Finality and settlement

Dr Alexander Ressos, TEP
Of Counsel, KGP Legal LLC
Attorney-at-Law (Switzerland and Germany), Solicitor (England & Wales and Hong Kong)

Finality is the point after which a transaction cannot be reversed by the protocol's own rules. Bitcoin offers probabilistic finality. Each new block makes reversal of an earlier block exponentially harder, which is why exchanges wait for six confirmations, roughly one hour, before crediting a deposit. Ethereum since its 2022 transition to proof of stake offers economic finality after two epochs, about thirteen minutes, after which reversal would require destroying at least one third of all staked ETH. Permissioned ledgers can offer deterministic finality within seconds because a known set of nodes signs each block.

The legal question is when settlement has occurred. Under the Swiss Financial Market Infrastructure Act (FinMIA; FinfraG), a DLT trading facility must define the point of settlement finality in its rules, and the Federal Council's DLT Ordinance requires the facility to ensure that transfers are irrevocable once that point is reached.[1] The point is not academic. If a Swiss custodian credits a client with Bitcoin after one confirmation and the block is later orphaned, the client has a credit on the custodian's books and no coin on the chain. Who bears the loss depends on the custody agreement, which should say so.

Client question

"Our Singapore exchange credits customer deposits instantly on an internal ledger. Does that create a problem?" It creates two. First, until the chain transaction is final the exchange carries a reversal risk that it should price or disclaim in its terms. Second, an instant internal credit followed by instant internal trading means the exchange is extending the customer the use of value it may not yet hold, which comes close to the credit facilities that MAS Guidelines PS-G03 prohibit for retail customers. Set the confirmation threshold in writing, disclose it, and align the internal credit to it.

Notes

1. Financial Market Infrastructure Act, SR 958.1, Art. 73a ff. (DLT trading facilities); Ordinance on Financial Market Infrastructures, SR 958.11, Art. 58e ff. as amended by the DLT Ordinance of 18 June 2021, AS 2021 400. See Part E, Chapter V.

Copyright © 2026 Dr Alexander Ressos, TEP – Of Counsel, KGP Legal LLC. SingaporeIQ is an information website and gives no legal advice. For Singapore law advice through KGP Legal LLC, please write to alexander.ressos@kgplegal.com.sg