

Client diversity for the consensus layer is currently a major problem with Prysm having [~70%](#) of all staked eth.

As described [here](#), slashing (when a staker goes down) is directly proportional to the number of stakers that go down alongside. So if there's a bug in one client implementation, all the stakers using that client will go down and result in a greater amount being slashed.

Currently, the incentive to switch from Prysm and use a minority client is to avoid the possibility of losing a greater % of your stake when things don't go to plan (a rare occurrence ideally). This might not be an important enough reason for stakers to switch since switching requires some effort. However, how about we flip the incentive mechanism and reward people for using a minority client. A staker's reward can be inversely proportional to the number of stakers using that particular client. When stakers using a majority client see an easy way to increase their APY, they will be more motivated to switch clients and a market equilibrium can be reached much more quickly.

This mechanism would require the following 2 things:

1. A tamper-proof way to determine which client is being used by a staker.
2. A mathematical formula to determine how the reward will vary depending on the client you are using. This can be similar to the quadratic inactivity leak formula being used to calculate the amount to be slashed when a staker's node goes down.

Interested to receive some feedback regarding the feasibility of such an approach and how we could come up with a tamper-proof way of determining a staker's client.