Democratic Improvement Proposals for decentralization projects

(Ethereum Improvement Proposals)

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ConsenSys Diligence

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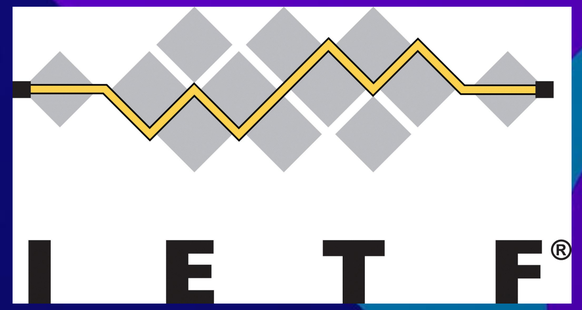
IETF 105 - Montreal
July 2019



Ethereum

- Second largest cryptocurrency (based on market cap - $24+ B). Possibly first in number of developers and tools

- Home to:
  - ENS (Ethereum Naming Service)
  - IPFS Apps (InterPlanetary File System)
  - 1869+ DApps.

- **Ethereum (EIP process)** seems to have **one of the healthiest decentral dev cycles amongst other Blockchain/Cryptocurrency projects** , but yet it is **far from perfect.**

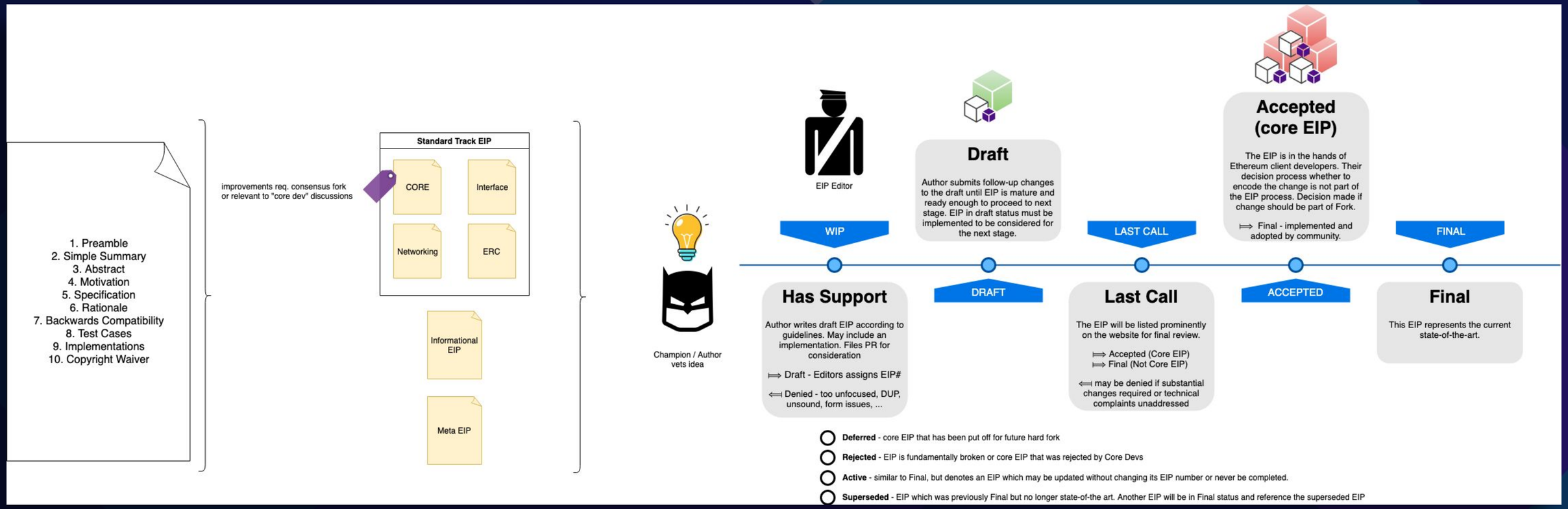
(E)IP Challenges

- Decentralization requires a non-hierarchical development cycle, which is really hard to achieve.

IETF RFC → PEP → BIP → **EIP**

- Some aspects were dropped on this path (e.g. Security Considerations section)

EIP Process (today)



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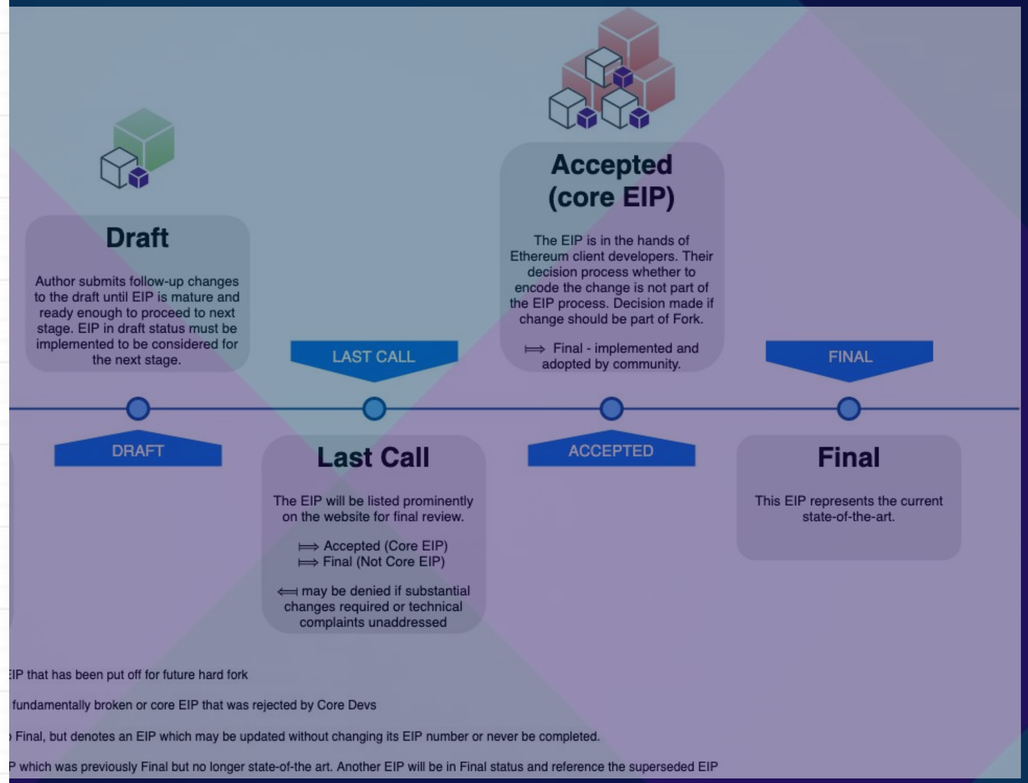
EIP Process (today)

1. Preamble
2. Simple Summary
3. Abstract
4. Motivation
5. Specification
6. Rationale
7. Backwards Compatibility
8. Test Cases
9. Implementations
10. Copyright Waiver

EIP-1



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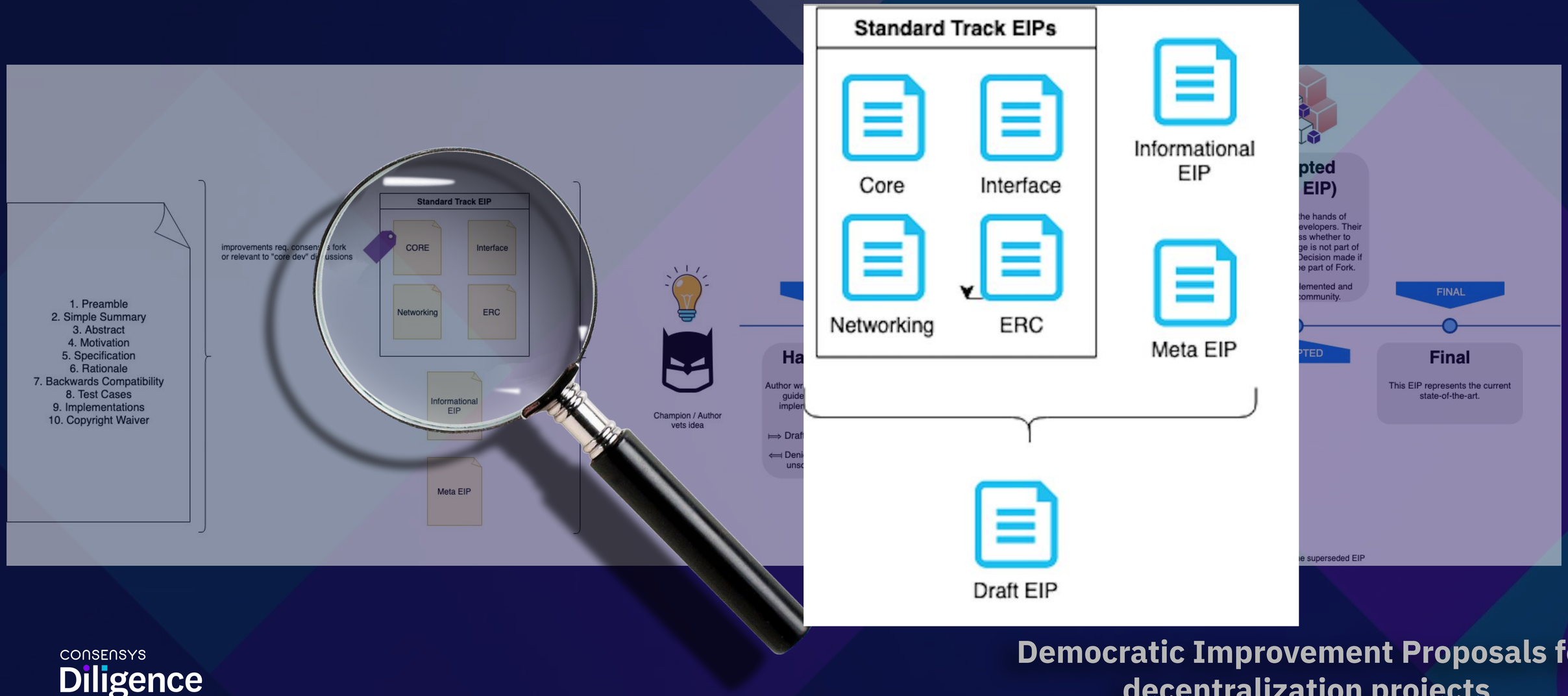
EIP Process (today) - Tracks



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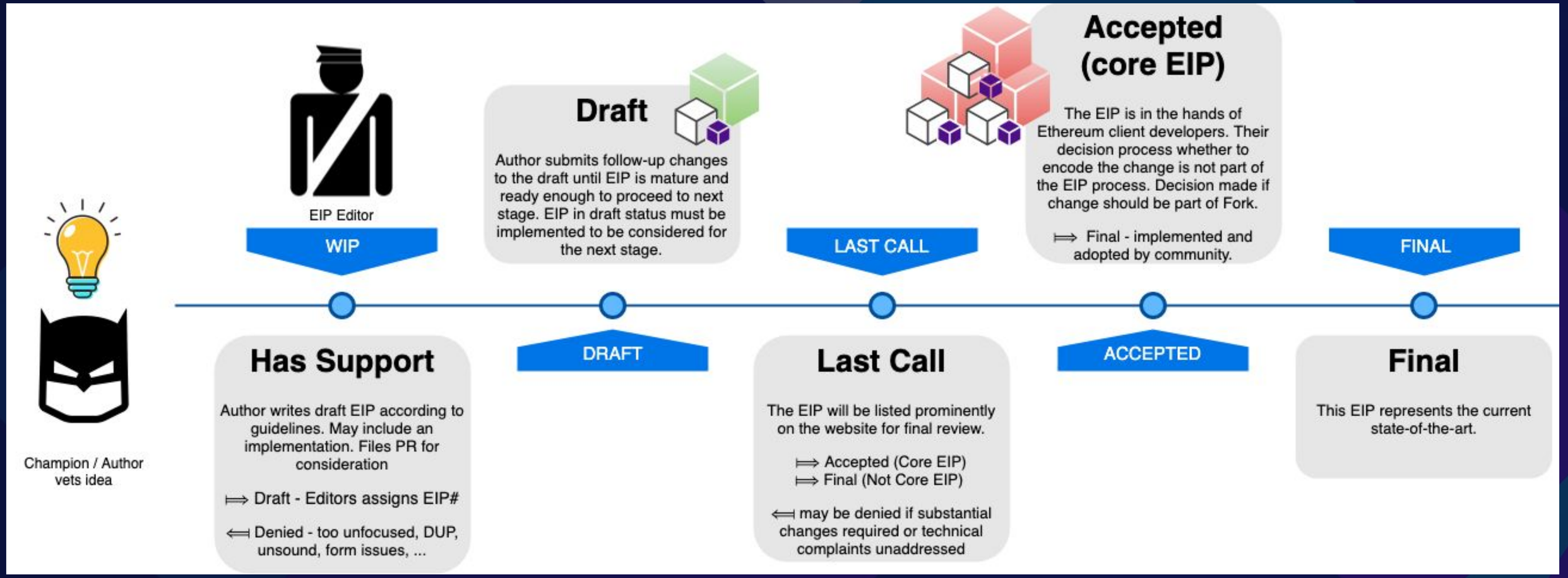
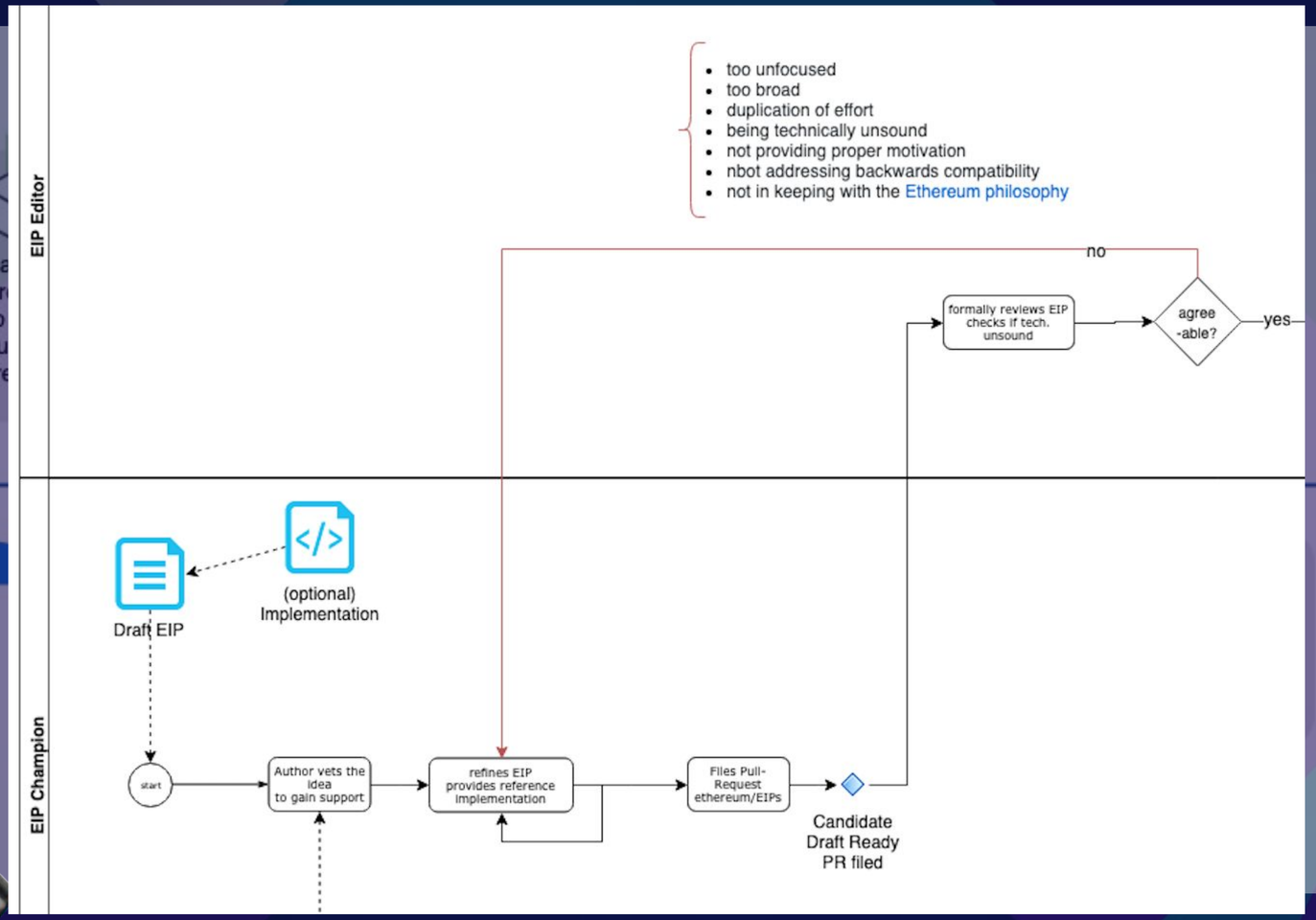
EIP Process (today) - Process



EIP Process (today) - WIP



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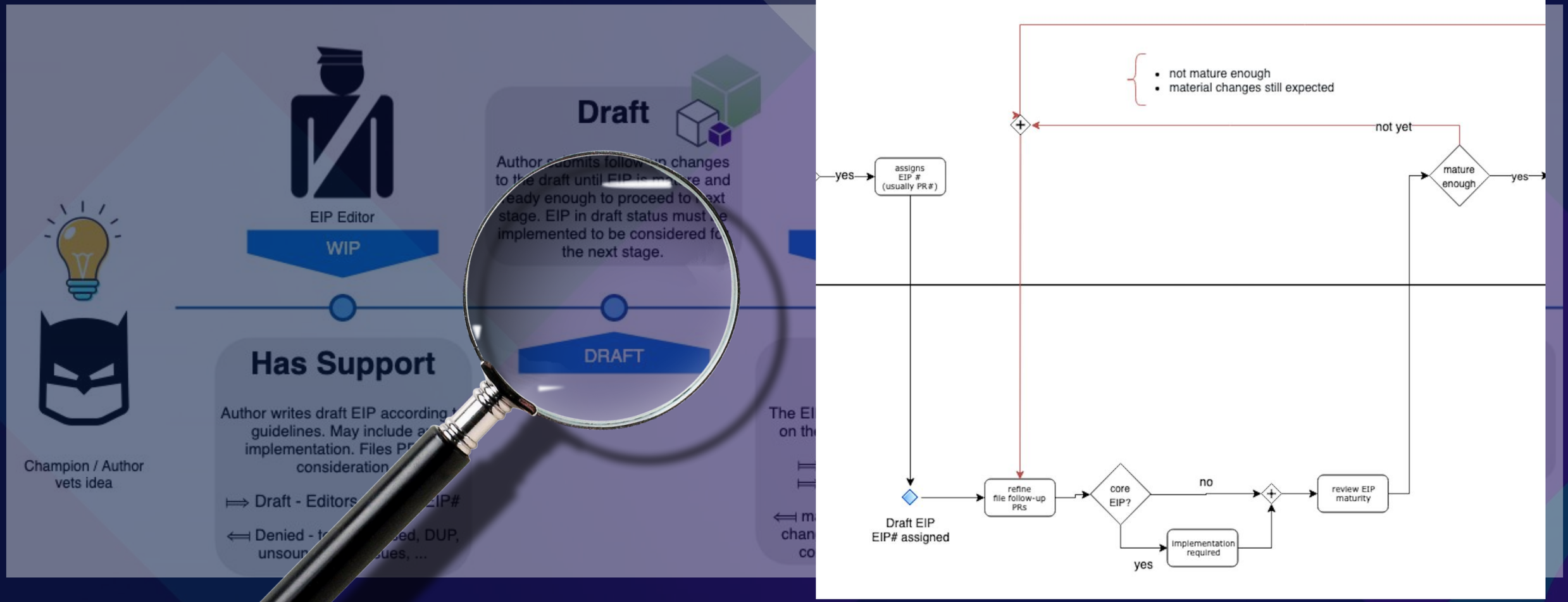
EIP Process (today) - Draft



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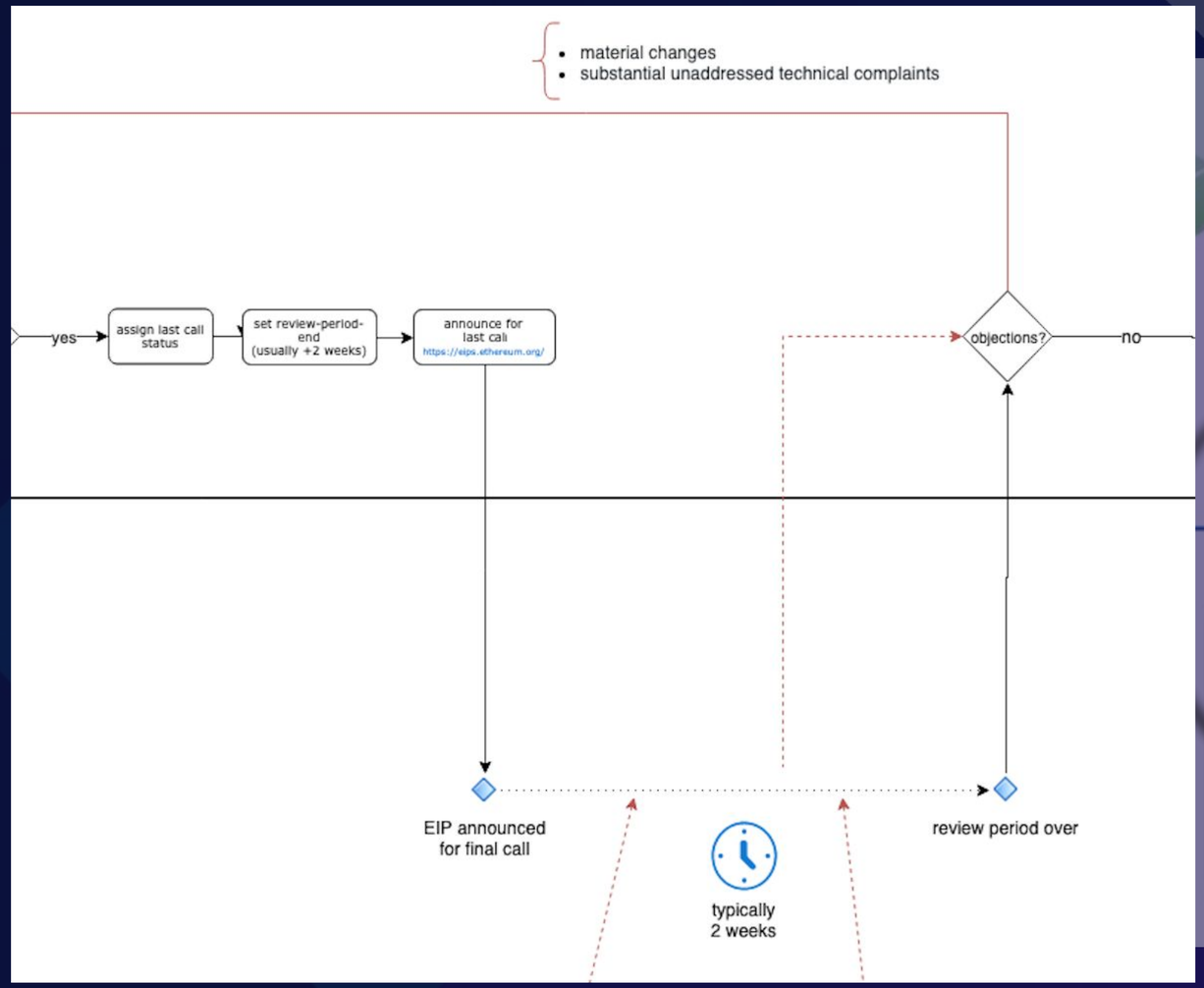
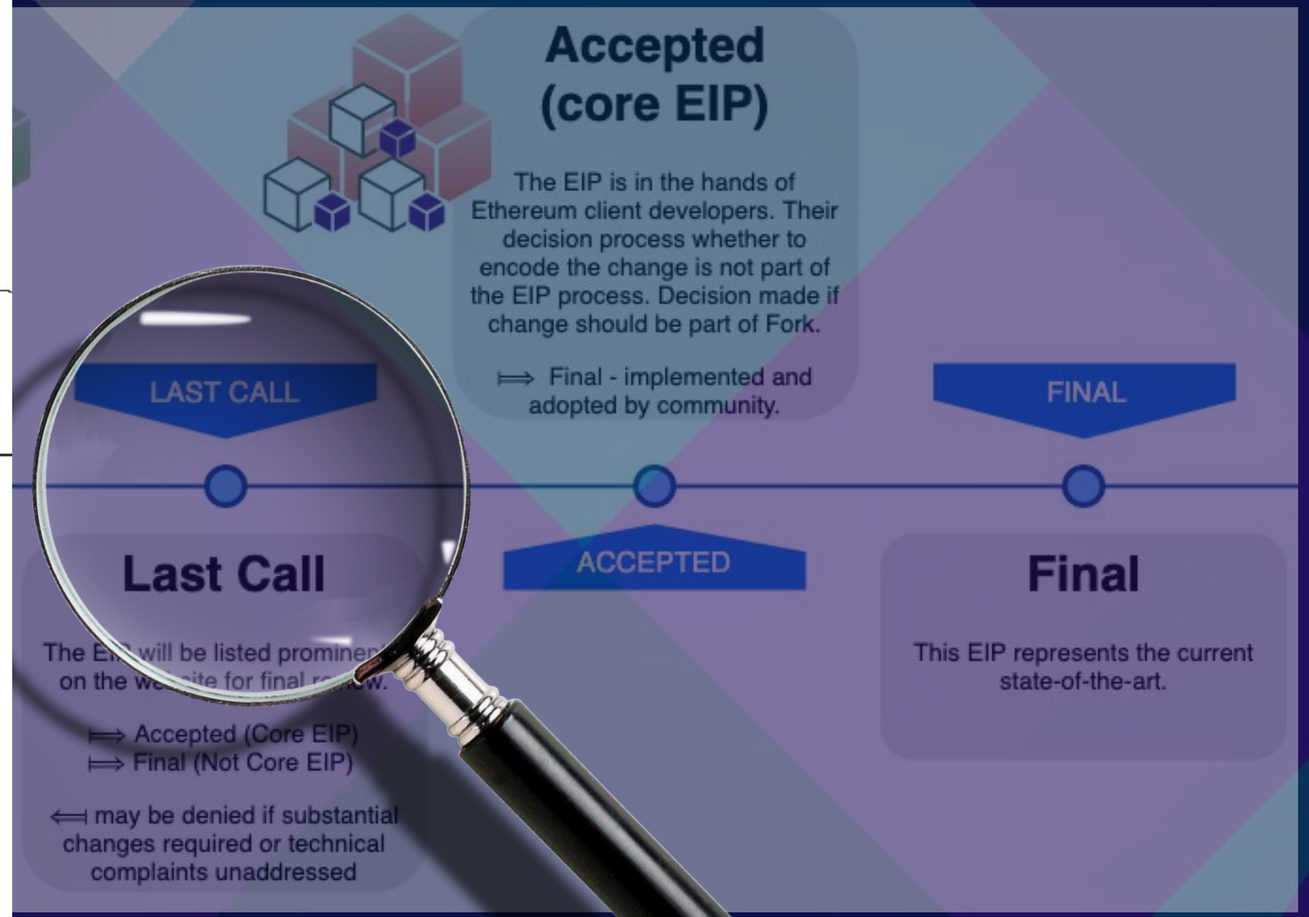
EIP Process (today) - Last Call





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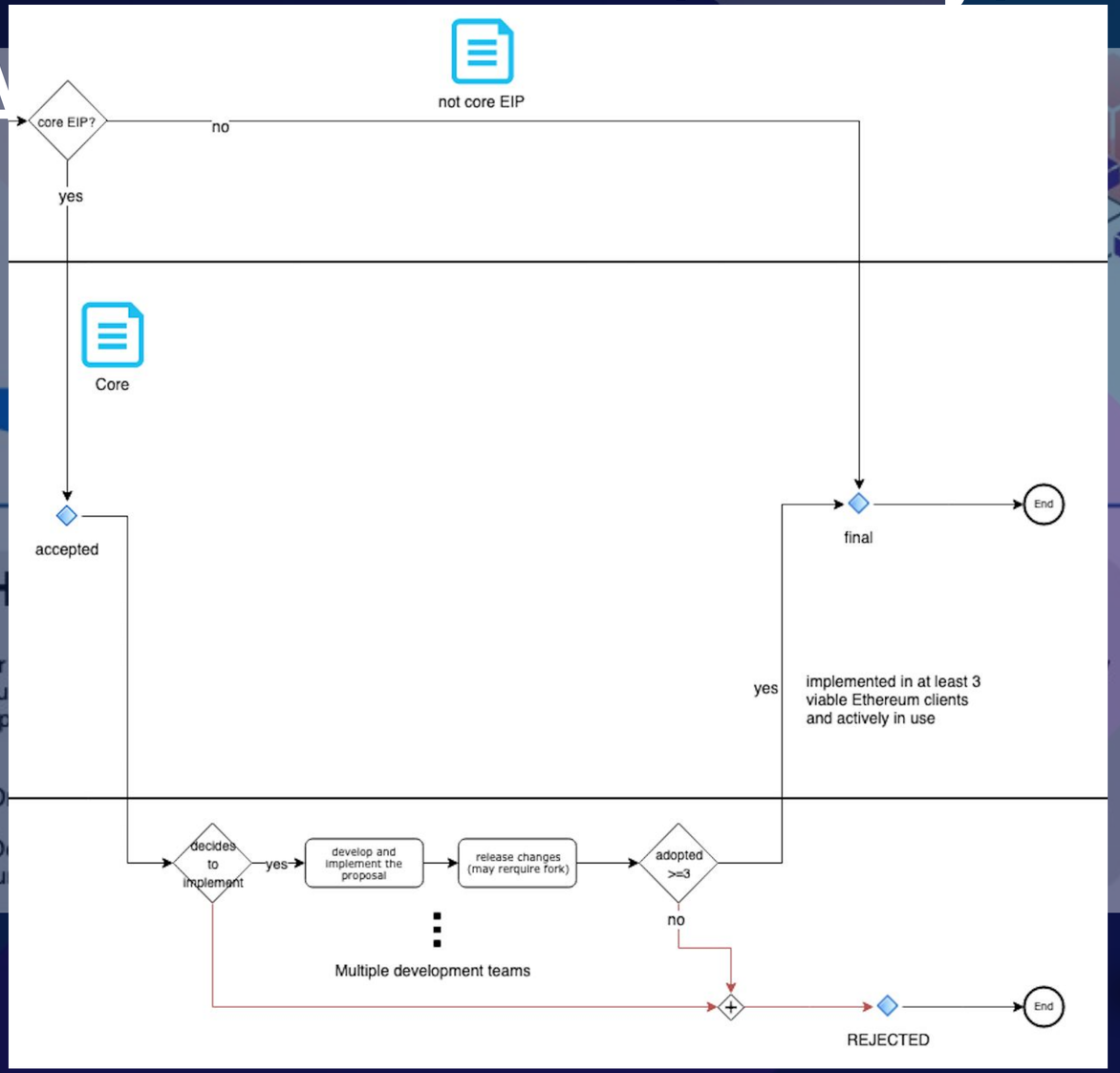
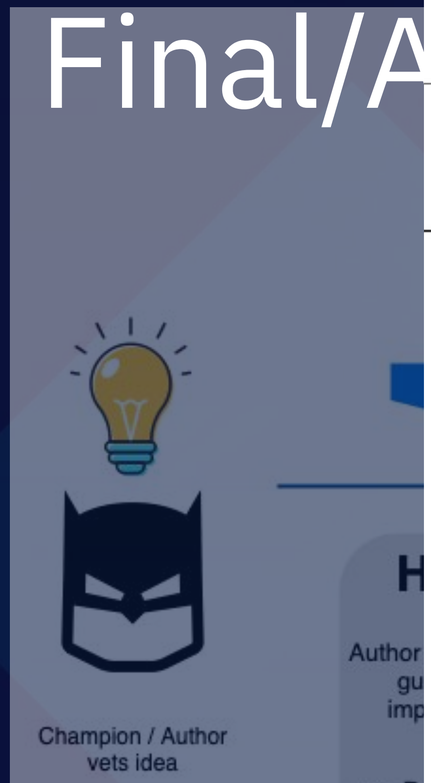
EIP Process (today) - Final/A





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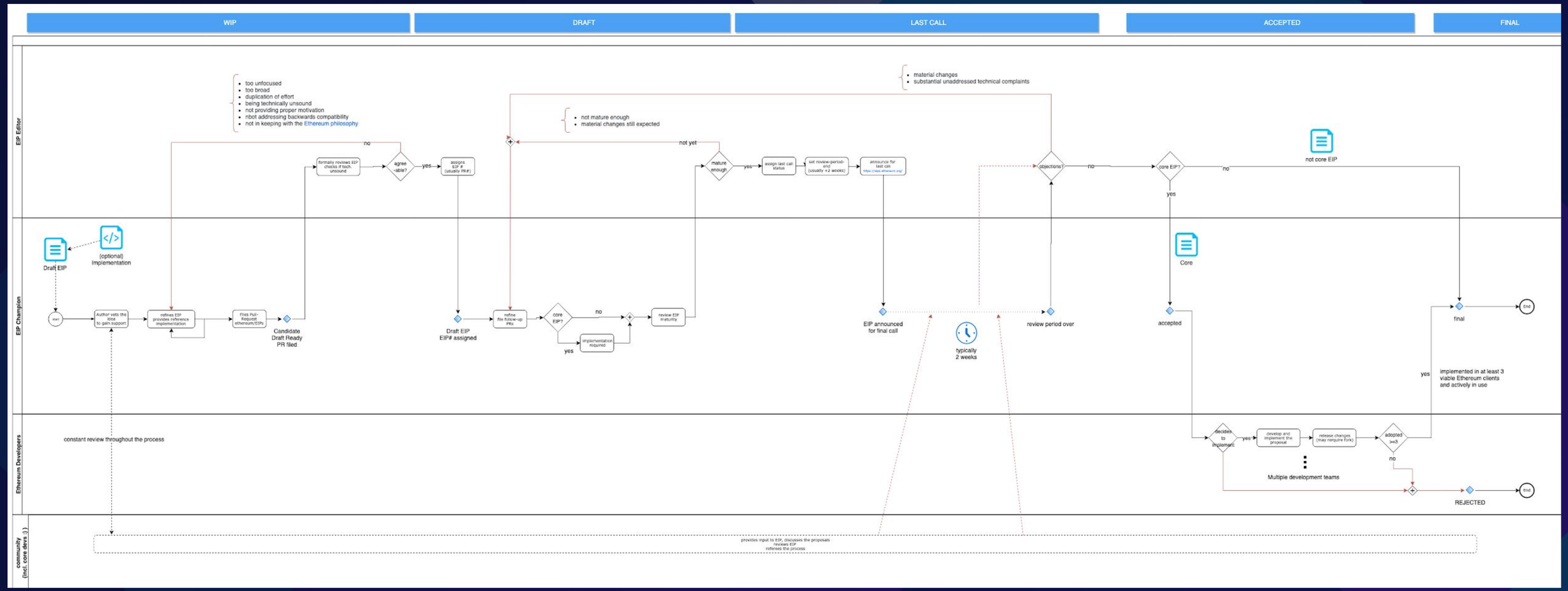
EIP Process (today) - Overall



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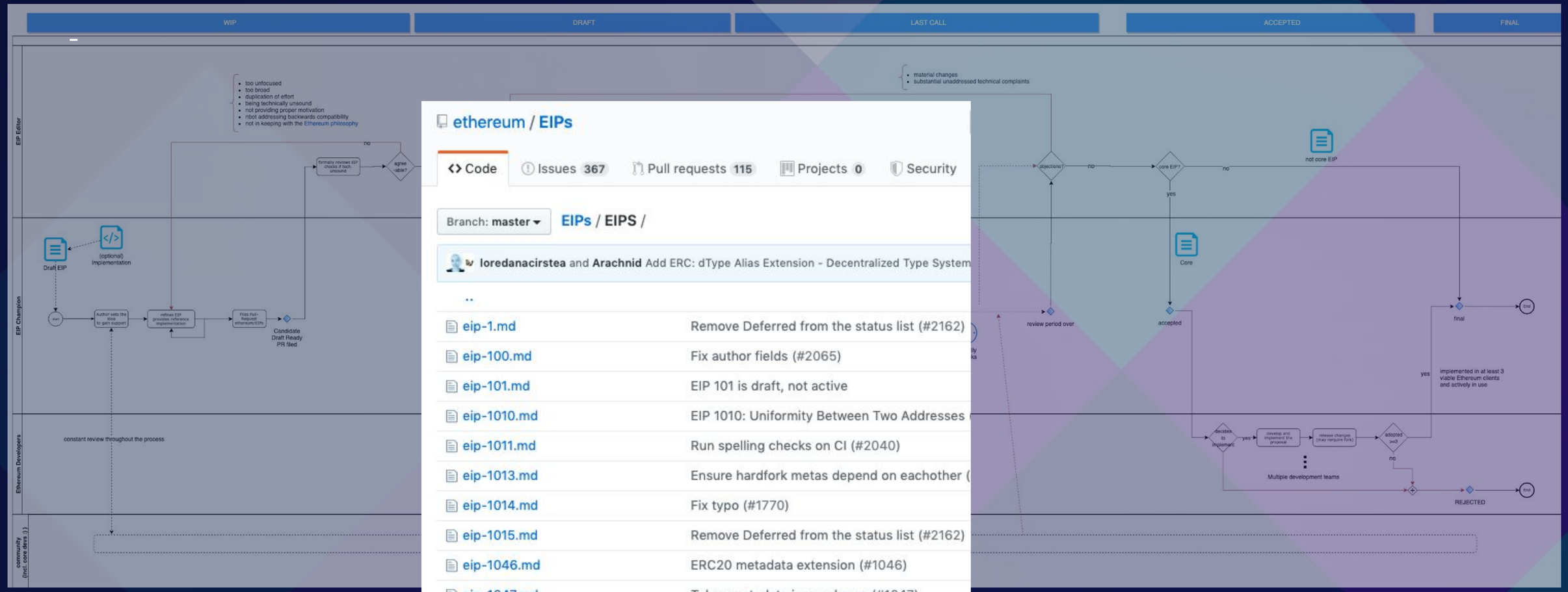
EIP Process (today) - Overall



ethereum / EIPs

Code | Issues 367 | Pull requests 115 | Projects 0 | Security

Branch: master ▾ EIPs / EIPS /

loredanacirstea and Arachnid Add ERC: dType Alias Extension - Decentralized Type System

..

eip-1.md	Remove Deferred from the status list (#2162)
eip-100.md	Fix author fields (#2065)
eip-101.md	EIP 101 is draft, not active
eip-1010.md	EIP 1010: Uniformity Between Two Addresses
eip-1011.md	Run spelling checks on CI (#2040)
eip-1013.md	Ensure hardfork metas depend on eachother
eip-1014.md	Fix typo (#1770)
eip-1015.md	Remove Deferred from the status list (#2162)
eip-1046.md	ERC20 metadata extension (#1046)
eip-1047.md	Token metadata json schema (#1047)
eip-1051.md	Arithmetic overflow detection for the EVM (#1
eip-1052.md	Mark Constantinople and all its references Fin

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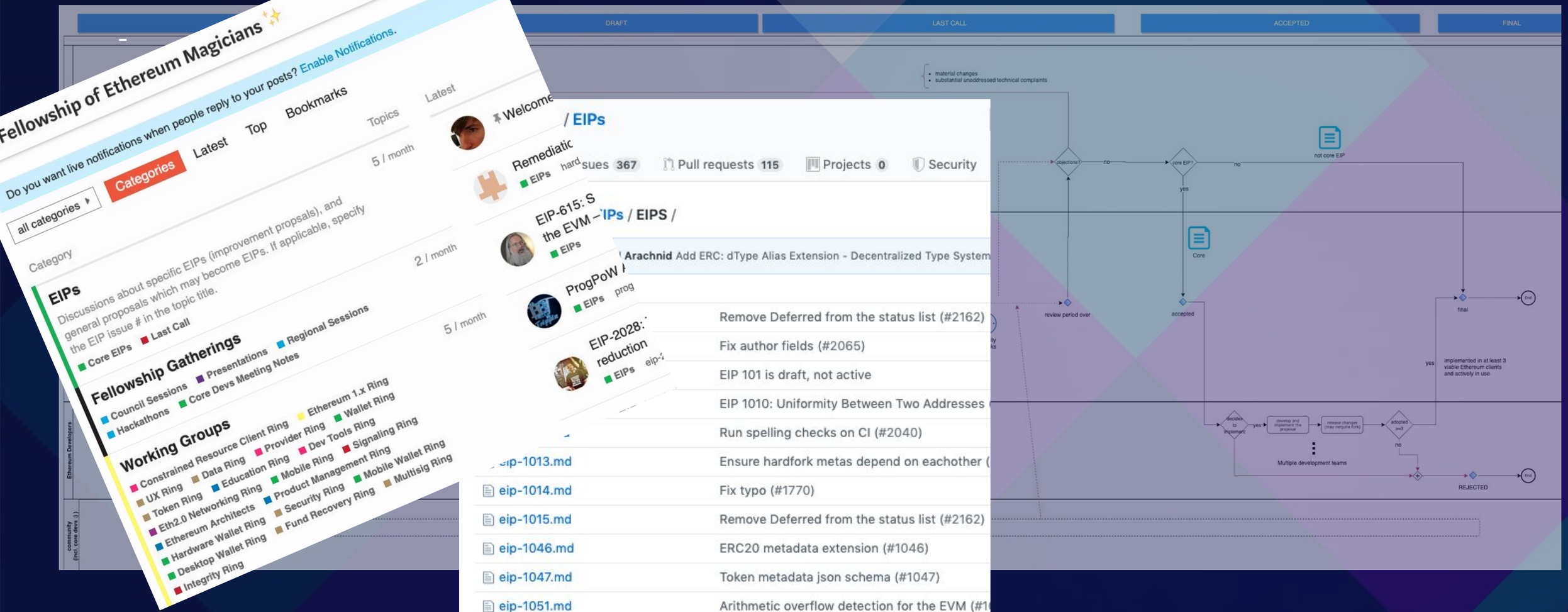
EIP Process (today) - Overall



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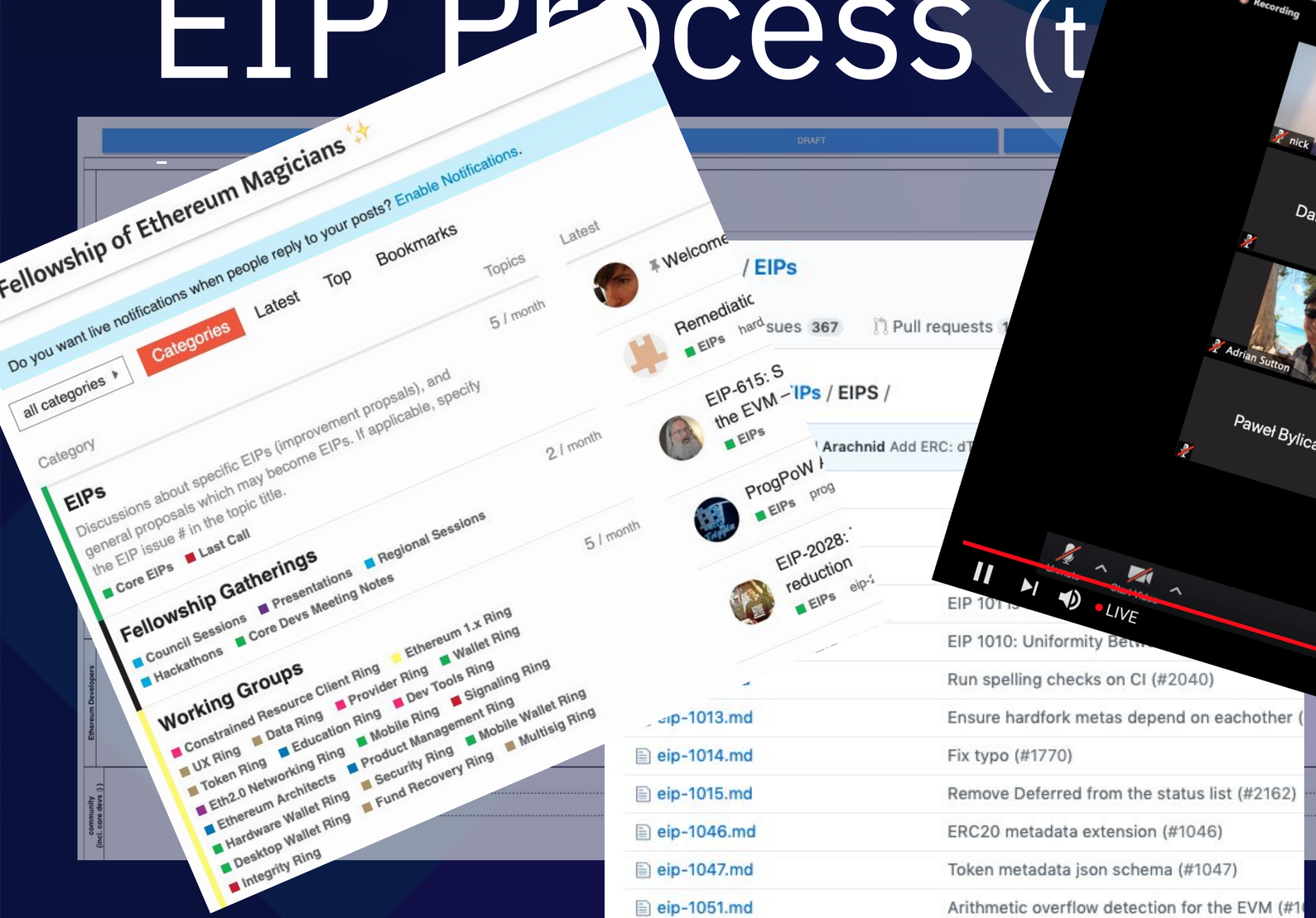
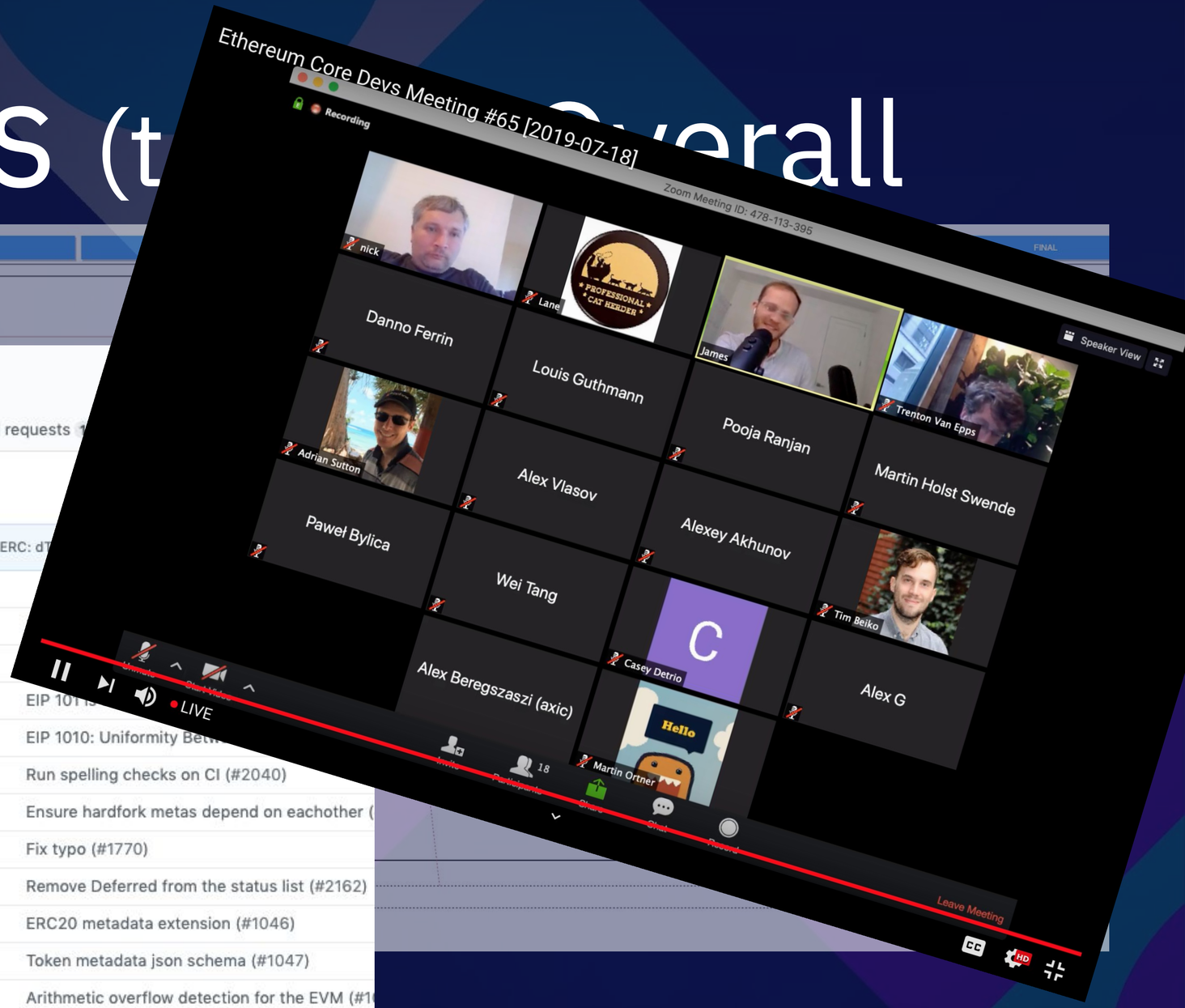
EIP Process (t Overall





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What is needed?

- Participation from IETF to improve these processes
  - Find the gaps, missing pieces
  - Refine modules
- Standardize development and change management processes
- Open to any discussions or comments

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Thank You

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Other Initiatives

- **Decentralized Internet Infrastructure (dinrg):** https://datatracker.ietf.org/rg/dinrg/about/
- **General Security Considerations for Cryptoassets Custodians:** https://datatracker.ietf.org/doc/draft-vcgtf-crypto-assets-security-considerations/
- **OASIS / Ethereum Open Project for EIP Process:** https://ethereum-magicians.org/t/oasis-ethereum-open-project-update/3232
- **Cryptocurrency Consortium Open Standard:** https://cryptoconsortium.github.io/CCSS/Details/
- **ISO/TC 307 Blockchain and distributed ledger technologies:** https://cryptoconsortium.github.io/CCSS/Details/

- **Mostly reinventing (new) processes in the ecosystem.**

- **Our ongoing internal proposals:**
  - **Mandatory “Security Considerations” for EIPs - (Similar to RFC 3552):** https://ethereum-magicians.org/t/eip-mandatory-security-considerations-for-eips/2839, https://youtu.be/Au1Qll-86v0?t=18029