

# ZERO KNOWLEDGE NETWORK





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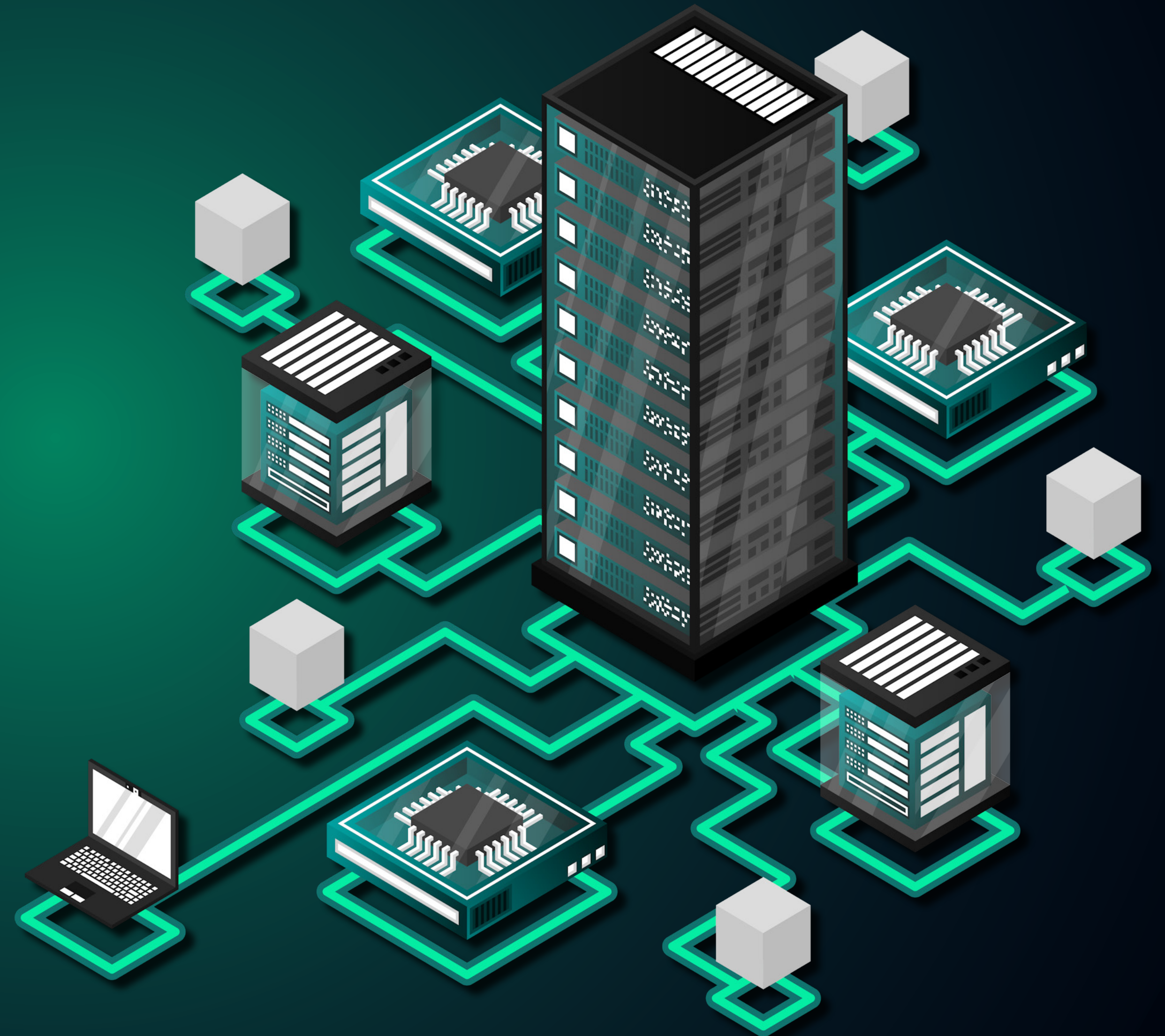
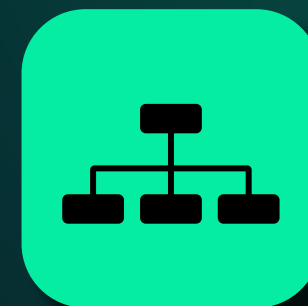




# WELCOME MESSAGE

ZERO KNOWLEDGE NETWORK

*Building the worlds most resilient  
and decentralized anonymous  
communication network*







# THE PROBLEM

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Although VPN, private email and many other forms of privacy based products offer improved internet privacy and protection against data hacking, they suffer from the biggest inherent weakness due to their centralized trust based model. You are trusting them with your data and in most cases blindly. When subpoena's start coming from powerful enough governments it's game over.



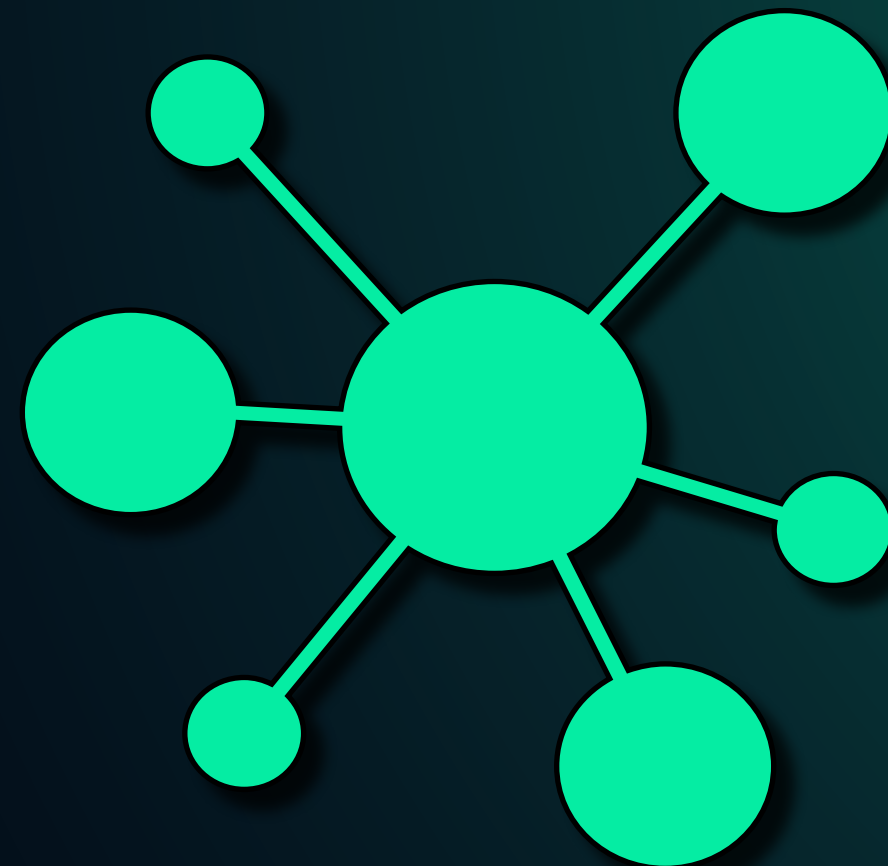
In reality no company on the face of the planet is ever going to throw themselves in jail over your privacy as it has been proven over and over again. Even those that promise to not share your data with authorities. Swiss privacy laws are also not going to save you as Protonmail disgustingly demonstrated.





# THE PROBLEM

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All existing privacy systems lack protection against the most significant threat to true anonymity - metadata & traffic analysis.

With Tor, users proxy their traffic through a chain of servers which breaks the link between the identity of the user and the traffic destination. With I2p, users proxy traffic through a chain of peer nodes.

Such adversaries (e.g., ISPs or nation states) can easily identify users and the traffic content through metadata such as packet timing, packet size, and other identifying features-even when all traffic is encrypted.

State-of-the-art attacks can deanonymize encrypted Tor traffic with upwards of 95% accuracy by analyzing the encrypted packet traffic [1, 2, 3]. Unfortunately for these existing tools AI surveillance is only getting better.





# THE SOLUTION

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***We are building** the worlds  
first metadata-private and decentralized  
anonymous communication network.*



## Resilient & Decentralized

0 is powered by a decentralized network of staked servers. No one can shut it down. Also robust to changing network conditions and guarantees availability to honest users.



## Metadata- Private

All Metadata is hidden which guarantees that sender anonymity is preserved in the face of an adversary monitoring the entire network.



## Incentivised

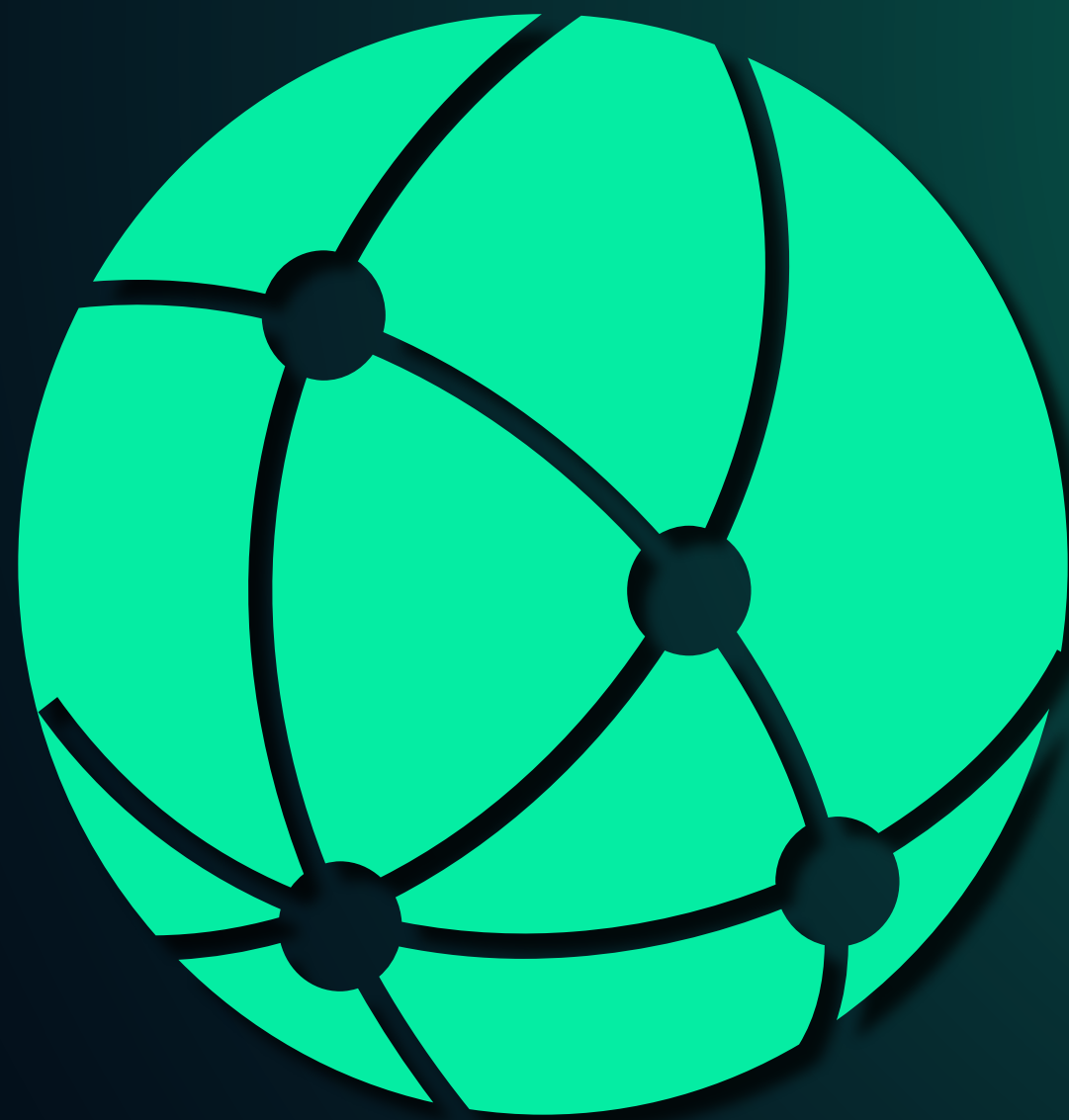
Staked servers in the network are rewarded two-fold, encouraging scalability and conversely penalized if they deviate from the protocol.



TRELLIS

# OVERVIEW

ZERO KNOWLEDGE NETWORK



## *Cryptographic Security*

Trellis is a state-of-the-art mix-net based metadata-private anonymous broadcast system that provides strong cryptographic security guarantees.

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## *Anonymous Communication*

It's designed for users to anonymously publish documents or communicate with others while assuming full network surveillance. The first of it's kind.

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## *Metadata Privacy*

Users send messages through a set of servers in successive rounds. The servers mix and broadcast messages, hiding which users sent which messages.

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# METADATA PRIVACY

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*One of the key features of Trellis is its metadata-private capabilities.*

- Trellis offers robust metadata-private capabilities, ensuring sender anonymity even under full network surveillance.
- It conceals all network metadata, such as packet timing and size, which could potentially be used to de-anonymize encrypted traffic.







# TARGET MARKET ANALYSIS

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*This is just a fraction of the market that OKN's infrastructure will serve and unlike the competition, OKN has network-level metadata-privacy and is fully decentralized and unstoppable.*



**ProtonMail**  
100 Million Users



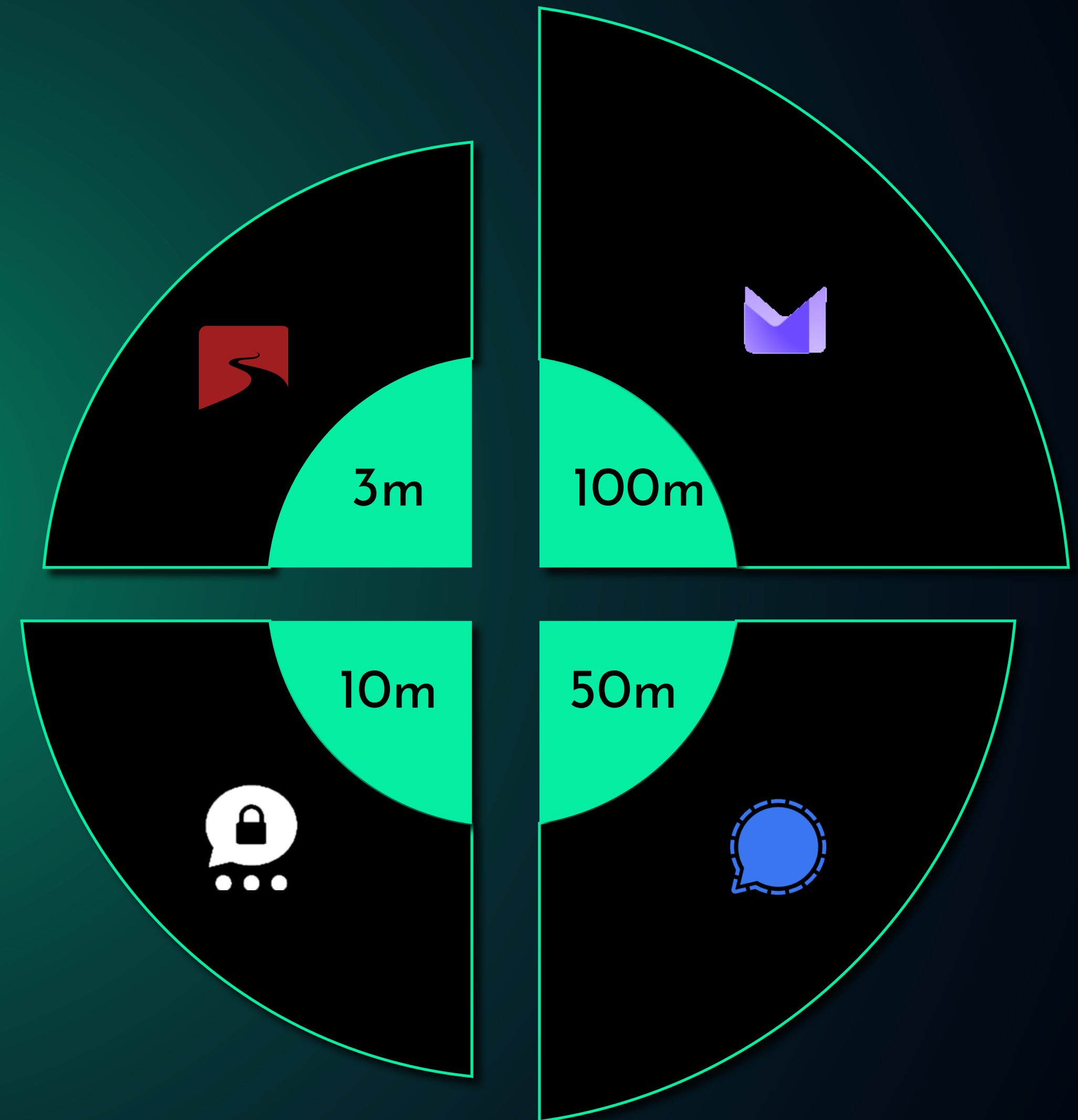
**Signal**  
50 Million Users



**Threema.**  
10 Million Users



**Tutanota**  
3 Million Users





# WHY BLOCKCHAIN

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Censorship Resistance



Decentralization



Incentives for Participation





# HOW WE HARDEN OUR NETWORK

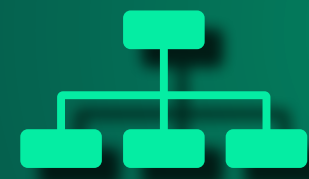
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*Incentivizing the servers in the network encourages participation which results in growth and scalability.*



## Accountability

The already powerful underlying blame and elimination protocol is further strengthened as any server acting maliciously will be eliminated from the network and their stake entirely slashed, making it extremely expensive to deviate from the protocol.



## Decentralization

Decentralizing the network makes it impossible for it to be shut down or censored. Making our network persistent and unstoppable. Essentially making it the first of its kind- Fully metadata-private and decentralized. (No subpoenas, No false marketing or false sense of privacy)



## Incentivization

Token is the primary currency of network usage as well as network incentives. Staked servers do not only receive rewards for participation but also a share of the network usage fees that end users pay. This also makes it expensive to spam the network for malicious end users



# OUR ROADMAP

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## Phase 1

- Research & Architecture design
- ERC20 Token Launch



## Phase 2

- MVP development
- CEX Listing
- Marketing Expansion
- Bandwidth Pricing Mechanism (Network Usage Fee)



## Phase 3

- Delegated POS
- Partnerships
- Testnet v1 public (Server on-boarding)



## Phase 4

- Coming soon





# THANK YOU FOR **VIEWING**

ZERO KNOWLEDGE NETWORK



Website: | [0101010011.xyz](https://0101010011.xyz)

Twitter: | [twitter.com/0Knowledge\\_net](https://twitter.com/0Knowledge_net)

