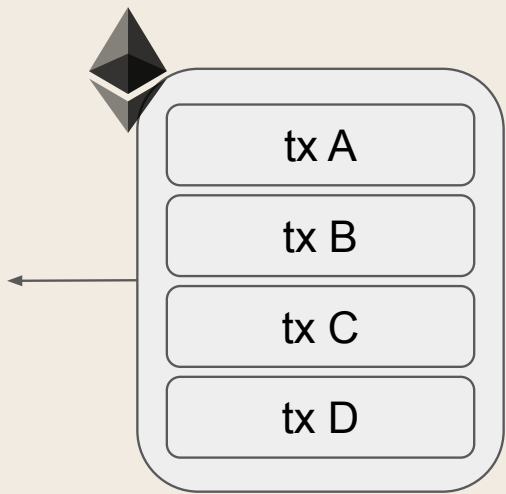
tx C

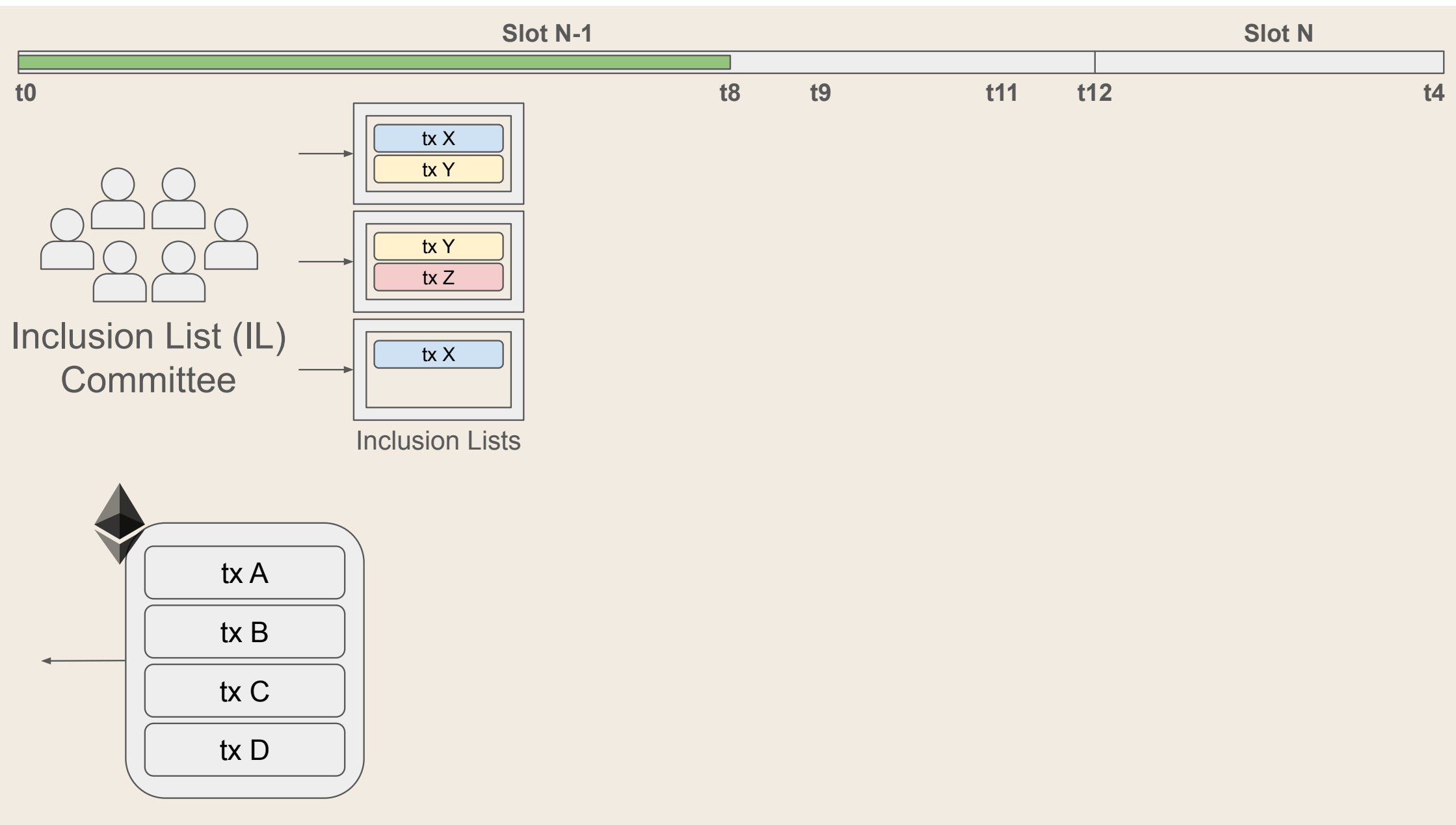
tx D

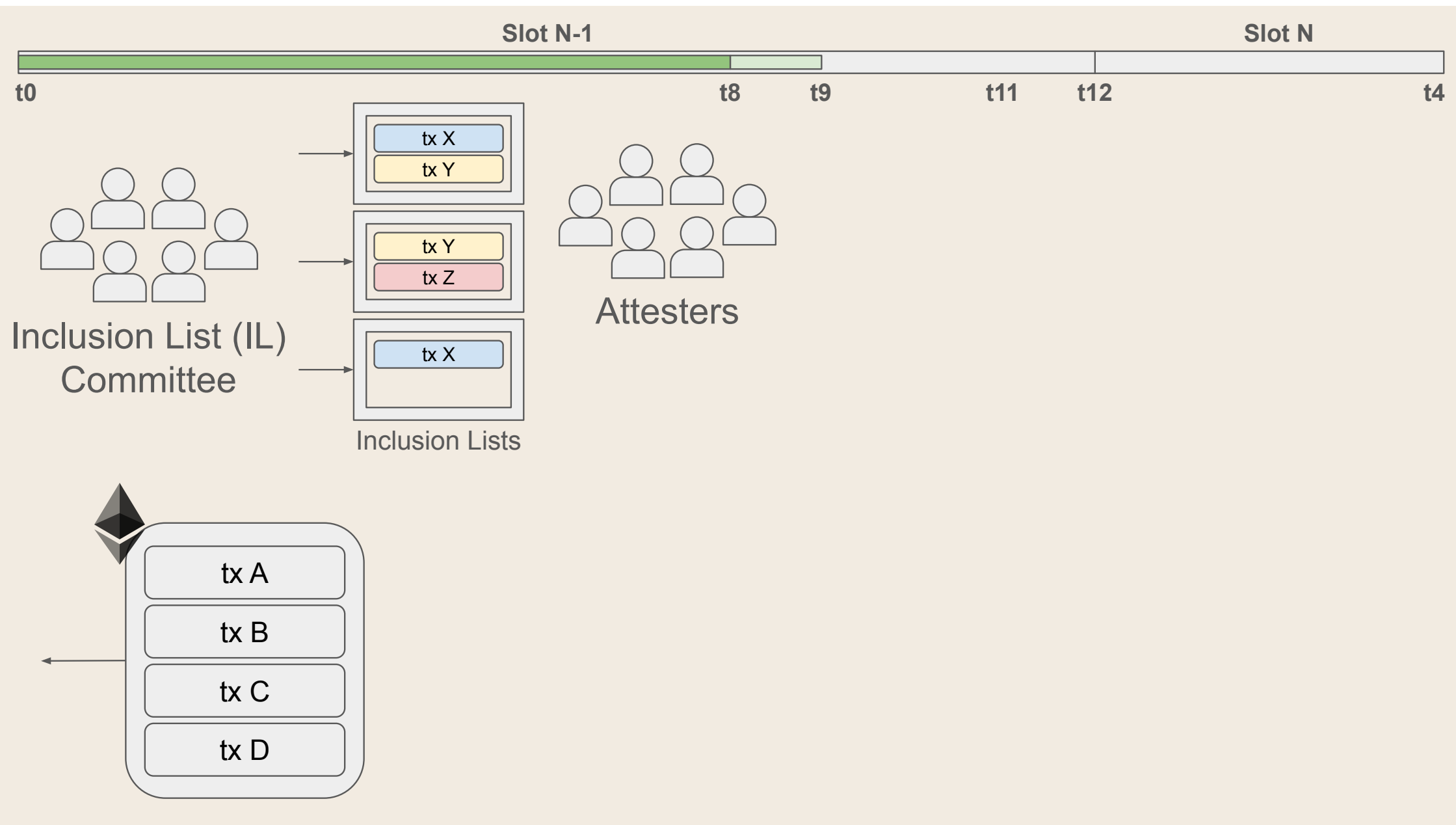


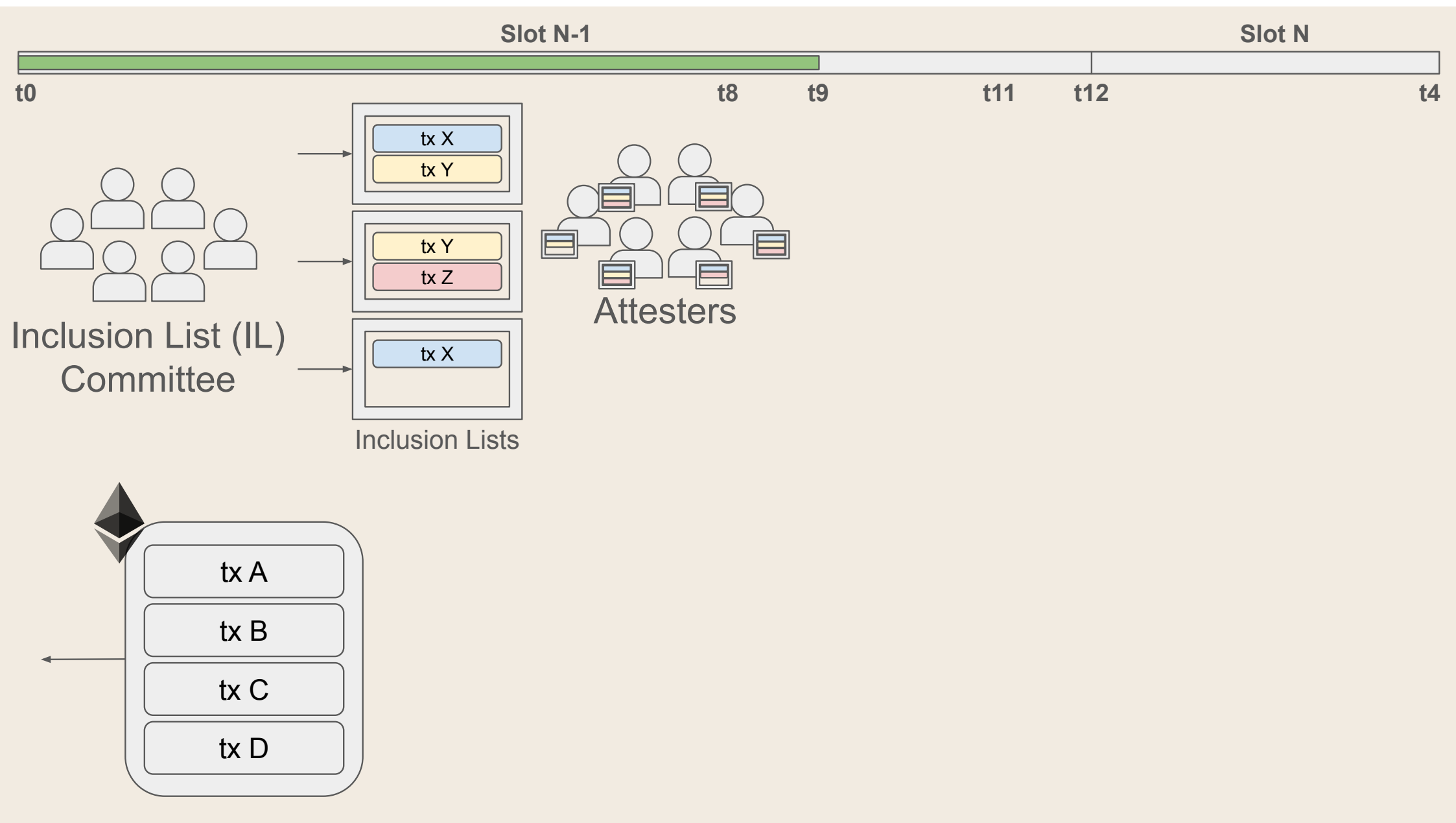


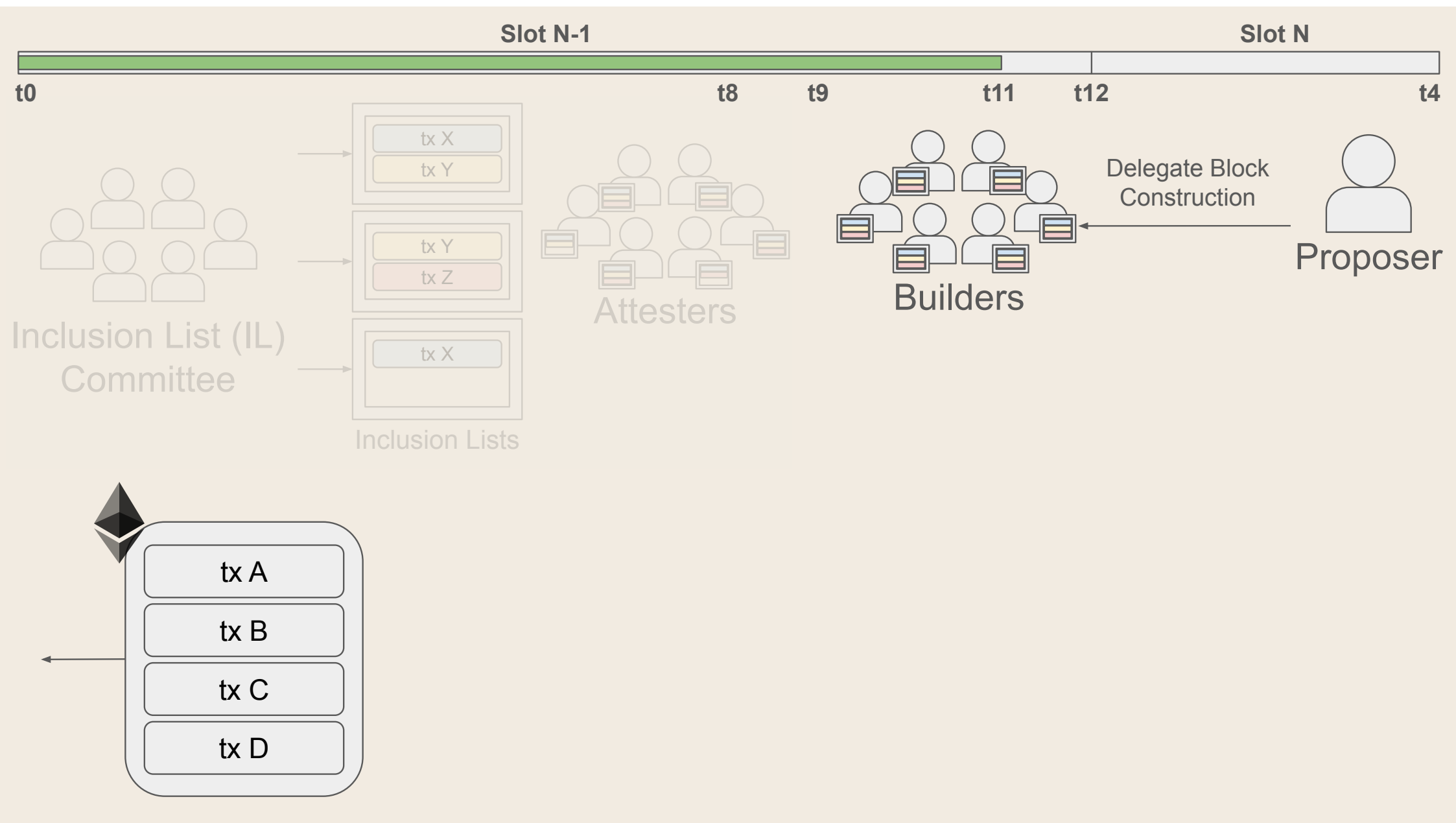
Inclusion List (IL)
Committee

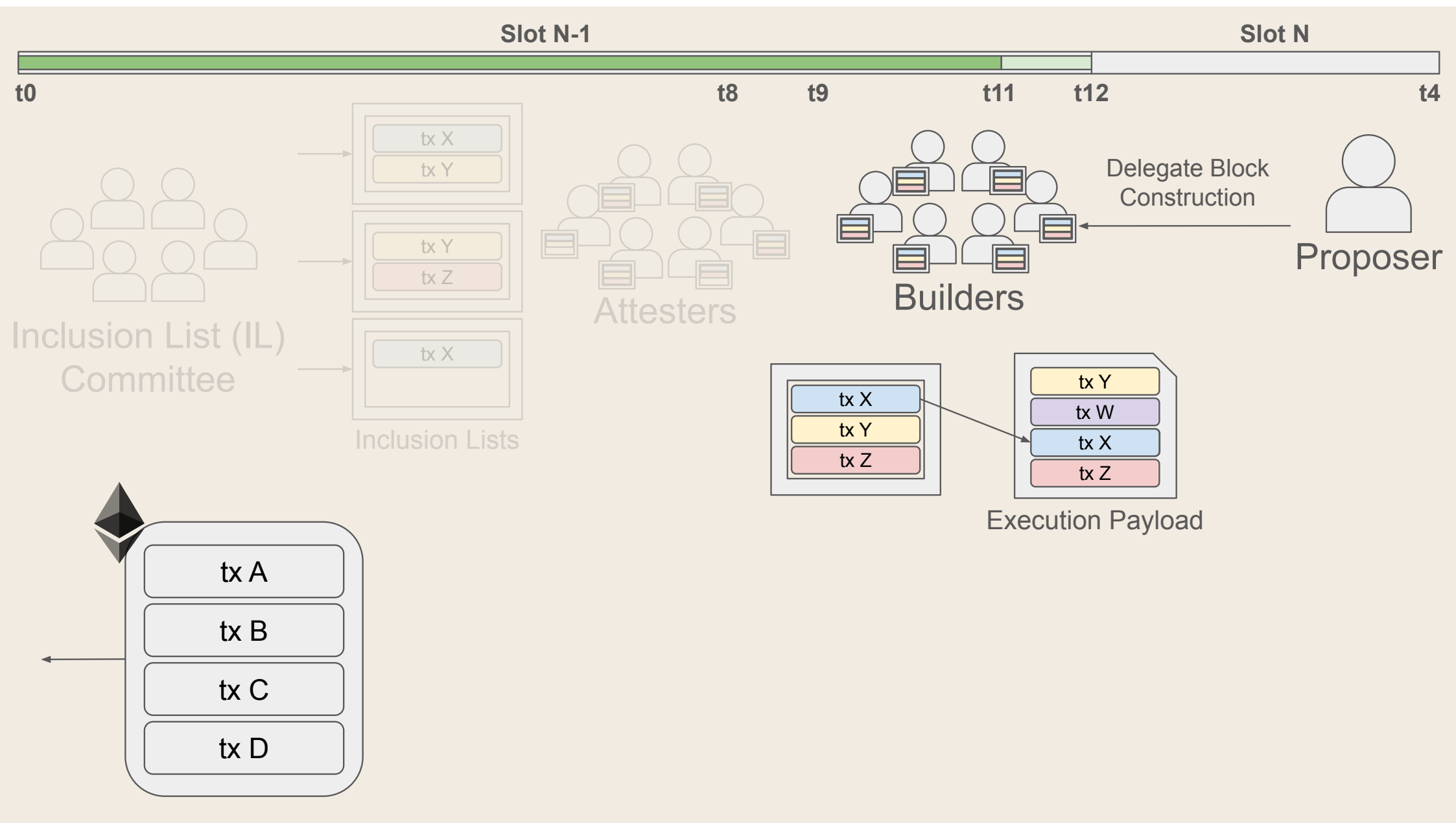


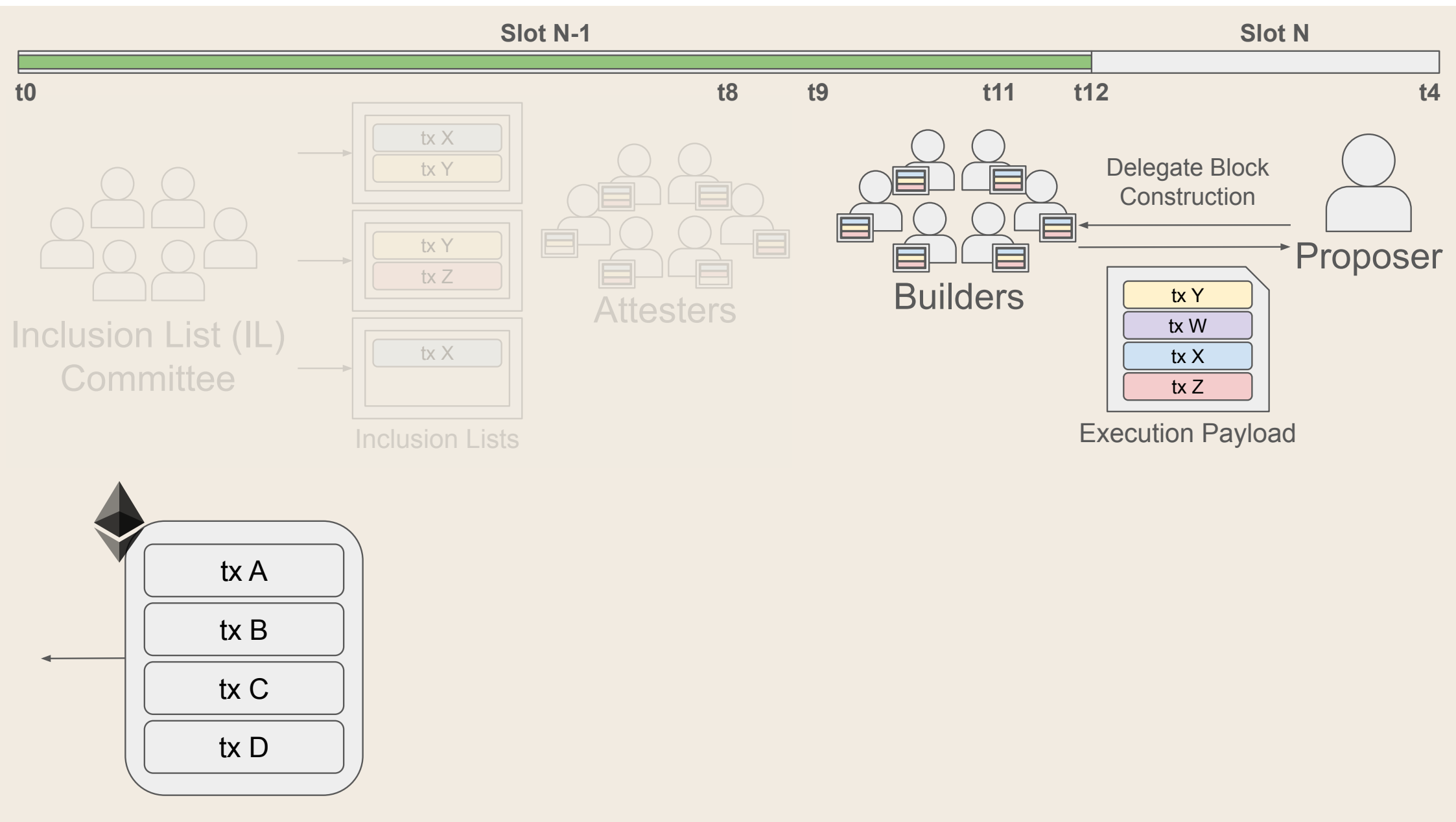


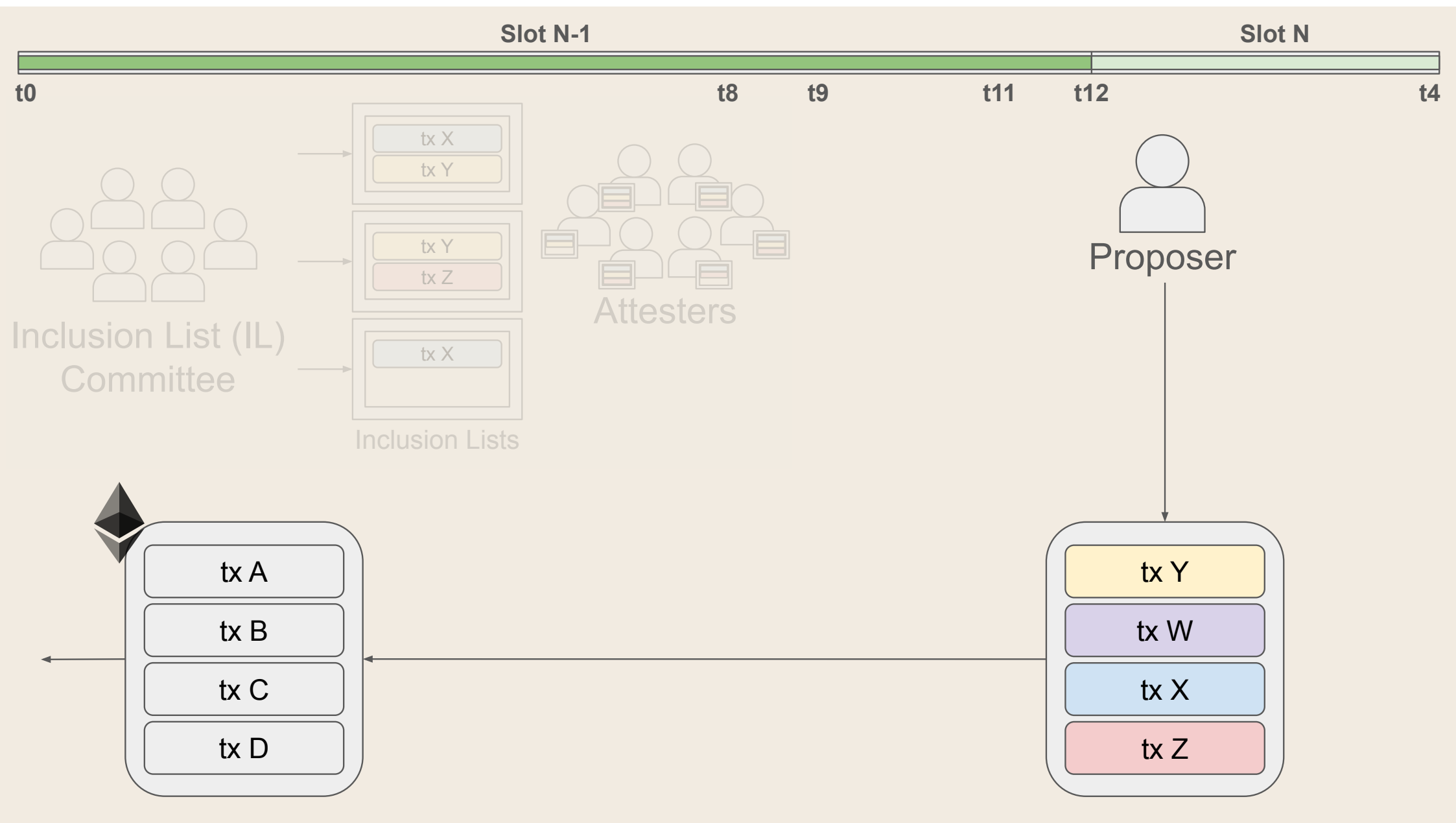


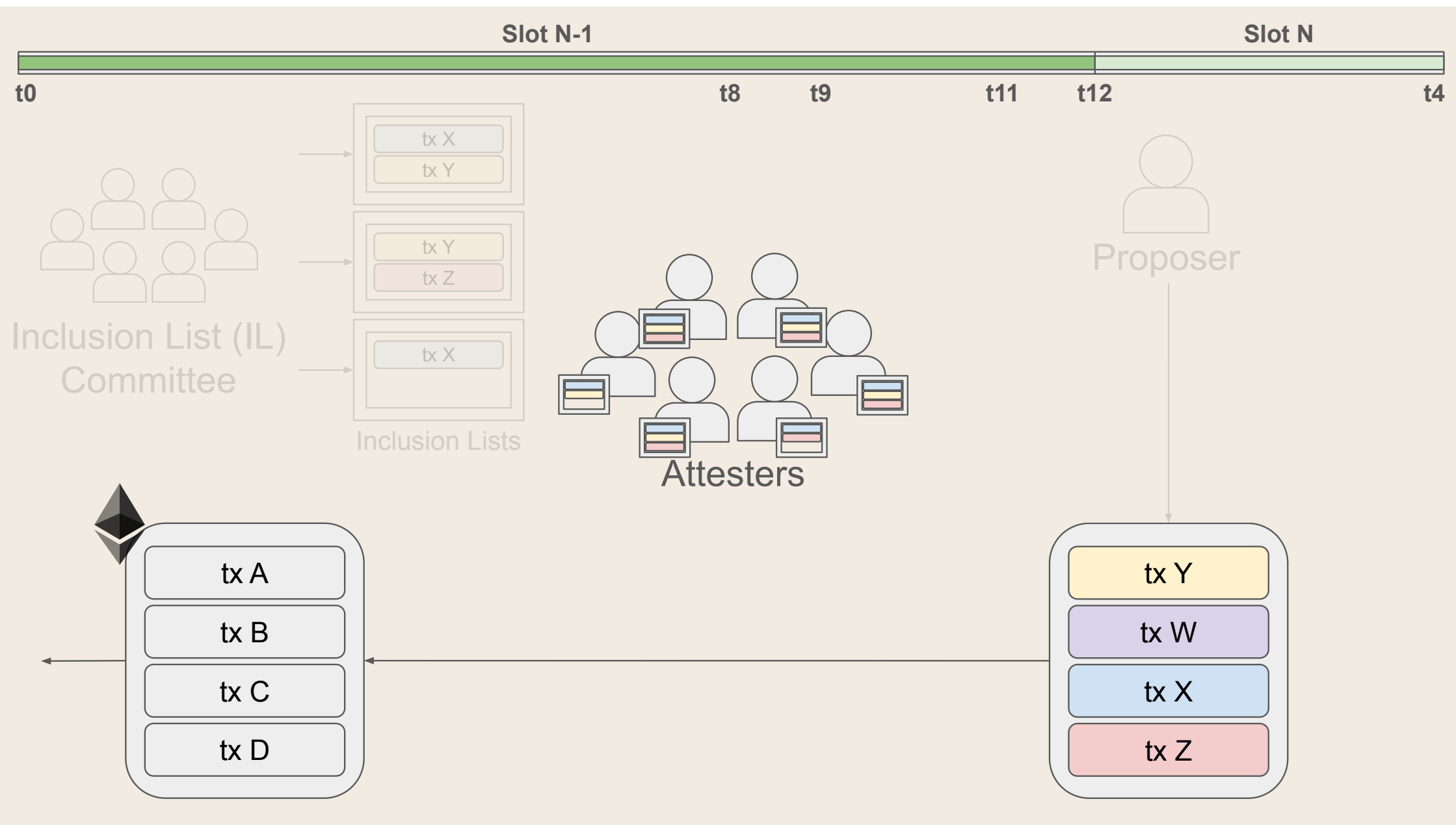


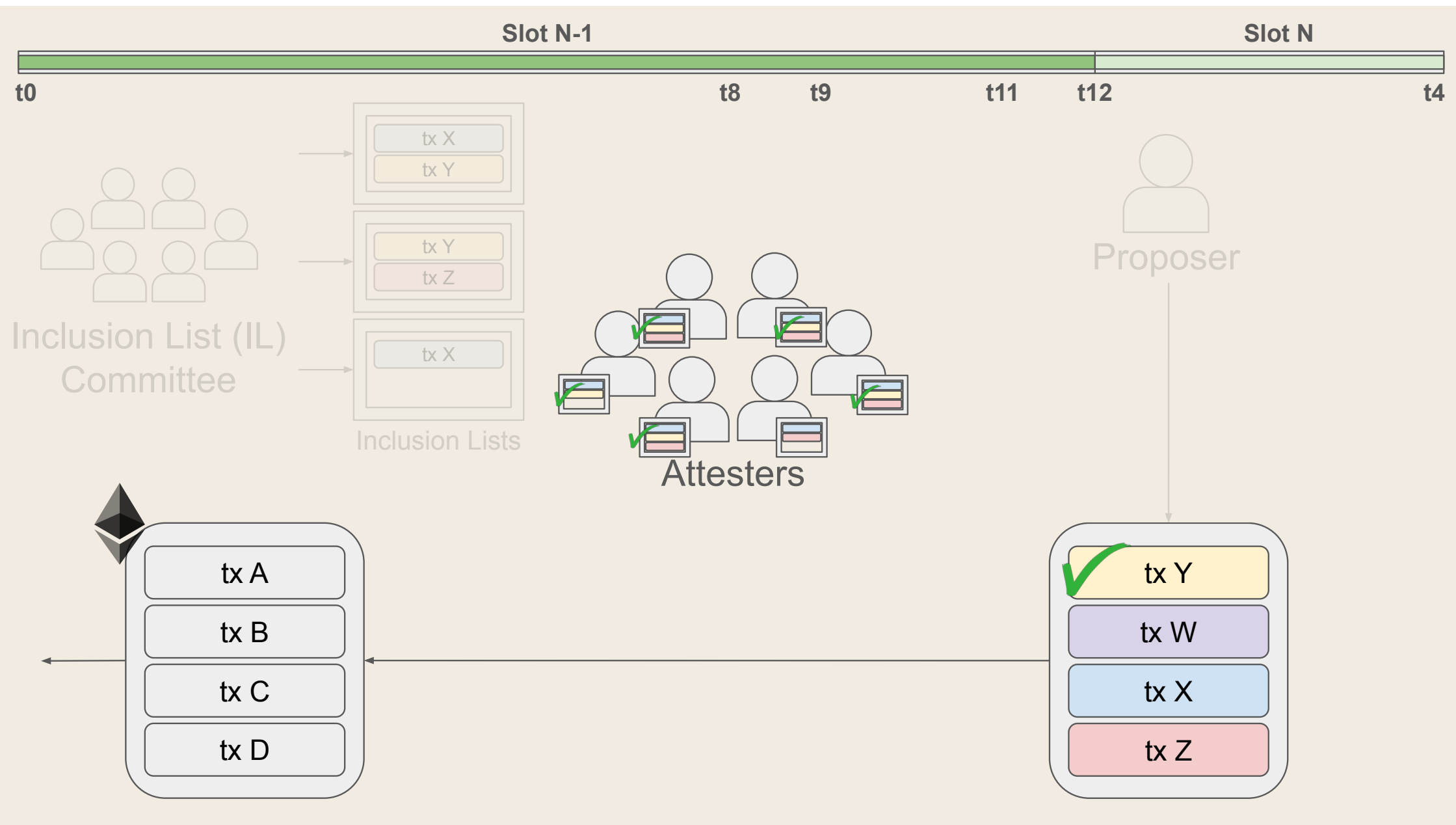


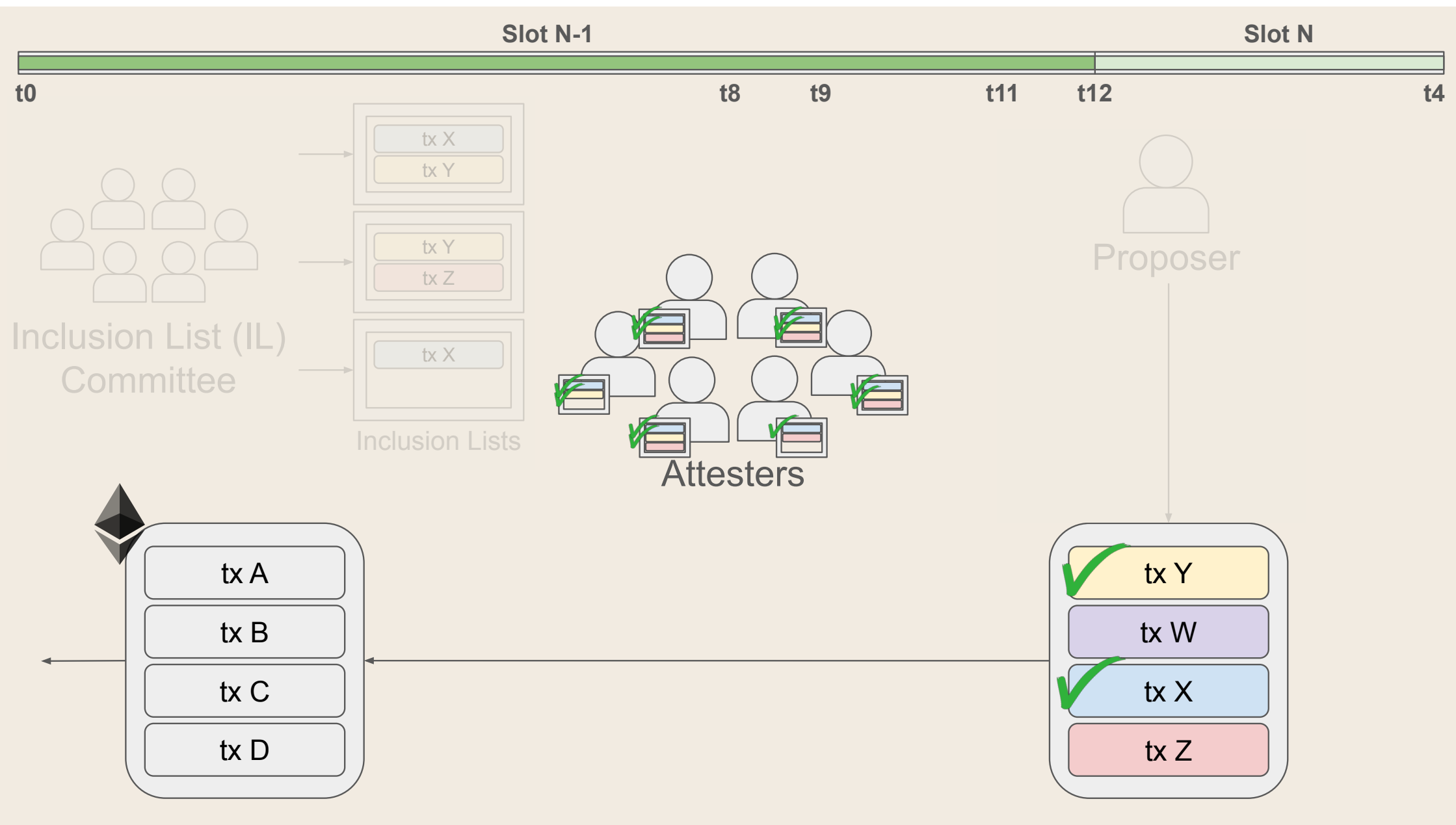


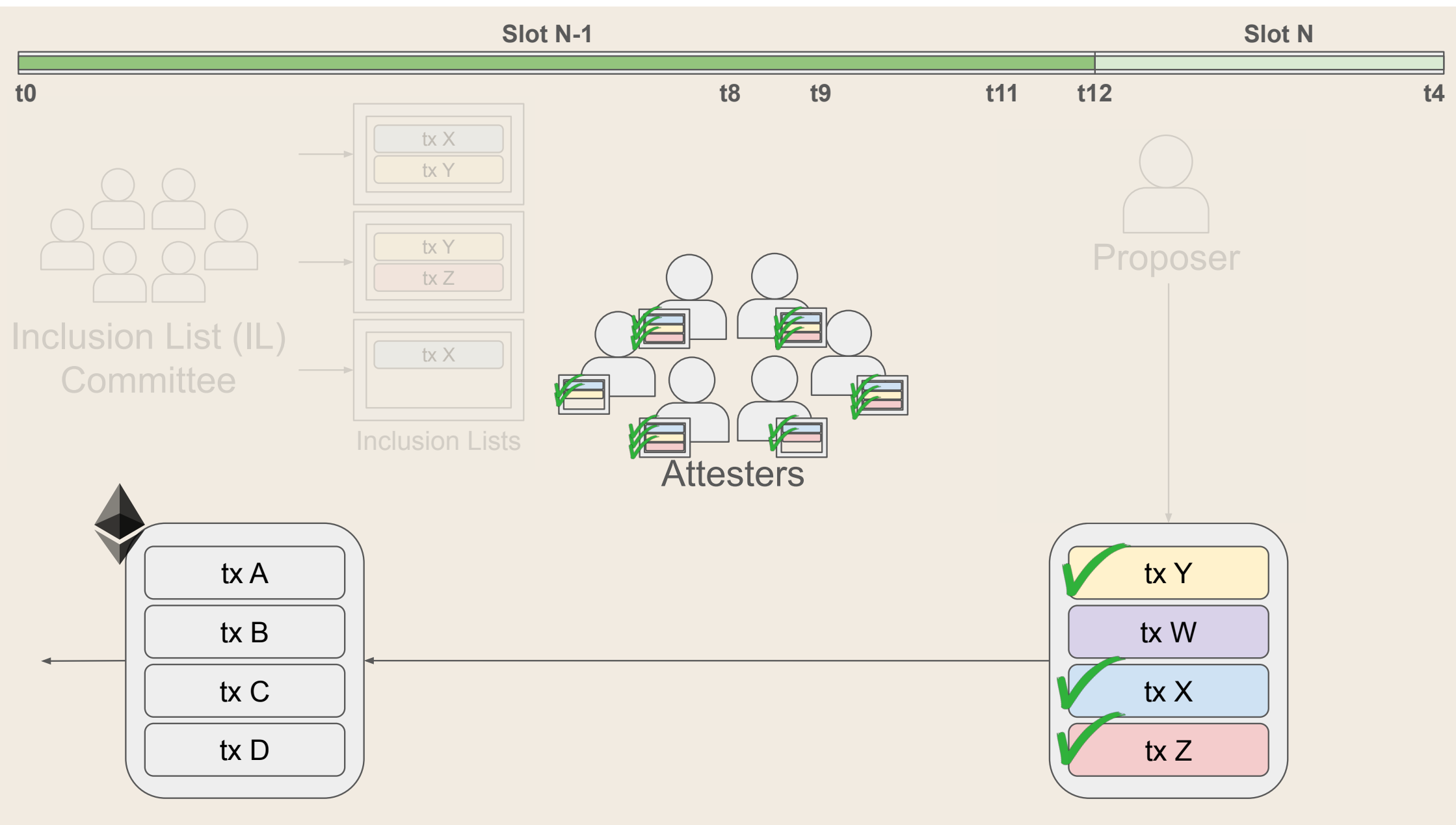


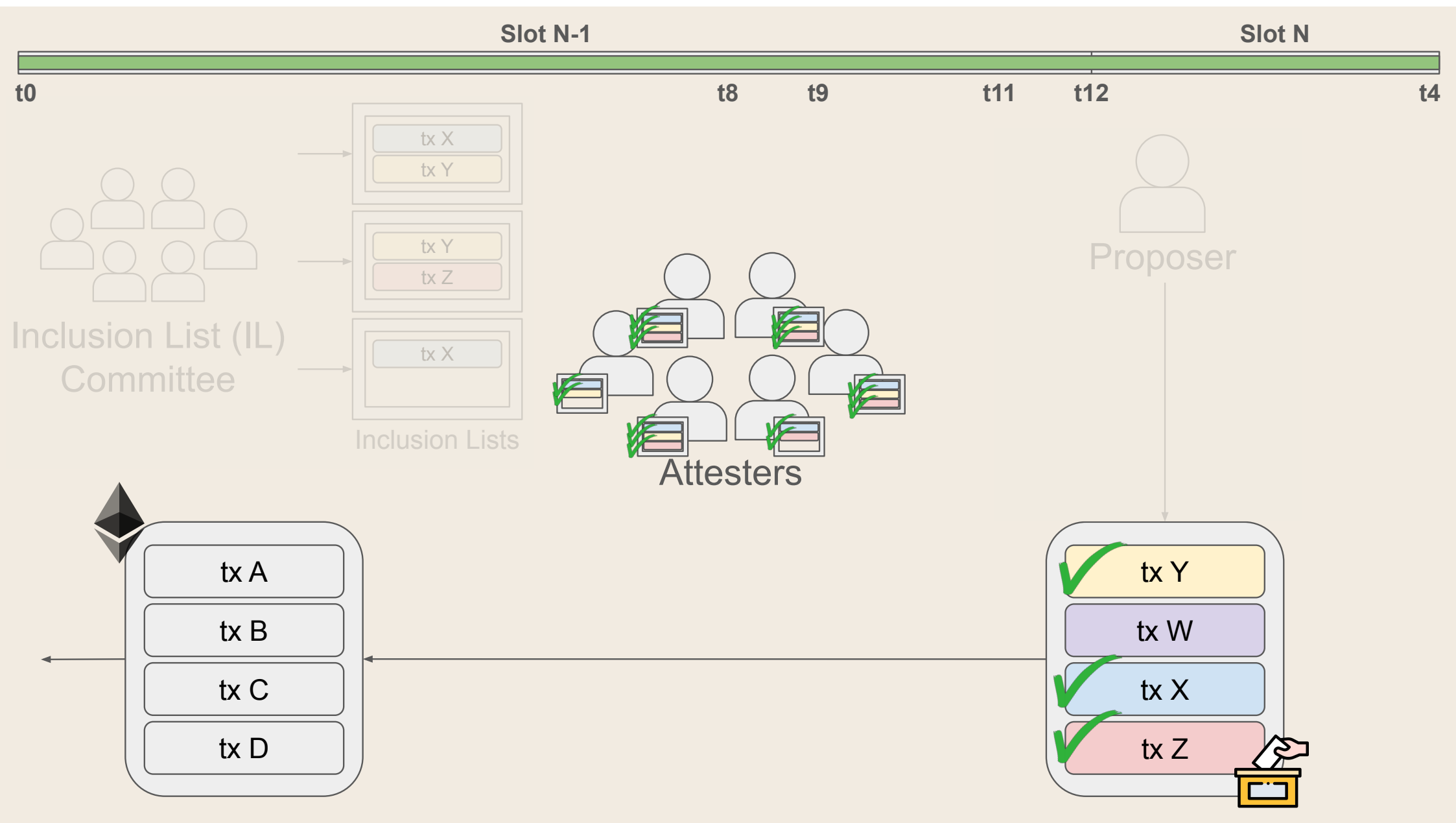


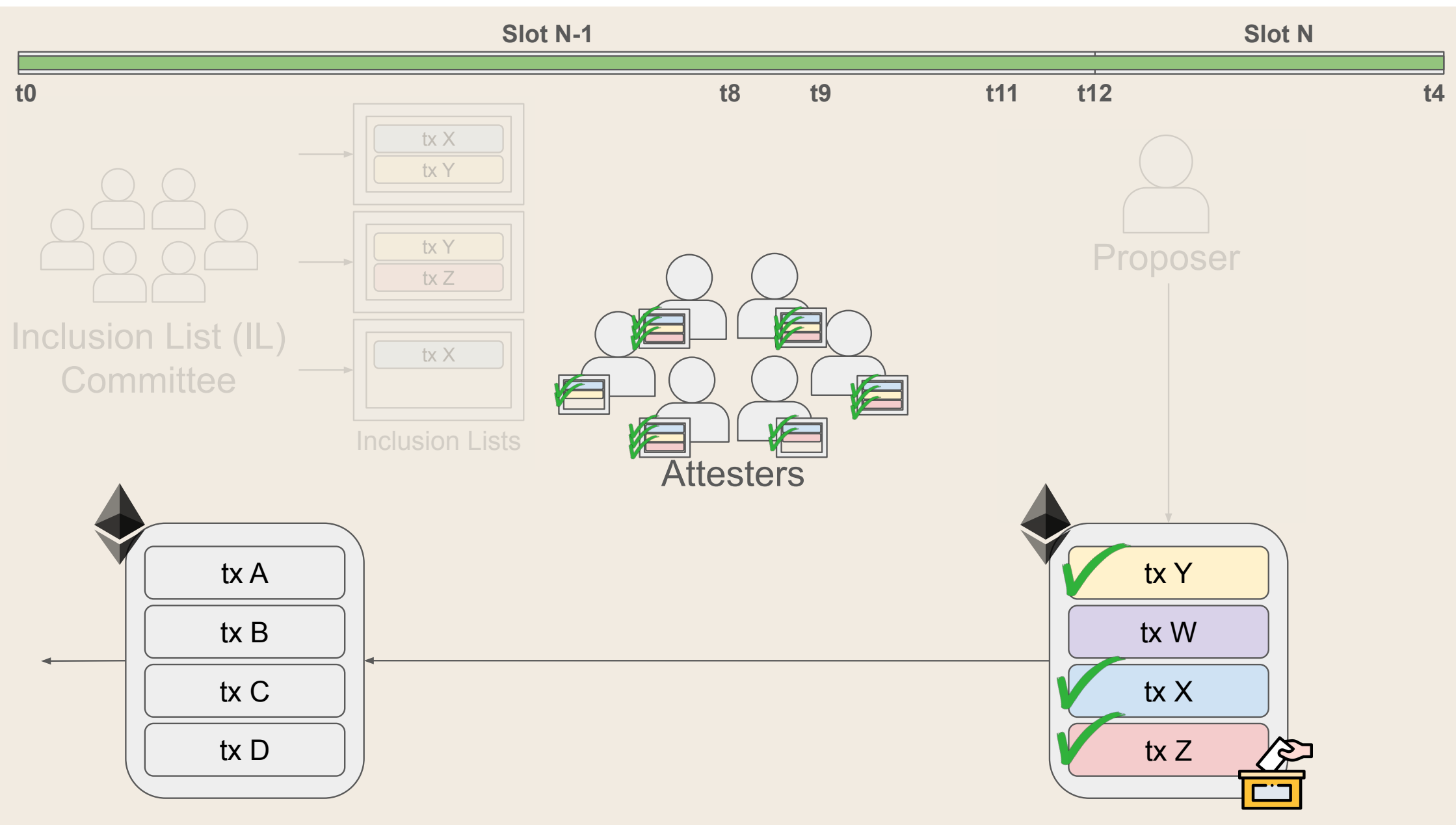












Client Implementations

		Started	Interop Local Devnets	Public Devnet	Public Shadowfork	Testnets	Mainnet
Consensus Clients	Lodestar	<div></div>					
	Prysm	<div></div>					
	Teku	<div></div>					
	Lighthouse	<div></div>					
	Nimbus	<div></div>					
	Grandine	<div></div>					
Execution Clients	Geth	<div></div>					
	Nethermind	<div></div>					
	Reth	<div></div>					
	Besu	<div></div>					
	Erigon	<div></div>					

Ethereum Protocol Fellowship Cohort 6

Erigon: FOCIL & Alternatives

By Mark Holt

[EIP-7805](#) FOCIL implements a robust mechanism to preserve Ethereum's censorship resistance properties by guaranteeing timely transaction inclusion. We are starting to implement this for both Erigon's CL and EL components and would like to catch up with other [client's progress](#) so we can become an active participant in the public devnet process once it commences.

We are also interested in exploring alternatives for censorship resistance such as [BRIAD](#) so we envision this project as a combination of background research and implementation.

Grandine: FOCIL (EIP-7805) Implementation and Testnet Deployment

By Saulius Grigaitis

EIP-7805 introduces FOCIL, a promising feature for Ethereum consensus clients. While a few teams already have early implementations, testnets are expected to launch soon. Grandine intends to develop a robust FOCIL implementation to ensure compatibility and actively participate in testnet experimentation. This work will help validate and refine the proposal through testnet deployment.

Specification Tests

feat: add initial EIP-7805 #1214

Draft

jacobkaufmann wants to merge 71 commits into `ethereum:eips/osaka/eip-7805` from `jacobkaufmann:eips/osaka/eip-7805`

Conversation 5

Commits 71

Checks 5

Files changed 6

jacobkaufmann commented on May 8

What was wrong?
N/A

How was it fixed?
add initial implementation of EIP-7805.

Cute Animal Picture

TODO

Add EIP-7805 (FOCIL) Tests #4351

Draft

jihoonsong wants to merge 2 commits into `ethereum:dev` from `jihoonsong:focil-tests`

Conversation 9

Commits 2

Checks 12

Files changed 15

jihoonsong commented last week



Contributor





This PR is WIP and lack of several tests. Please focus on its changed spec while it's draft.


1

Metrics

Add FOCIL metrics #16

 Draft KatyaRyazantseva wants to merge 3 commits into `ethereum:master` from `KatyaRyazantseva:focil-metrics` 


 Conversation 8  Commits 3  Checks 1  Files changed 1

 **KatyaRyazantseva** commented on Apr 25 • edited ▾ ...

This PR introduces the list of the recommended metrics for monitoring FOCIL.

Issues [#11](#), [#15](#)

Name	Usage
<code>beacon_inclusion_lists_size_bytes_total</code>	Byte size of the inclusion list (Counter)
<code>beacon_inclusion_lists_validated_total</code>	Number of validated inclusion lists (Counter)
<code>beacon_inclusion_lists_validation_time_seconds</code>	Time to validate inclusion list (Histogram)
<code>beacon_get_inclusion_list_v1_total</code>	Number of <code>getInclusionListV1</code> requests (Counter)
<code>beacon_get_inclusion_list_v1_latency_seconds</code>	Latency for <code>getInclusionListV1</code> (Histogram)
<code>beacon_update_payload_with_inclusion_list_v1_total</code>	Number of <code>updatePayloadWithInclusionListV1</code> requests (Counter)
<code>beacon_update_payload_with_inclusion_list_v1_latency_seconds</code>	Latency for <code>updatePayloadWithInclusionListV1</code> (Histogram)
<code>beacon_inclusion_lists_submitted_for_rpc_total</code>	Number of inclusion lists submitted for RPC (Counter)
<code>beacon_inclusion_lists_cached_total</code>	Number of cached inclusion lists in slot N-1 (Counter)



Compatibility with Other EIPs

- [EIP-7702](#)
- [Delayed Execution \(EIP-7886\)](#)
- [Block-Level Access Lists \(EIP-7928\)](#)
- [ePBS \(EIP-7732\)](#)

"FOCIL aims to uphold Ethereum's censorship resistance by inviting a more diverse set of participants to contribute to block content."



[FOCIL for Glamsterdam](#)



[FOCIL Website](#)

Jihoon Song
@jih2nn