

# **Censorship Resistance: A Framework for the Social Layer of Ethereum**

## ***Project Abstract***

Most research into censorship resistance is focused on protocol structure and mechanism design. However, the final resort for censorship resistance in any blockchain is “Layer Zero” – the social layer of users, developers, validators and the community who collectively decide which clients to run, which dApps to use and which blockchain is legitimate when hard forks happen.

In this project, I intend to study the social layer of Ethereum from the perspective of censorship resistance and develop a research framework outlining different kinds of censorship and appropriate community responses (including the nuclear option of a hard fork). This framework could then be used by the wider Ethereum community as the basis for discussing a coherent, unified response to a censorship attack on the network.

## ***Objectives***

A hard fork to slash censoring validators is the nuclear option to defend Ethereum’s integrity. While there has been discussion about this in social media (particularly in relation to the Tornado Cash OFAC sanctions), the Ethereum ecosystem and community will benefit from in-depth research into the issue, and the development of a conceptual framework for discussion of the issue with a view to reaching community consensus.

In other words – I intend to produce a research paper setting out different kinds and levels of censorship and discussing the appropriate response to each level of censorship, up to and including the nuclear option. This will not be a technical document, but rather an exploration of community attitudes and reactions to different levels of censorship and practical responses to such censorship attacks that the wider community will support.

I will consider this project to be a success if my paper adds to the conversation about Ethereum’s censorship resistance, informs the community about the practical responses available, and helps to develop an informed consensus about how to respond to censorship attacks.

## ***Outcomes***

This framework could then be the basis of a more structured discussion by the community in an attempt to reach consensus on a controversial issue in advance. This will not only be preferable to having this discussion in a panic after a censorship attack occurs; a strong and public community commitment to slashing censoring validators in clearly defined circumstances will act as a deterrent to any potential attack in itself.

The focus of this project is on presenting a research framework to catalyze such a community discussion with a view to reaching consensus as a community.

### ***Grant Scope***

I will research the Ethereum community views and attitudes towards censorship, censorship resistance and various potential options to respond to censorship attempts. The output will be a research paper.

### ***Project Team***

I will be the only person working on this project. I intend to spend 8-10 hours per week, or about 30-40 hours per month on it.

### ***Background***

I am a lawyer with over 20 years' experience. In addition to my Master's dissertation, I've published a number of academic legal articles, and authored an Award in a large international arbitration dispute that was upheld by the High Court in England & Wales.

I became involved with Ethereum in 2017, and I've been advising startups in the Ethereum ecosystem since 2018, initially as a lawyer and more recently as a strategic advisor and community member.

Among others, I was also active in DAO governance with the BZRX/OOKI project and one of the largest DAO voters, as well as writing the detailed compensation proposal to BZRX hack victims that was eventually passed by the DAO in 2021.

I've also been a speaker at EthCC, EDCON and other conferences in the past. See for example:

<https://www.youtube.com/watch?v=AlsoGA-FRgM>

### ***Methodology***

I will review the social media discussion around censorship resistance, the articles and podcasts on the subject, and conduct interviews in person or online of various key figures and write a paper on that basis.

### ***Timeline***

I intend to complete the project in 3-6 months and produce a research paper that will be freely available on my website. Ideally, I will complete it in time to present my conclusions at Devcon 2023.

### ***Budget***

I am seeking a grant of US\$30,000 for this project.

This will be used partly for my living and family expenses (since I will be giving up a significant amount of time from my legal practice to devote to this project) and to fund some limited travel as required to meet and interview key figures and thought leaders in the community.

**Badri Natarajan**