

mikeneuder:

Top-of-Block Payments

There is no need to break the separation of concerns with complicated payment systems. Payment to proposers in ePBS are inherently a consensus construct and if builders are staked in the BeaconChain then there's trivial mechanisms to only allow bids that are collateralized and the same consensus protocol can take care of the payment.

One reason to move this to the EL is to attend to the interest of builders to not be staked and only put up the stake when they find a successful MeV opportunity. If we do require builders to be heavily staked then this whole construct does not need to happen.

If we stake the builders then at the same time invalidates point 3 and point 5 in section 4. Rendering relays essentially useless except for out-of-protocol constructs like bid cancellations and the such, which is absolutely fine if they decide to continue providing this service and proposers/builders continue using.

Lower latency connection

Why is this even relevant in a system with registered builders? If builders are registered in the beacon chain then there's no gain in having a faster connection to the proposer, except perhaps in bid broadcasting, which they can still do via a relay if they so wish.

I would agree with most of what is said in this post if the construct does not require the builders to be staked. But as soon as we require builders to put a lot of capital in the system, I believe most of the complexities detailed here completely disappear, while at the same time the network gains (even if an epsilon extra) security.