



# seL4<sup>®</sup> Foundation

Overview, Update and Vision

June Andronick

<https://sel4.systems/Foundation>

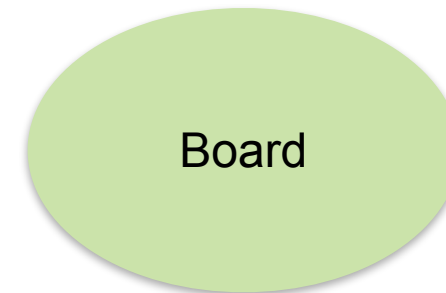
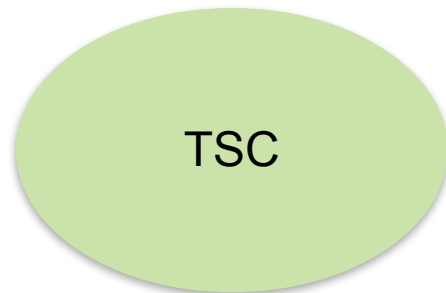
# Overview



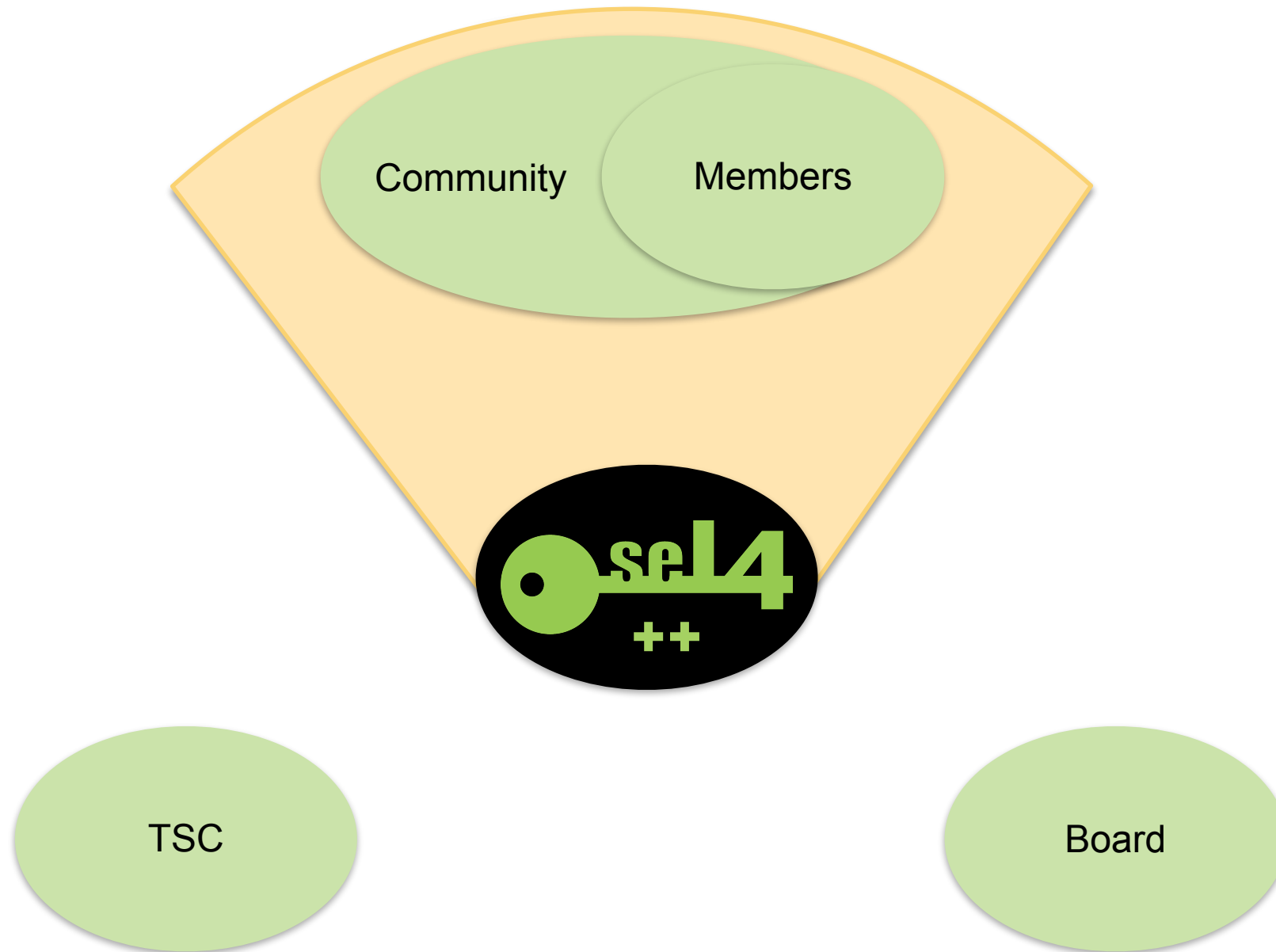
**Home to an ecosystem of software, developers and adopters  
for safety- and security-critical systems based on seL4**

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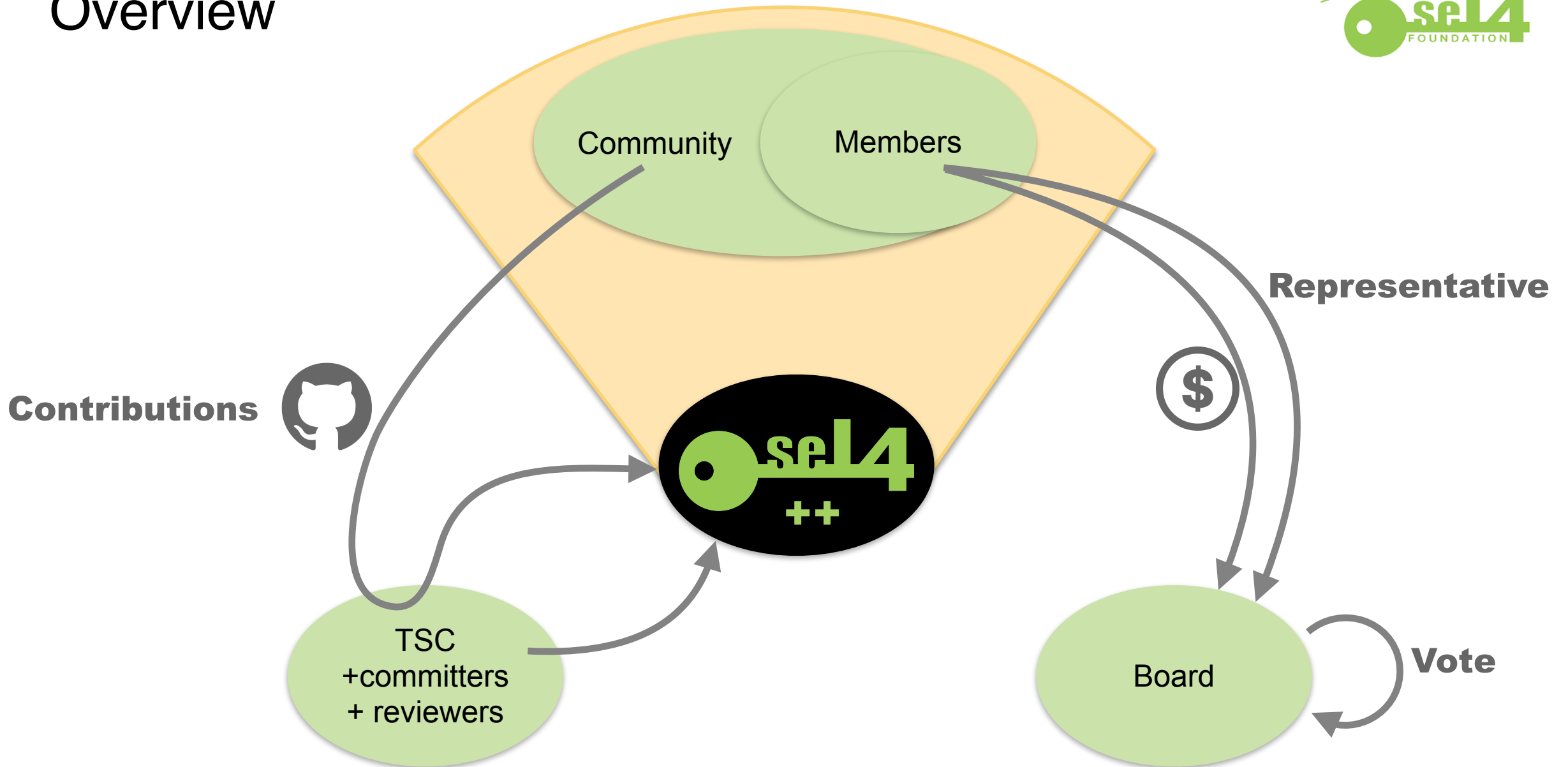
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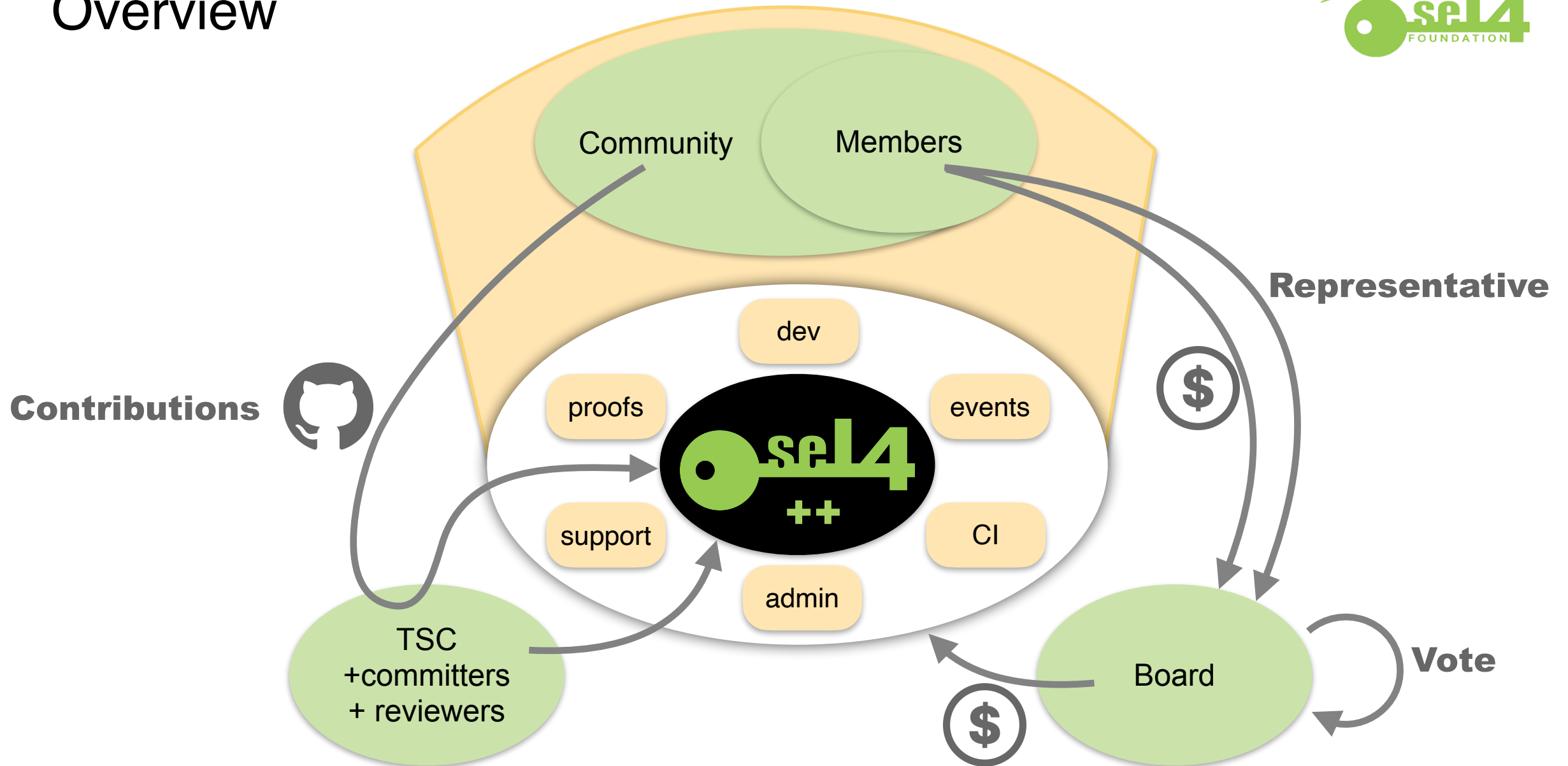
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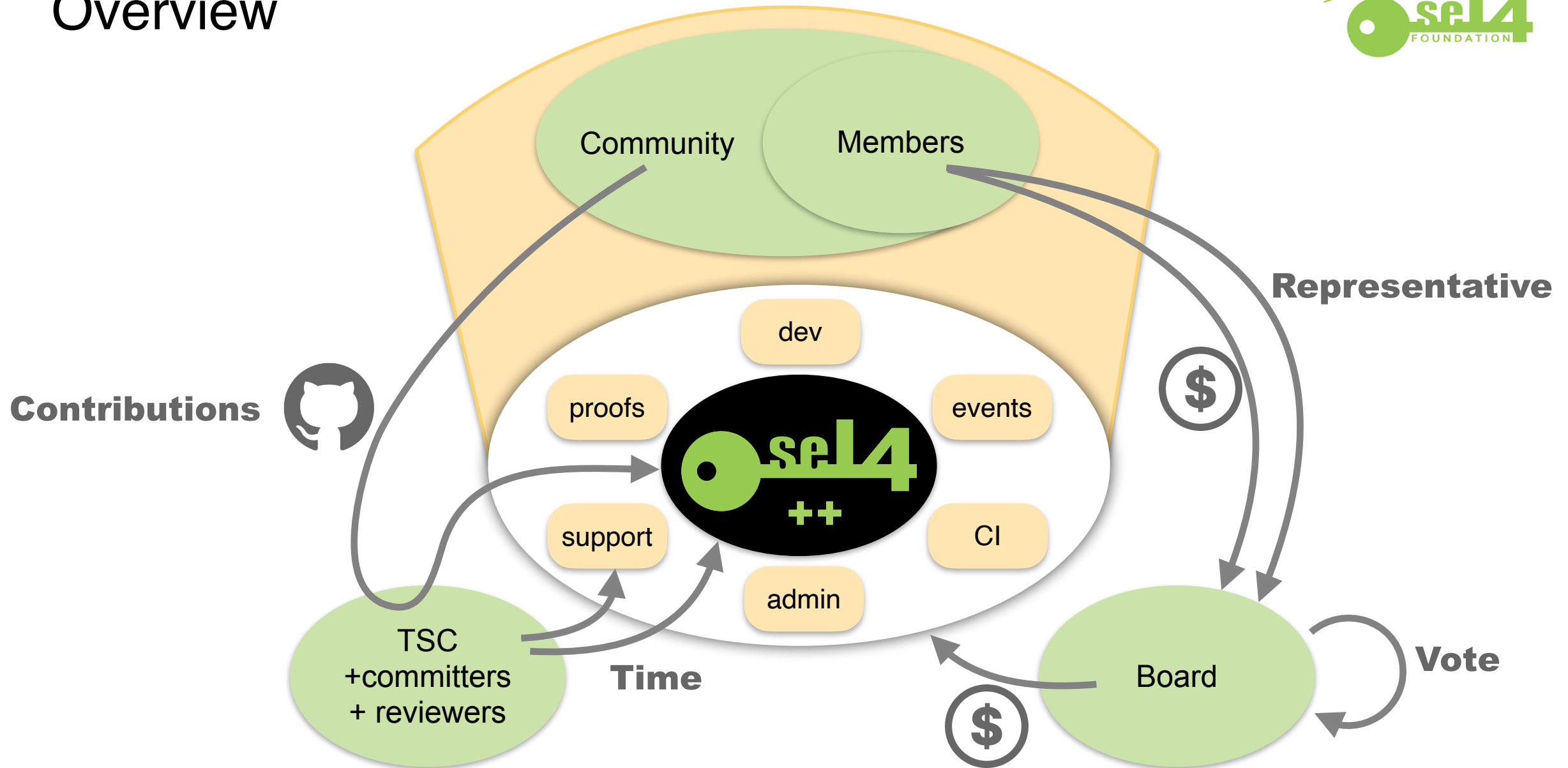
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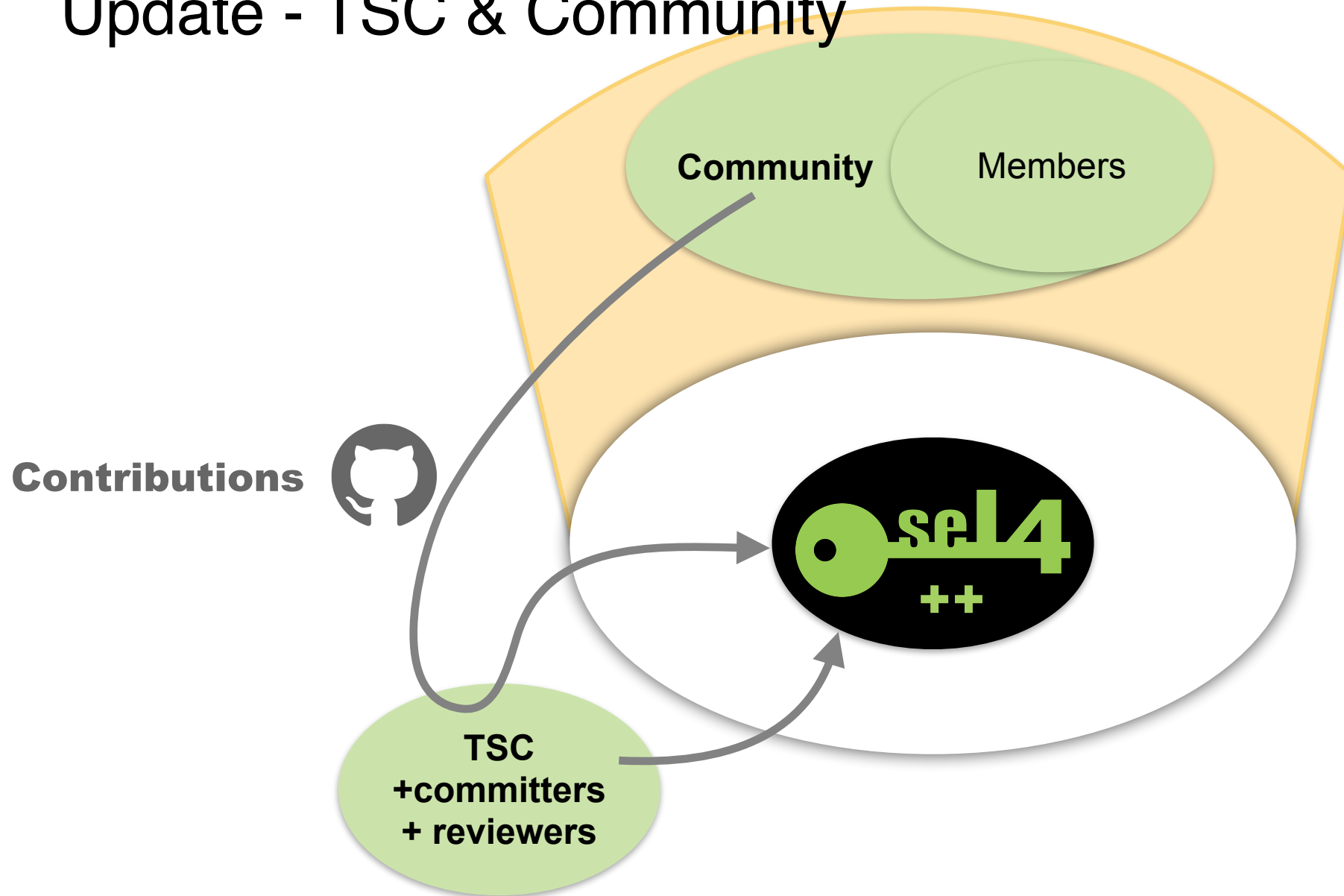
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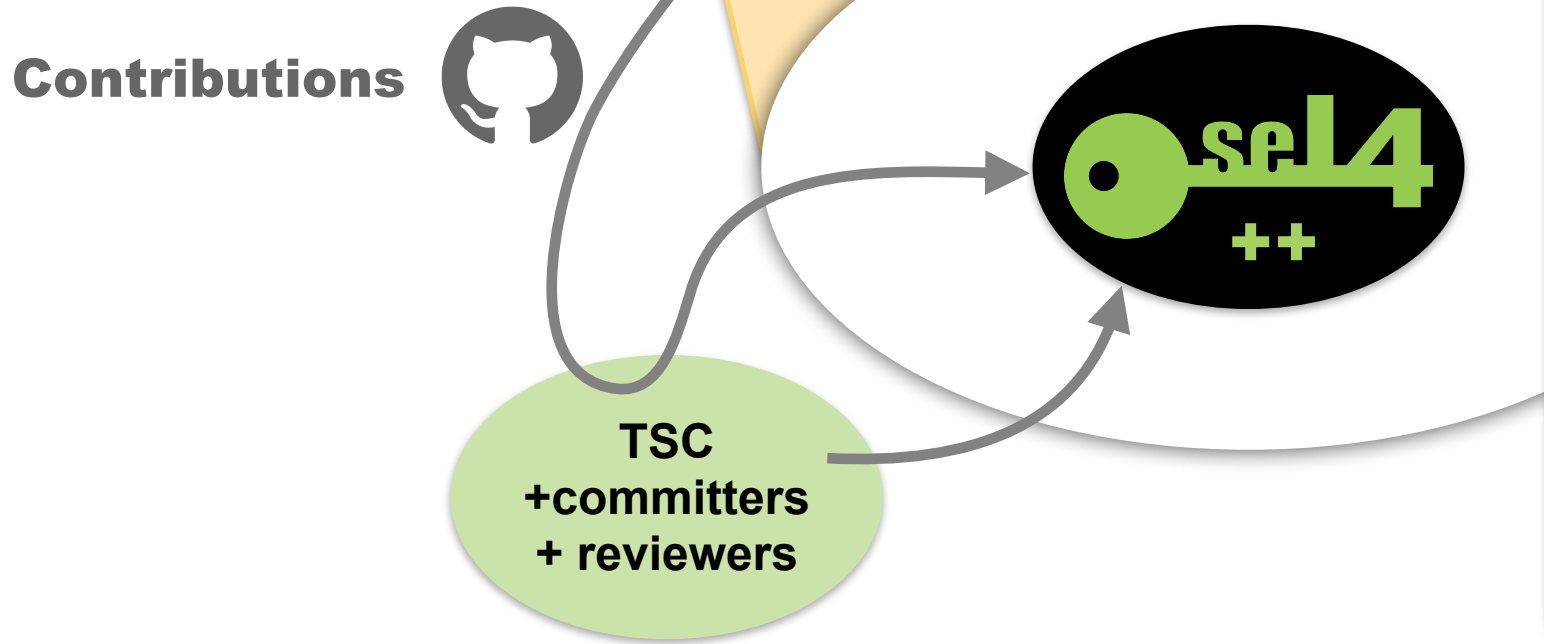


# Update - TSC & Community





# Update - TSC & Community



- Example contributions:
    - Ports to new platforms; improvements to the quality/scope of existing ports
    - usability improvements
    - Error code documentation in the manual
    - Updates to comments and documentation
    - Multiple RFCs in progress to extend seL4
- Little change to how the kernel works and to the verified high-assurance code base
- This is what we want!**  
High-assurance code should not change without good reason and without re-verification
- +strong design principles:  
**policy-free, performance-focussed**

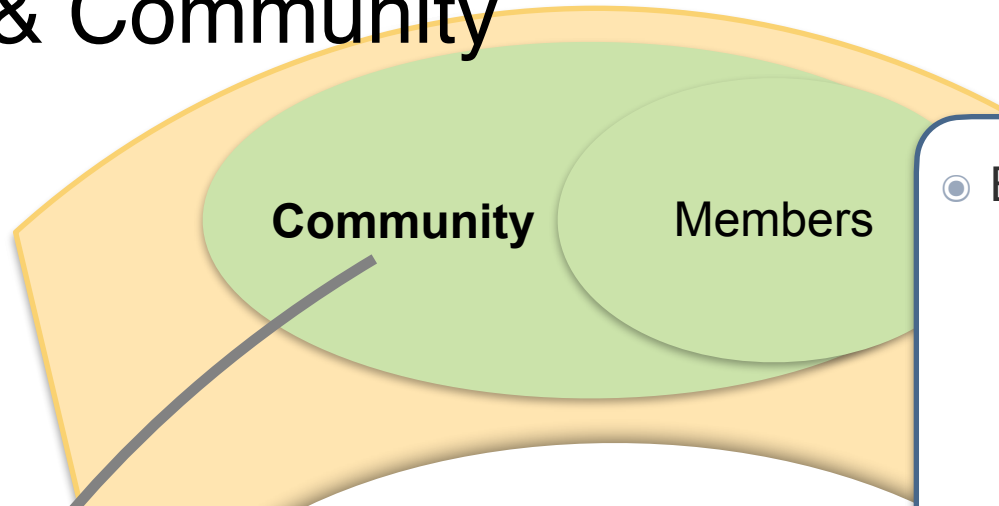
# Update - TSC & Community



**Contributions**



**TSC**  
**+committers**  
**+ reviewers**



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seL4 can evolve thanks to a growing community, while being safeguarded by the Foundation's Technical bodies

# Update - TSC & Community

## seL4 hangouts:

- Open video chat hangout, no strict agenda
- Brings seL4 developers together, anybody can join for technical discussions about seL4, related repositories and projects, or general questions and answers
- Every two weeks, calendar feed available



### Stay in touch

Mailing lists, blog, contacts, chat

Community

Members



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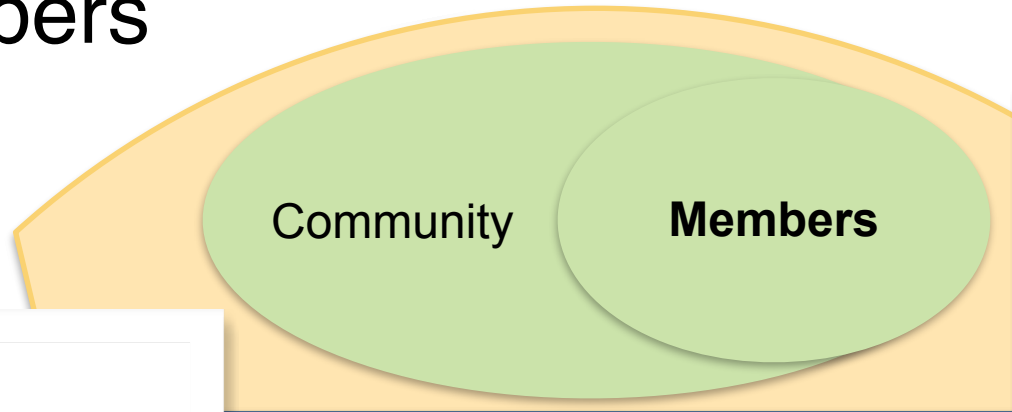
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# Update - Members



# Update - Members



## Premium Members



HENSOLDT Cyber GmbH  
Founding member  
Endorsed Service Provider



Horizon Robotics



jumptrading  
Jump Trading



Li Auto Inc



NIO



UNSW Sydney  
Founding member  
Endorsed Service Provider

- Membership: 25
- Premium Members: 6
- General Members: 14
- Associate Members: 5

## Associate Members



ETH Zurich



Kansas State University



NCSC



RISC-V International



TU Munich

## General Members



Adventium Labs



Cog Systems Inc  
Founding member  
Endorsed Service Provider



DORNERWORKS  
DornerWorks Ltd  
Founding member  
Endorsed Service Provider



Ghost Locomotion Inc

Founding member



Google LLC



Kry10 Limited

Endorsed Service Provider



Lotus Cars



Penten Pty Ltd



Proofcraft Pty Ltd

Endorsed Service Provider



Raytheon Technologies



SpacemIT



Technology Innovation Institute



XcaliByte



LatticeX

# Update - Members



- Founding members:



# Update - Members



## ● Latest:



in association with  
National Cyber  
Security Centre



# Update - Members



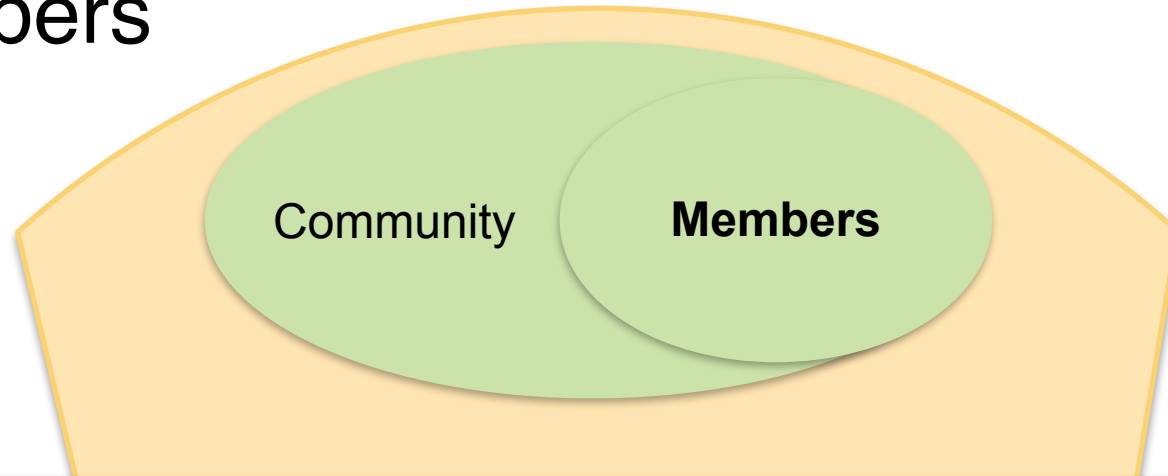
## Endorsed Service Providers:



<https://sel4.systems/Foundation/Services/>

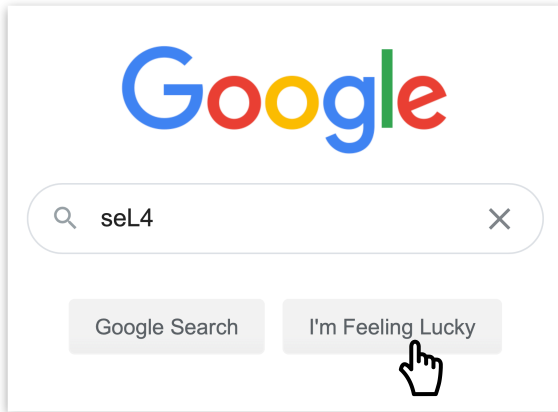


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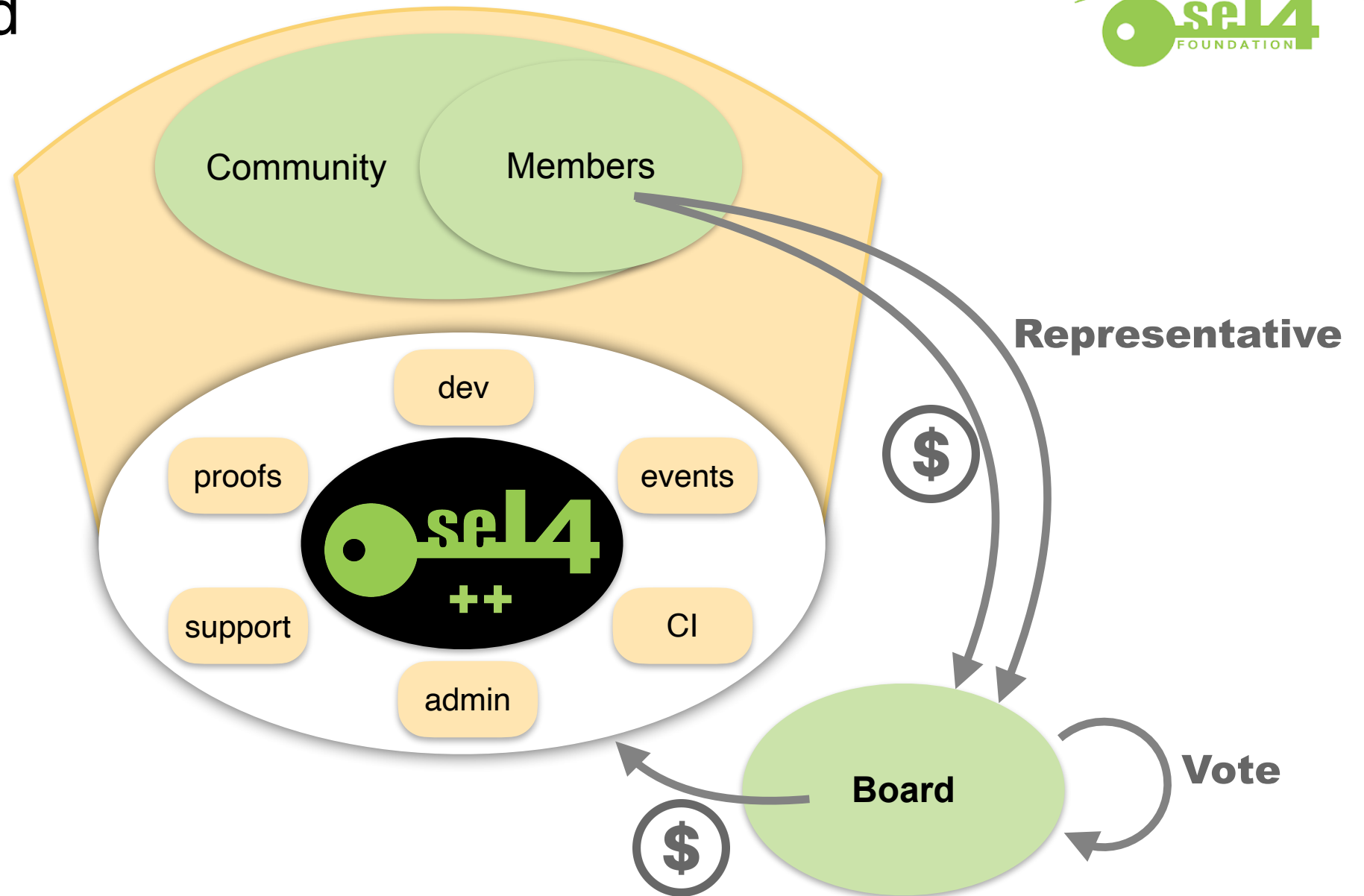


Membership is growing, allowing the support of the technology and the community

**Join in!**

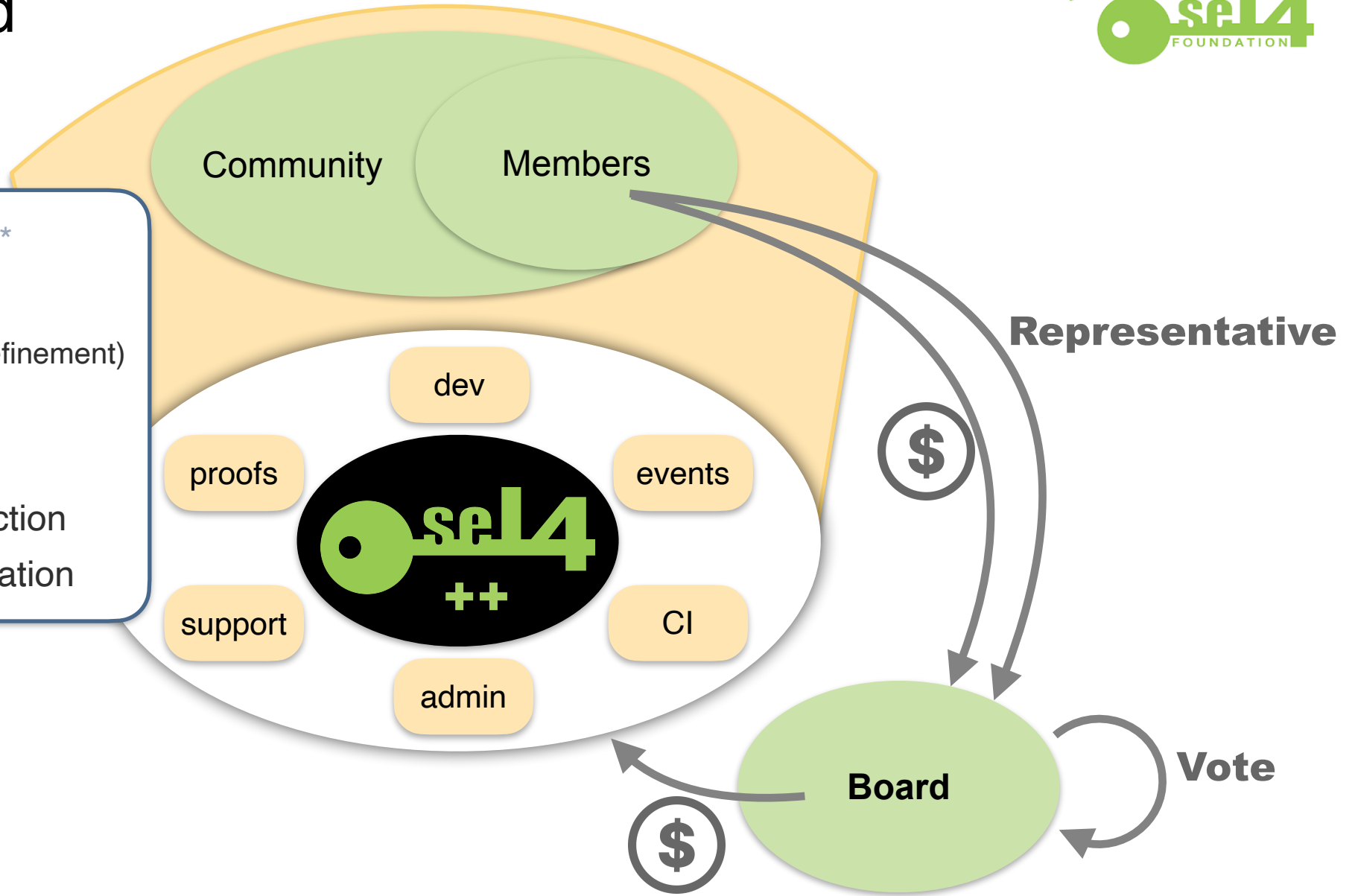


# Update - Board



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- CI infrastructure & seL4test\*
- Proof improvements
- MCS verification (start of C refinement)
- Driver Framework
- seL4 summit!
- Brand promotion and protection
- Leadership, project coordination



\*more in my Feb'22 talk at the TCCoE summit on seL4 Youtube channel

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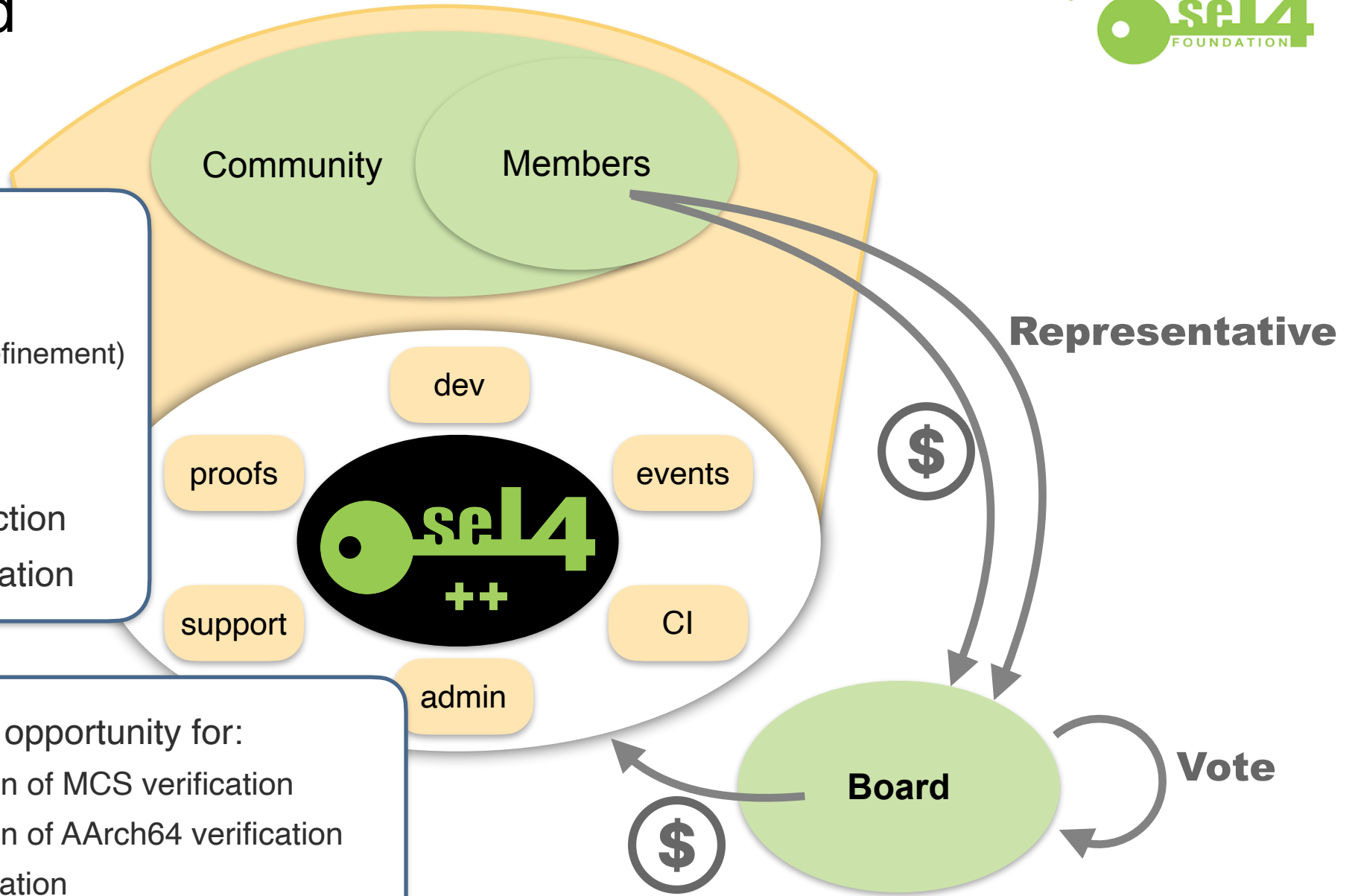
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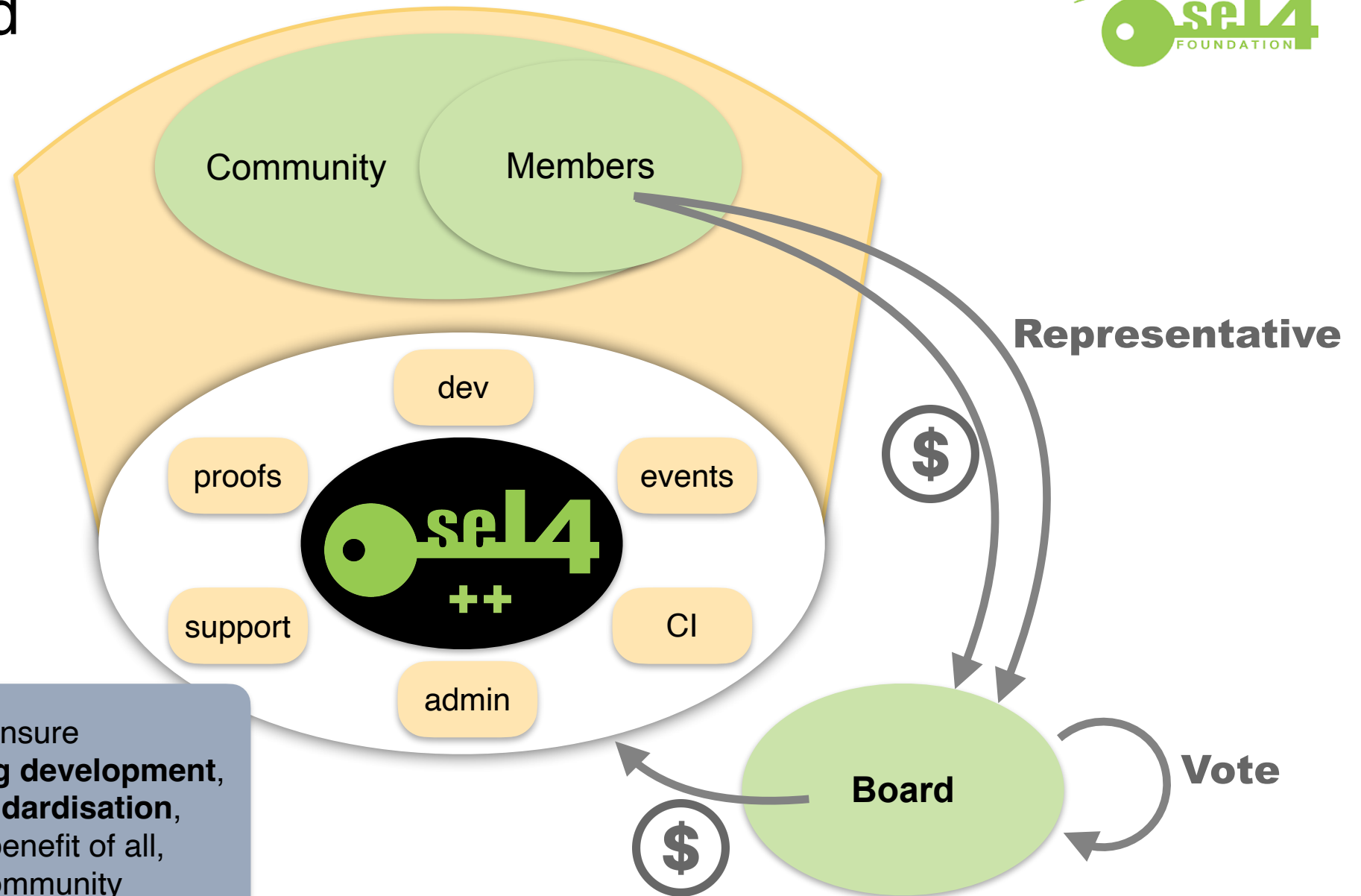
Want to support?  
Funding the next big steps for the seL4 project

Co-funding opportunity for:

- Completion of MCS verification
- Completion of AArch64 verification
- MC verification

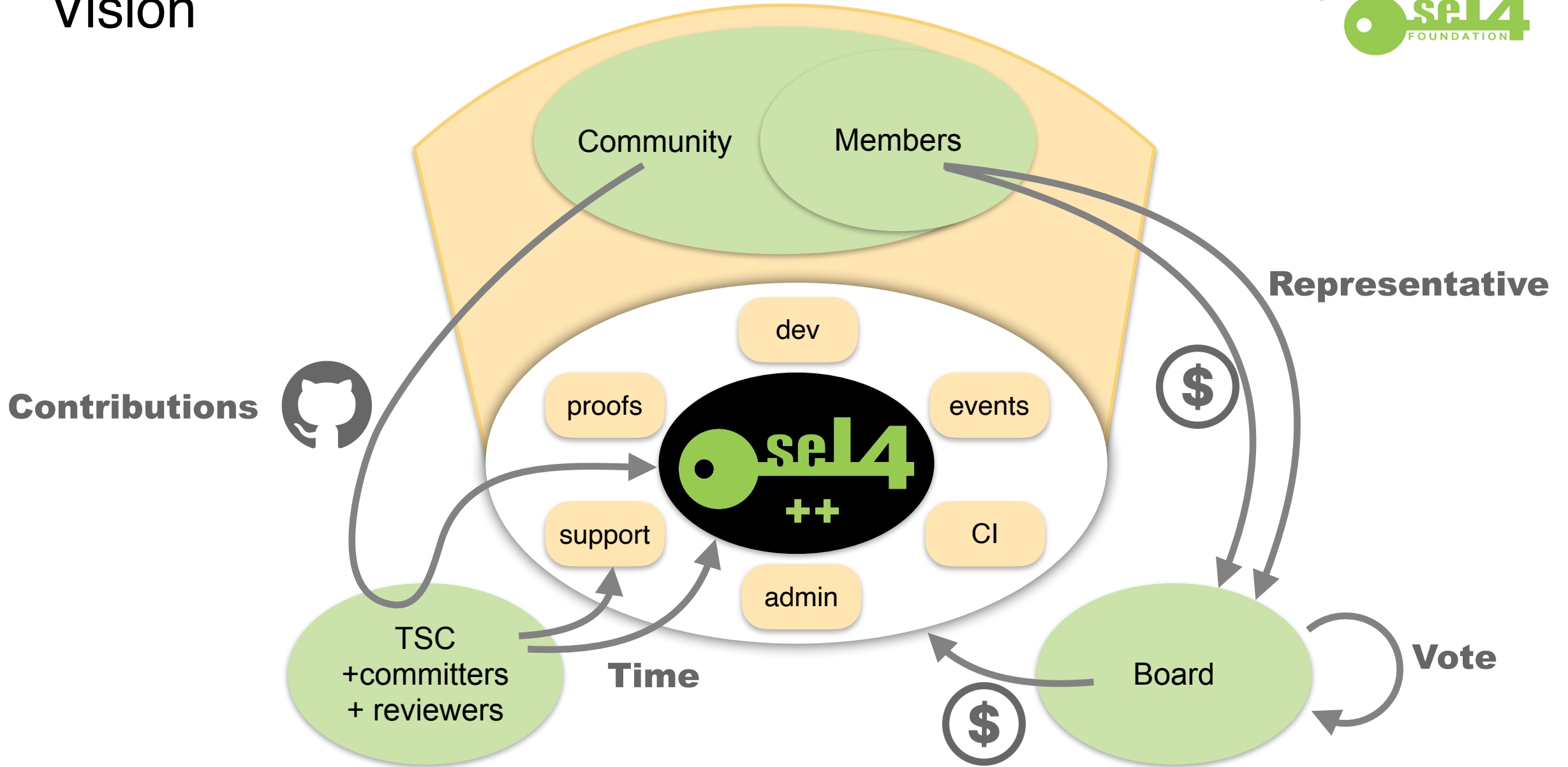


# Update - Board



The Board invests to ensure the **continuing and accelerating development**, the **interoperability and standardisation**, the **sharing of cost** for the benefit of all, and the **support** of the community

# Vision



# Vision

