

We're considering adding a feature to the sequencer that allows clients to submit a bundle of transactions, that is, a set of multiple transactions, in a single submission. The sequencer would promise to include those transactions consecutively in its ordering, with no other transactions interleaved among them.

The sequencer already sequences transactions in the order they arrived at the sequencer, so the result would be as if all of the transactions in the bundle arrived consecutively. The bundles wouldn't get earlier or later position in the sequence by virtue of being bundles. We wouldn't guarantee that the transactions in a bundle will end up in the same block, only that no other user transactions will be between them.

We think this bundle functionality is useful for some use cases, for example to carry out a sequence of DeFi transactions that rely on an assumption that no other transactions intervene. It also makes some kinds of account abstraction approaches easier to implement.

Of course we would limit the total size of bundles, or the total gas consumed by a bundle, to some reasonable limit.

We're interested in hearing thoughts on this. Would you use it? Are there any constraints we should take into consideration?