

# Democratic Improvement Proposals for decentralization projects

(Ethereum Improvement Proposals)

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**Diligence**

**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.

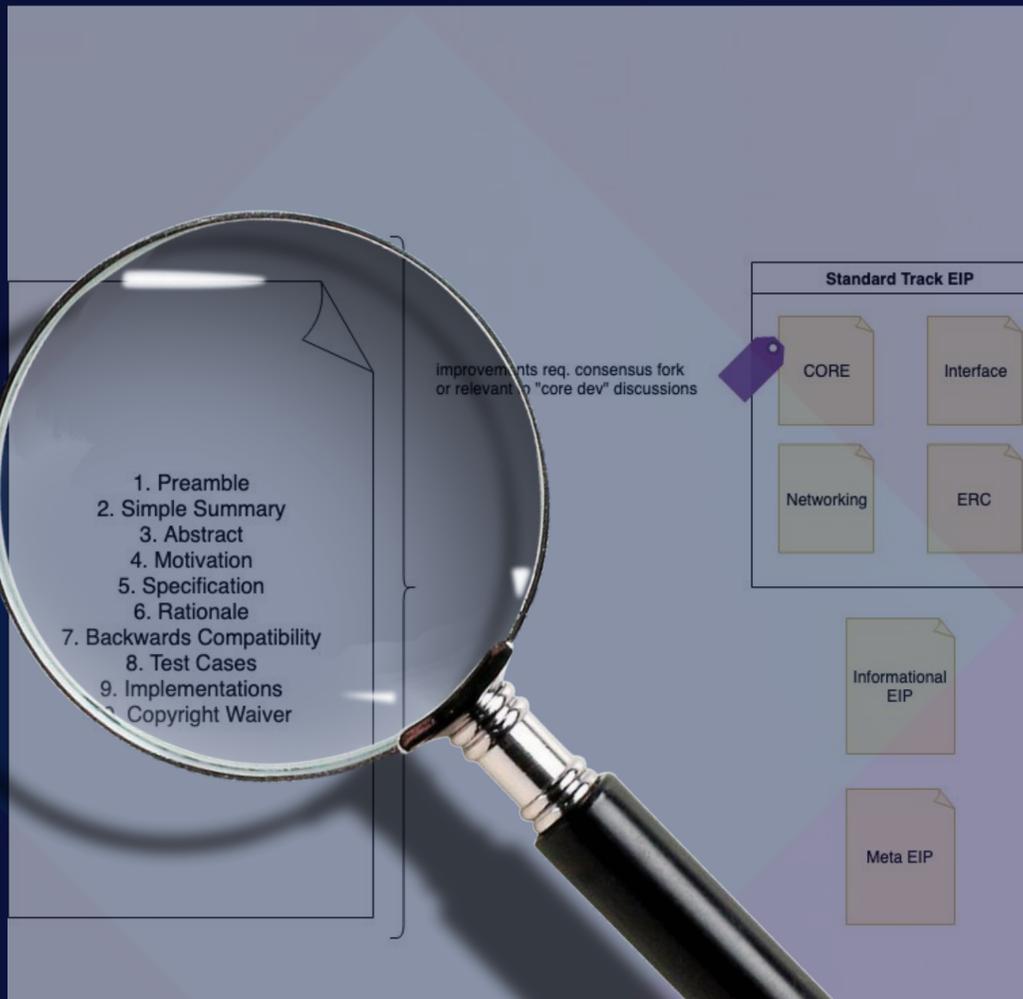
**IETF RFC** → **PEP** → **BIP** → **EIP**

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

# EIP Process (today)

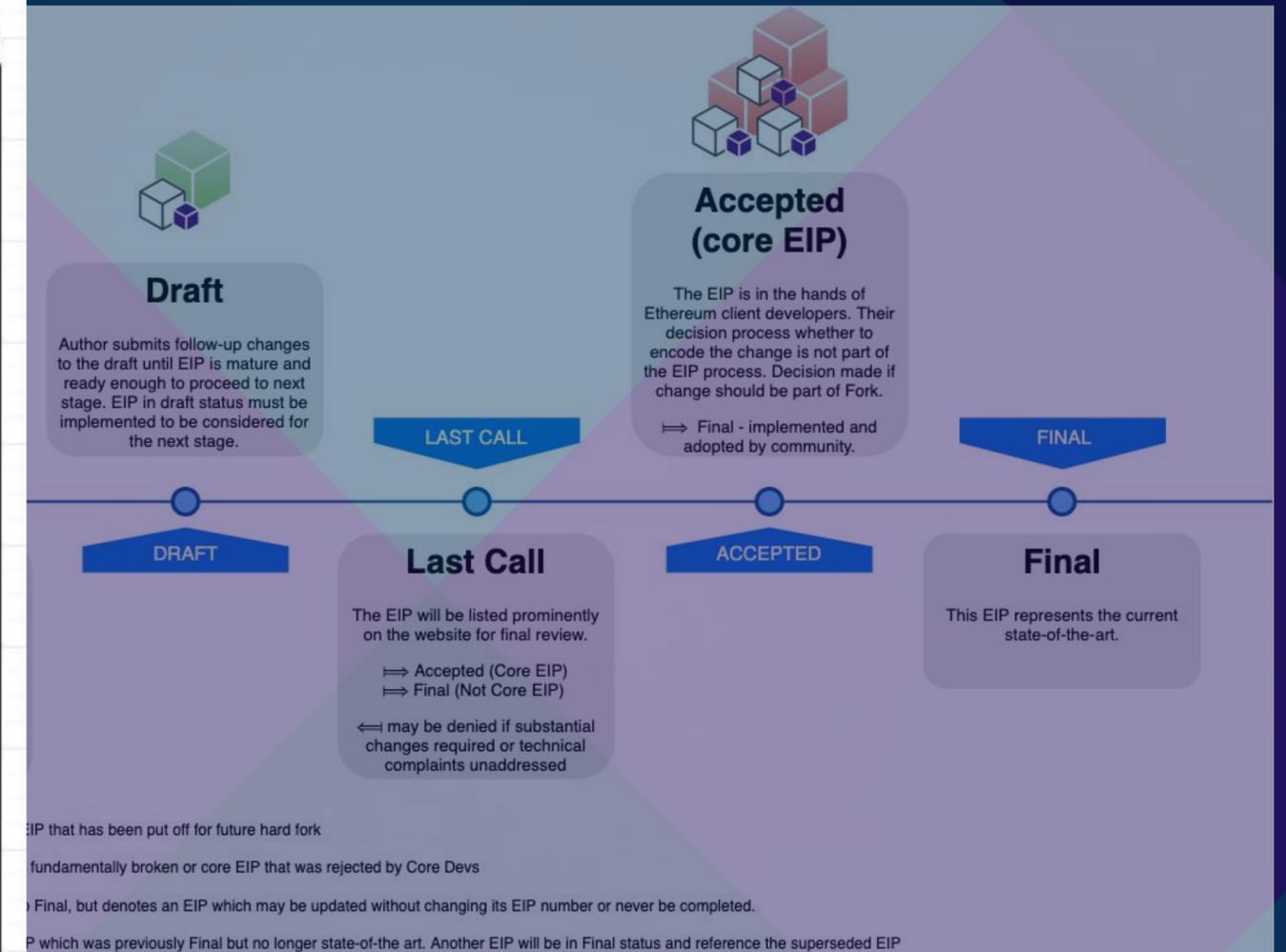


# EIP Process (today)

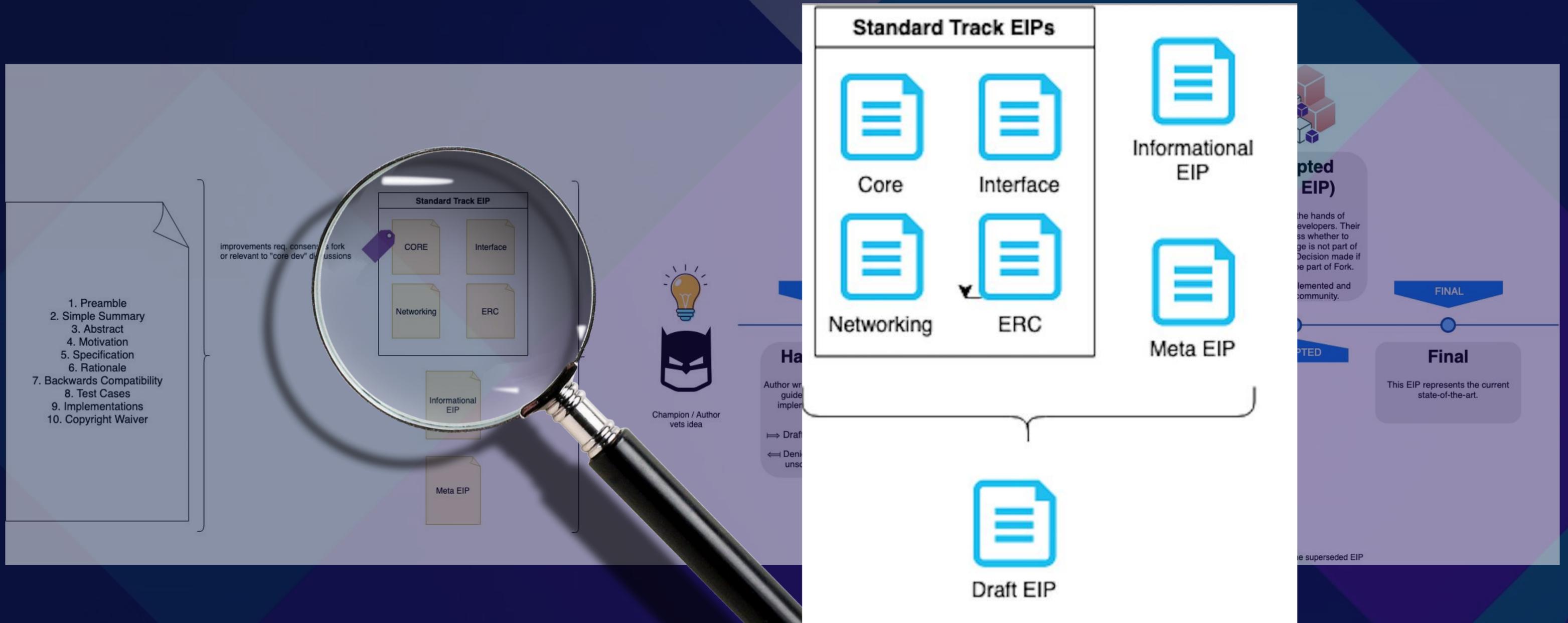


1. Preamble
2. Simple Summary
3. Abstract
4. Motivation
5. Specification
6. Rationale
7. Backwards Compatibility
8. Test Cases
9. Implementations
10. Copyright Waiver

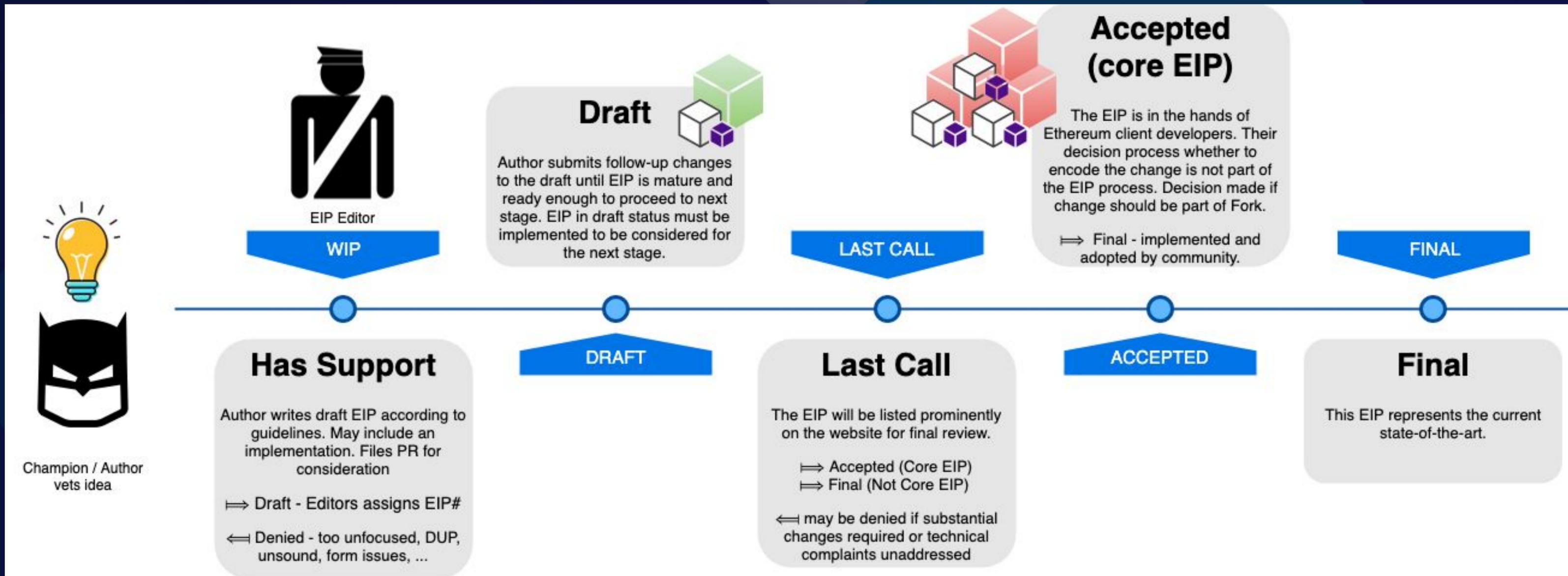
EIP-1



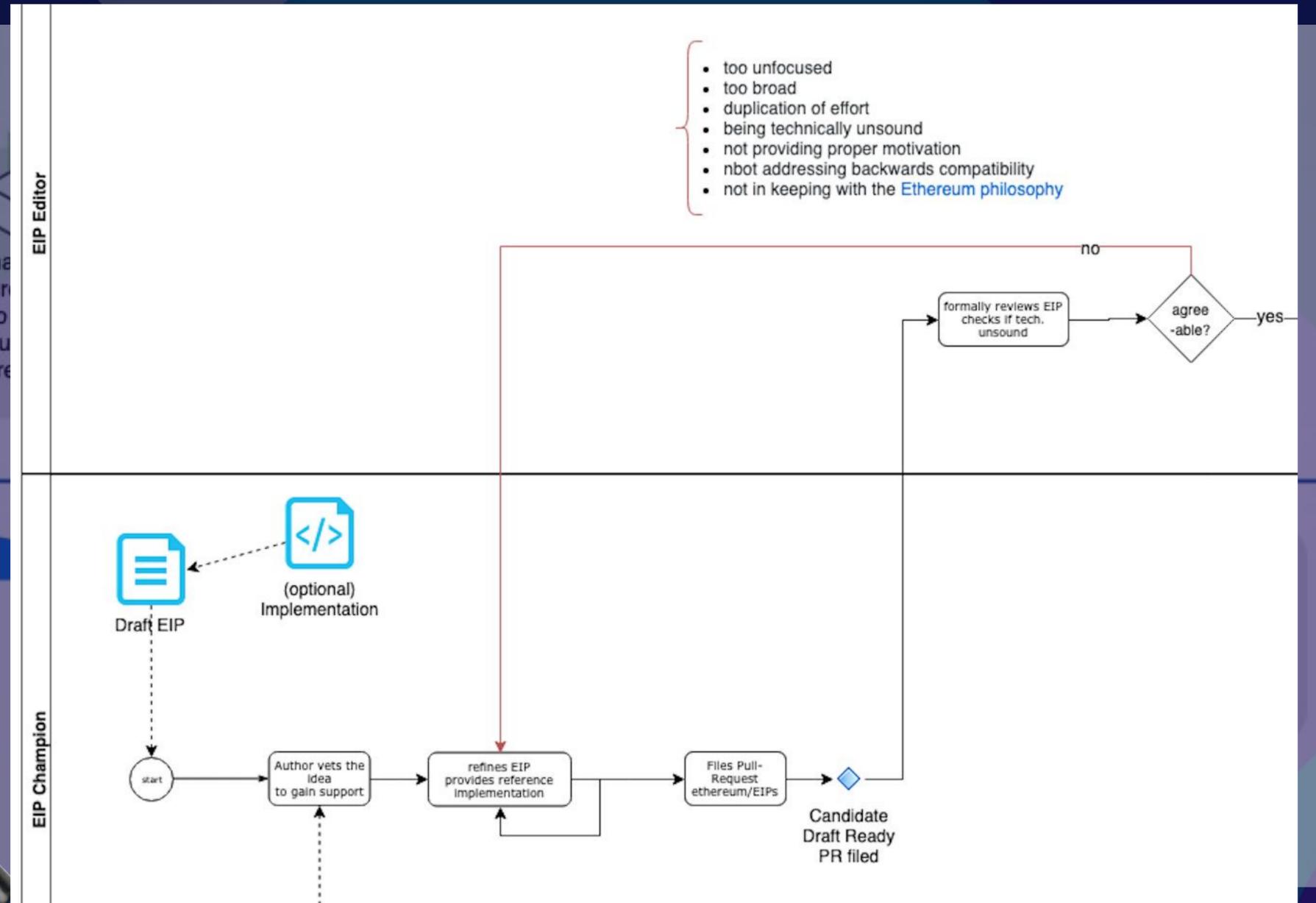
# EIP Process (today) - Tracks



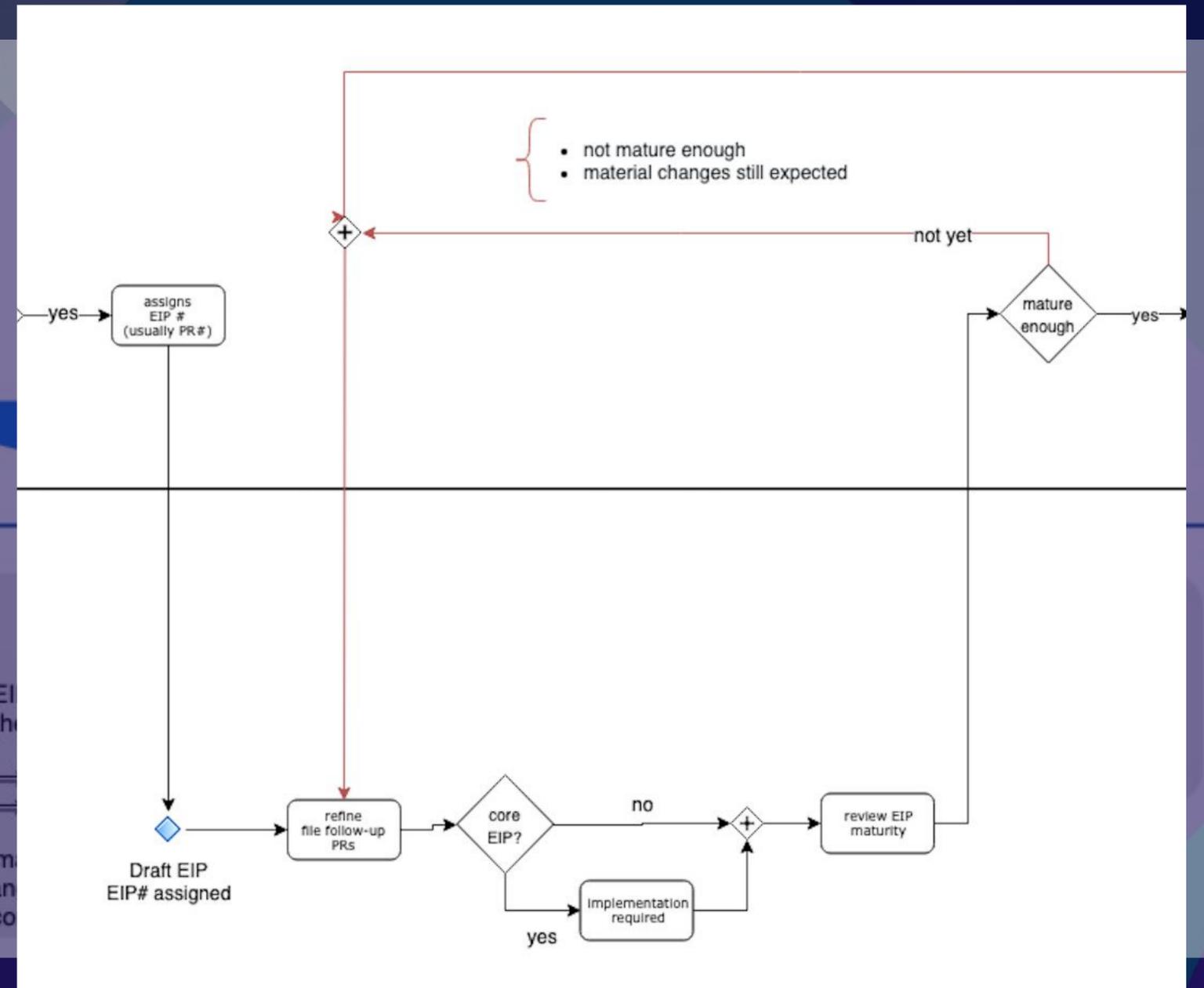
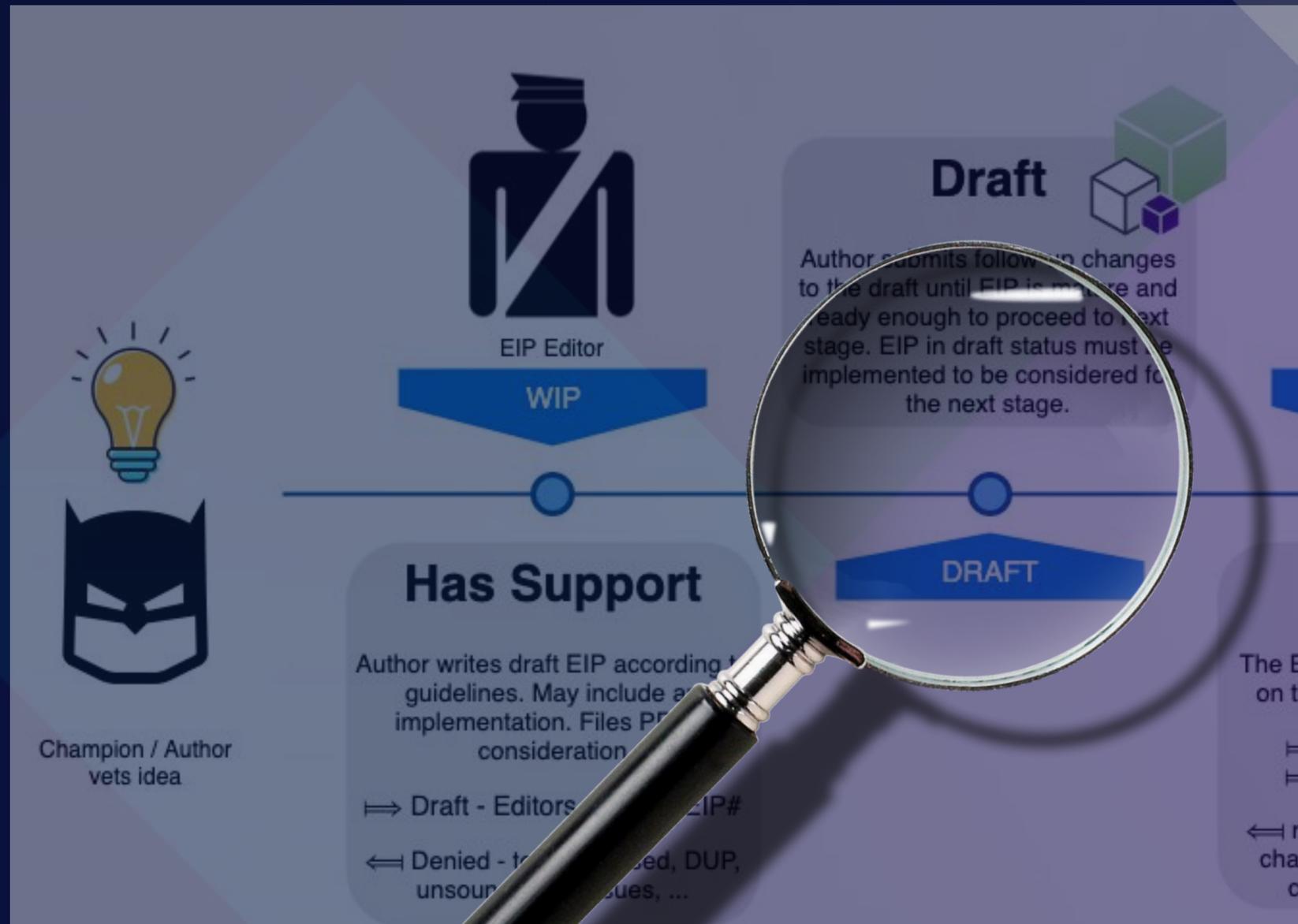
# EIP Process (today) - Process



# EIP Process (today) - WIP

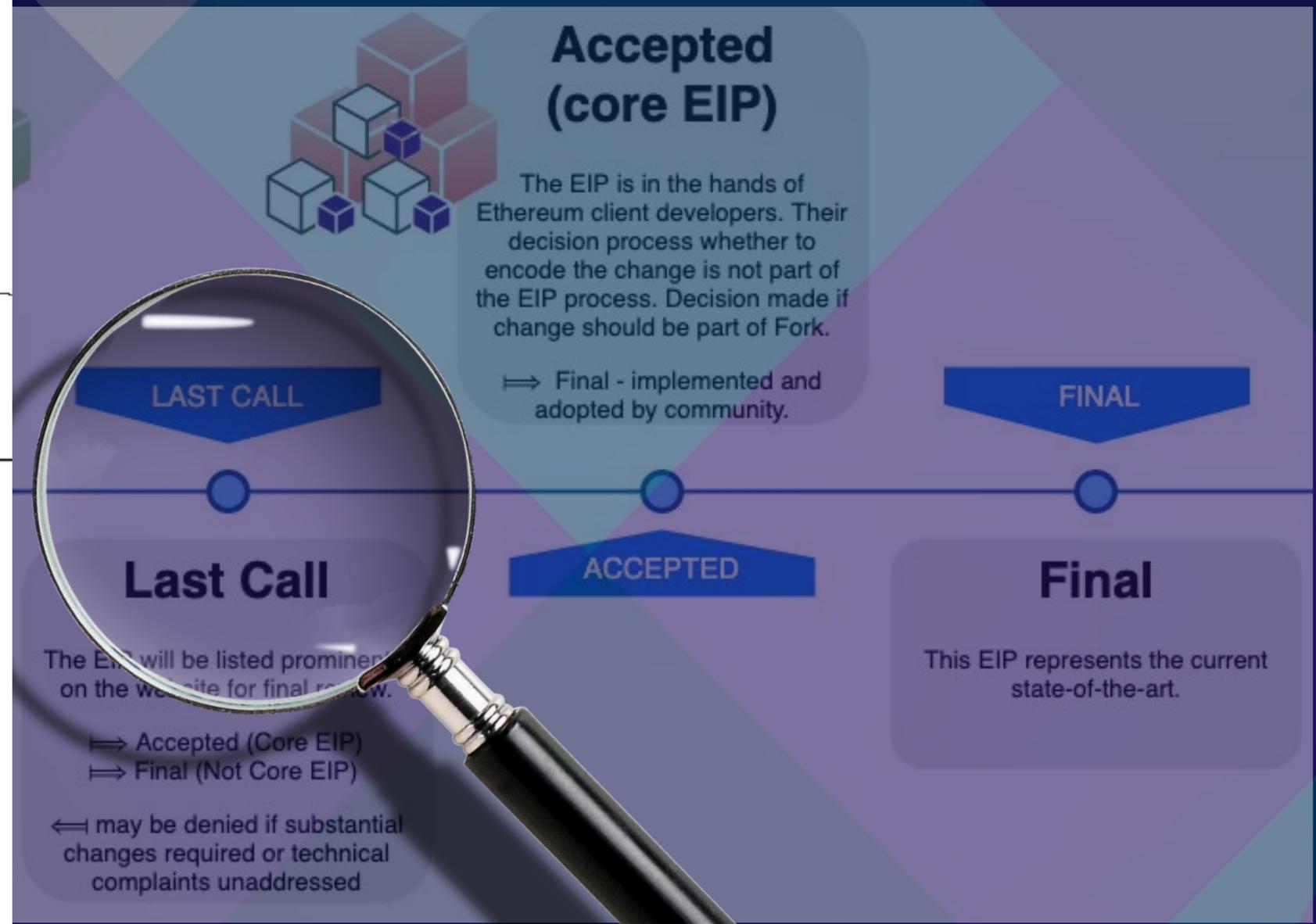
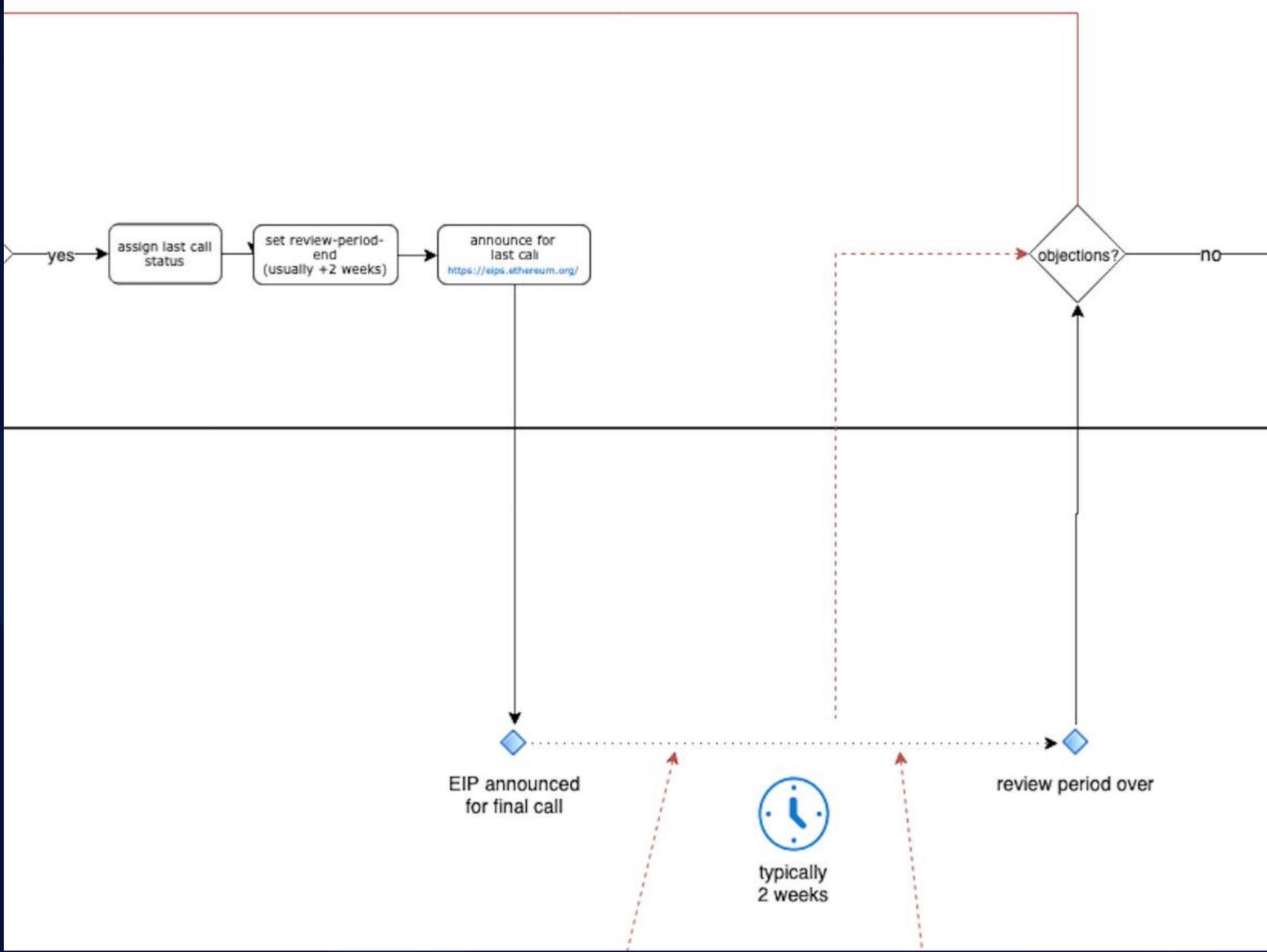


# EIP Process (today) - Draft



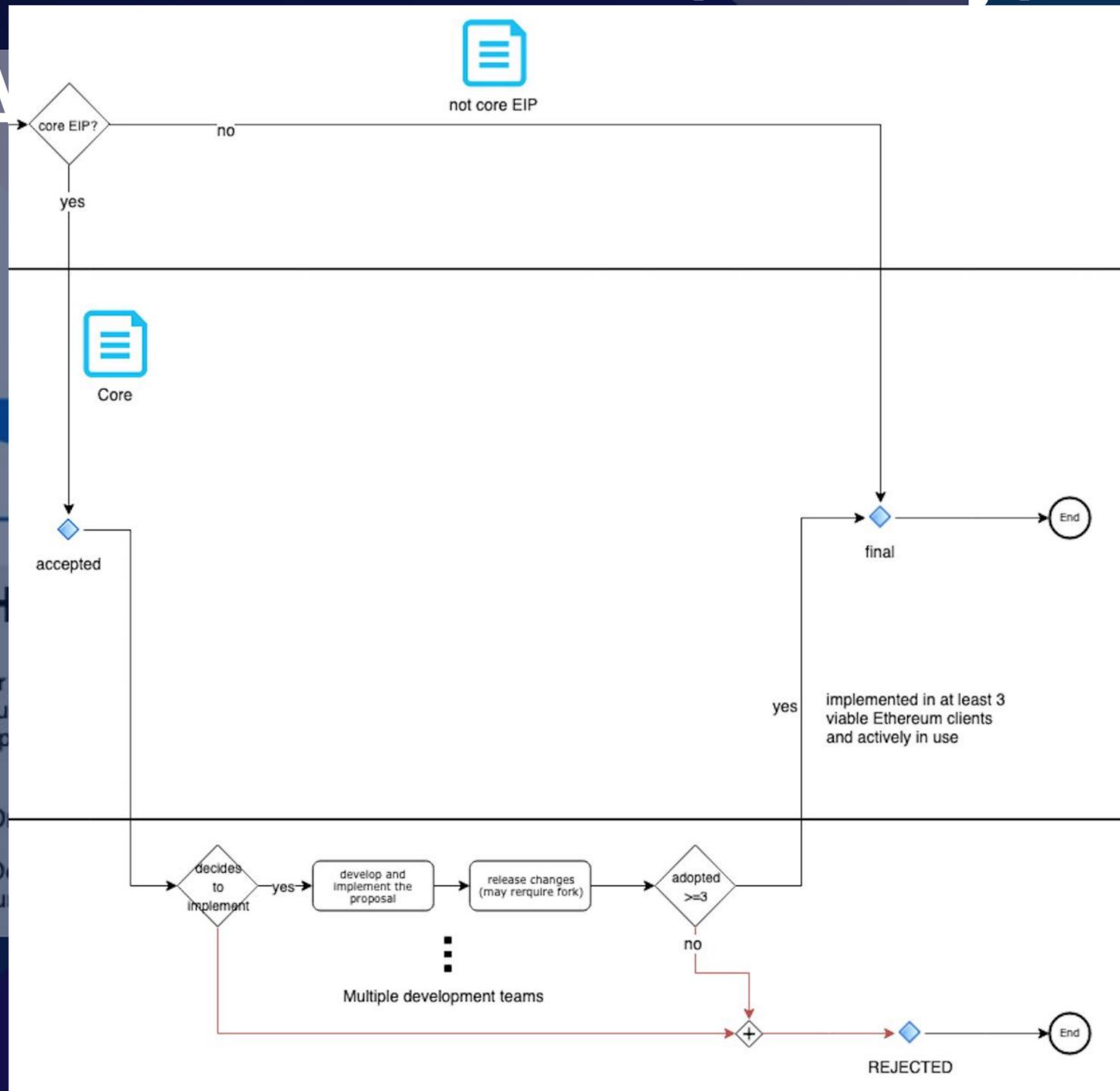
# EIP Process (today) - Last Call

- material changes
- substantial unaddressed technical complaints



# EIP Process (today) -

Final/A



## Accepted (core EIP)

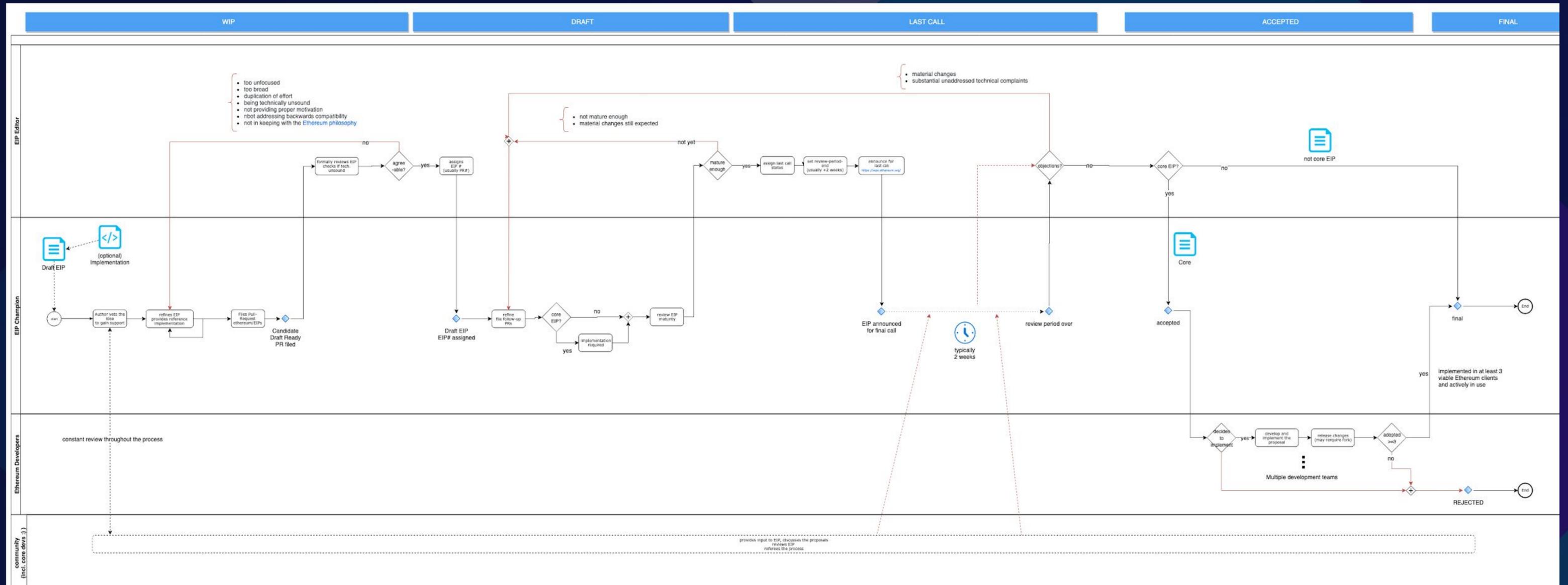
The EIP is in the hands of Ethereum client developers. Their decision process, whether to encode the change is not part of the EIP process. Decision made if change should be part of Fork.

⇒ Final - implemented and adopted by community.

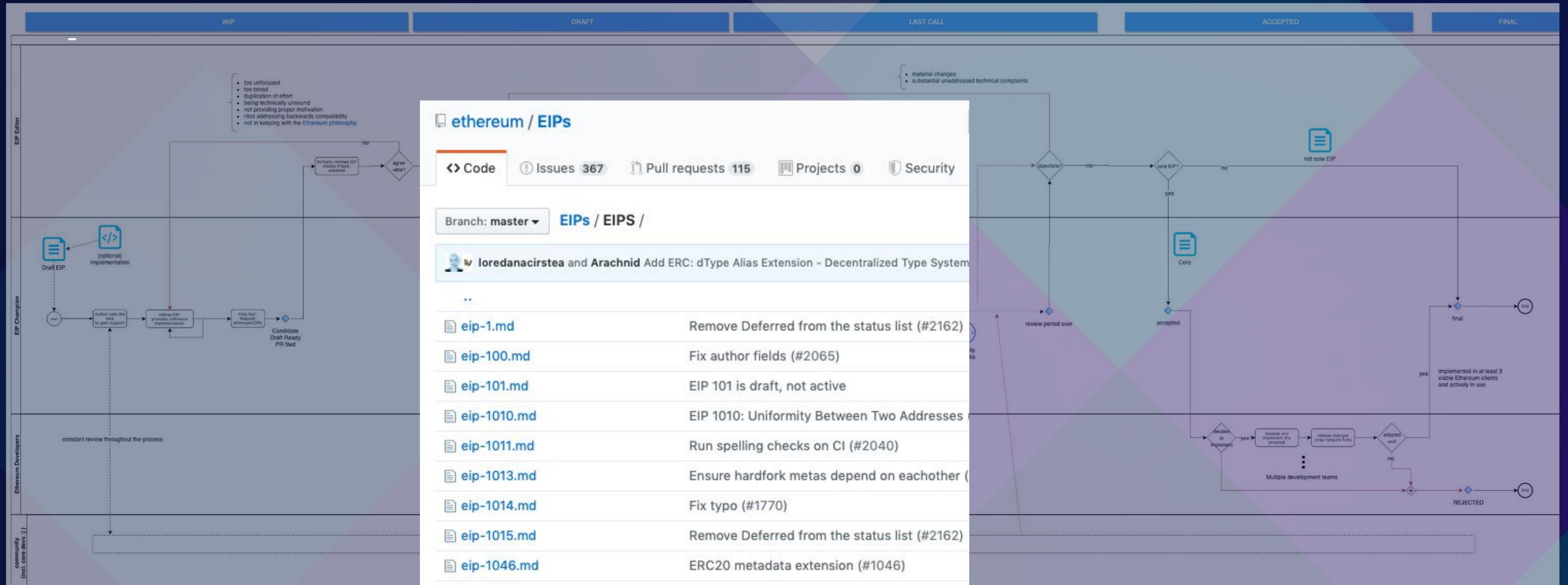


Democratic Improvement Proposals  
decentralization projects

# EIP Process (today) - Overall



# EIP Process (today) - Overall





# EIP Process (to be covered)

Fellowship of Ethereum Magicians

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all categories Categories Latest Top Bookmarks Topics Latest

EIPs  
Discussions about specific EIPs (improvement proposals), and general proposals which may become EIPs. If applicable, specify the EIP issue # in the topic title.

Fellowship Gatherings  
Council Sessions Presentations Regional Sessions  
Hackathons Core Devs Meeting Notes

Working Groups  
Constrained Resource Client Ring Ethereum 1.x Ring  
UX Ring Data Ring Provider Ring Wallet Ring  
Token Ring Education Ring Mobile Ring Dev Tools Ring  
Eth2.0 Networking Ring Product Management Ring Signaling Ring  
Ethereum Architects Security Ring Mobile Wallet Ring  
Hardware Wallet Ring Fund Recovery Ring  
Desktop Wallet Ring Integrity Ring Multisig Ring

Category	Author	Topic	Frequency
EIPs	Remediatic	EIPs hard issues 367 Pull requests	5 / month
EIPs	Arachnid	EIP-615: S the EVM - IPs / EIPS /	2 / month
EIPs	ProgPow	EIPs prog	5 / month
EIPs	eip-2	EIP-2028: reduction	
EIPs		EIP 1013	
EIPs		EIP 1014: Uniformity Betw	
EIPs		Run spelling checks on CI (#2040)	
EIPs		Ensure hardfork metas depend on eachother	
EIPs		Fix typo (#1770)	
EIPs		Remove Deferred from the status list (#2162)	
EIPs		ERC20 metadata extension (#1046)	
EIPs		Token metadata json schema (#1047)	
EIPs		Arithmetic overflow detection for the EVM (#1	
EIPs		Mark Constantinople and all its references Fin	

Ethereum Core Devs Meeting #65 [2019-07-18]

Zoom Meeting ID: 478-113-395

Recording

nick

Danno Ferrin

Louis Guthmann

James

Trenton Van Epps

Adrian Sutton

Pooja Ranjan

Alex Vlasov

Martin Holst Swende

Pawel Bylica

Alexey Akhunov

Wei Tang

Tim Beiko

Alex Beregzaszi (axic)

Casey Detrio

Alex G

Martin Ortner

Leave Meeting

LIVE

# Moving Forward

- 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

CONSENSYS  
**Diligence**

**Thank You**

**Get in touch with us:**

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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://www.iso.org/committee/6266604.html>
  
- **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>