DLT INFRASTRUCTURE PLATFORMS

edition Q3 2019

BEST AMONG PEERS

WORST AMONG PEERS

PLATFORM NAME	COMMENTS	CONSENSUS MODE	CONTROL ON PARTICIPATING NODES	MARKET SIZE, $B	FUNDS RAIZED, $M	DATA CONFIDENTIA-LITY	TRANSACTIONS/ SECOND PER SHARD	APPROACH TO "SCALING TO INFINITE"	VALIDATION TIME	SUPPORT OF SMARTCON-TRACTING	COST OF EXECUTION	MATURITY OF THE PLATFORM	CURRENCIES AVAILABLE ON-CHAIN	DEVELOPMENT TEAM ROBUSTNESS	DEVELOP-MENT ECOSYSTEM
ETHEREUM (pre-PoS upgrade)		PoW	Public distributed ledger	30.8	18	Not easy - to be engineered specifically	1x	Sharding from a "Beacon-chain"	10s	Built-in, Turing-complete	Gas, market price; can get expensive	Available	All sorts	State-of-the-art and well funded	Largest existing
EOS	Criticized for not being decentralized	dPoS	Pseudo-centralized; inconvenients from both world	5.3	100	Not easy - to be engineered specifically	100x	Sharding	Around 2 blocks per second	Built-in, Turing-complete	Free; paid through dilution over time	Available	To be introduced by ad hoc bank; no technical problem	Important and well funded	Large. And EOS's smartcontract code is non specific
LIBRA		PoS	Permissionned, governed by corporations	N/A	N/A	Transparent	1000	Not envisionned	1s	Built-in, Turing complete	Zero; consortium rewarded by interest on collateral	Yet to be deployed	Libra native	Nascent	Nascent
TRON	Focus on "dWeb"; based on Ethereum logic, with 27 elected nodes every 6h	dPos	Pseudo-centralized; inconvenients from both world	2.2	70	Not easy - to be engineered specifically	1000	Probably some sort of sharding (a priori)	Around 2 blocks per second	Built-in, Turing-complete	Minimal	Available	To be introduced by ad hoc bank; no technical problem	Heavily criticized for not being able to deliver	Smartcontracts in java (~not specific)
CARDANO		PoS	Permissionning is possible	2.0	62	Not easy - to be engineered specifically	100x	Sharded	Adjustable in Ouroboros, never lower than 0.5s	Built-in, Turing-complete	n/a	Yet to be deployed	To be introduced by ad hoc bank; no technical problem	Research-oriented, technically excellent	Decent
STELLAR		Federated Byzantine Agreement	Public distributed ledger	2.0	3	Not easy - to be engineered specifically	1000x	Not debated yet; sharding not a priority due to already decent throughput rate	3s	Not Turing-complete	Minimal, just to prevent network flooding	Available	To be introduced by ad hoc bank; no technical problem	Decent	Decent
NEO	Same family as Ethereum	Delegated Byzantine Fault Tolerant	Public distributed ledger	1.2	100	Not easy - to be engineered specifically	100x	Probably some sort of sharding (a priori)	10s	Built-in, Turing-complete	Gas principle	Available	Finance oriented, assets a priori on-chain	Chinese	Non-specific programming languages
IOTA	Direct Acyclic Graph	Gossip of gossip, + currently authority by IOTA foundation; ultimately PoW	Public distributed ledger	1.1	N/A	Not easy - to be engineered specifically	1000x	In DAG structure, more participants, higher security and throughput	<1s	Not supported natively	n/a	Available	Just IOTA as long as no smartcontracting can be agreed upon	Controversial opinions expressed about the team and the technology	Modest
COSMOS		Byzantine Fault Tolerant	Permissionning is possible	1.0	17	Not easy - to be engineered specifically	100x	Specific architecture of sharding	<1s	Not supported natively	n/a	Maturing	To be introduced by ad hoc bank; no technical problem	Decent	A number of real projects use it
TEZOS	Focus on on-chain governance	LPoS	Public distributed ledger	0.8	232	Some expressed plans to implement recursive SNARK	1,000	Recursive SNARKs... To be demonstrated	60s	Built-in, Turing-complete	n/a	Still developing, especially the smart-contracting environment	To be introduced by ad hoc bank; no technical problem	Contradictory comments; lots of mess with the Tezos Foundation	Own language: Michelson
QITUM	Implementation of a VM based on BTC's like UTXO logic	PoS	Public distributed ledger	0.5	17	Not easy - to be engineered specifically	10,000	Unknown	15s	Built-in, Turing-complete	Gas, market price; can get expensive	Available	To be introduced by ad hoc bank; no technical problem	Modest	Specific Qitum smart contract language
VECHAIN	Thought from the beginning for traceability and supply chain	In between Proof of Authority and Proof of Stake	Public distributed ledger	0.4	N/A	Not easy - to be engineered specifically	100x	Probably some sharding (not specified) - but already good scalability in basis	10s	Built-in, Turing-complete; specific logics available serving supply-chain use cases	Probably minimal	Available	To be introduced by ad hoc bank; no technical problem	Modest	Modest
NANO (ex-RAILBLOCKS)	Direct Acyclic Graph	Vote of "representative" nodes on gossips of gossips	Public distributed ledger	0.2	N/A	Not easy - to be engineered specifically	1000x	In DAG structure, more participants, higher security and throughput	4s	Not supported natively	n/a	Available	Just NANO as long as no smartcontracting can be agreed upon	Decent	Modest
ZILLIQA		PoS	Public distributed ledger	0.1	1	Not easy - to be engineered specifically	100x	Specific architecture of sharding	60s	Not Turing-complete	Likely to be gas principle	Available	To be introduced by ad hoc bank; no technical problem	Decent	Unknown
CONCORDIUM		Proof of Stake (with some refining on incentivation)	Permissionned	N/A	N/A	Yes, promise	100x	Unknown, probably sharding	Promise to be fast	Built-in, Turing-complete, and promise to make them upgradable	Gas principle (pre-calculated)	Yet to be deployed	To be introduced by ad hoc bank; no technical problem	A priori good	Just starting; own language Oak
CORDA		Relies on ad hoc Notaries identified beforehand	Access to the network is public, but records are private	N/A	N/A	Yes	1000x	Naturally sharded as groups of nodes can talk directly	~2s	Built-in, Turing-complete	Free in principle; cost of running nodes and remunerating notaries	Available	Finance oriented, assets a priori on-chain	A priori good	A number of real projects use it
DFINITY	"Public decentralized cloud hosting next gen of software and services"	Proof of Stake	Public distributed ledger	N/A	167	Not easy - to be engineered specifically	1000	Unknown, probably sharding	120s	Built-in, Turing-complete	Gas principle	Available	To be introduced by ad hoc bank; no technical problem	A priori brilliant minds contributing	Just starting
ETHEREUM (post-PoS upgrade)		PoS	Public distributed ledger	N/A	N/A	Not easy - to be engineered specifically	1000	Sharded	16s	Built-in, Turing-complete	Gas; price is manageable; if too expensive then new shard created	Yet to be deployed	All sorts	State-of-the-art and well funded	Largest existing
HASHGRAPH	Direct Acyclic Graph	Gossip of gossip + "Virtual voting", -> Asynchronous Bizantine Fault Tolerance	Only tested in permissionned environments so far	N/A	118	Not easy - to be engineered specifically	500000	In DAG structure, more participants, higher security and throughput	n/a	Probably under development; probably a challenge to make it supported	n/a	Still not launched	To be introduced by ad-hoc bank; no tech. problem once smartcontracting	Decent	Modest
HYPERLED-GER FABRIC		Permissionned voting-based consensus	Permissionned	N/A	N/A	In principle yes; may hinder the functionalities	1000x	Unknown	<10s	A priori yes, but no actual obvious example implemented...	Free in principle; cost of running nodes	Available	Not architectured to propose it; all projects separated	IBM & Linux foundation	IBM (with pros and cons)
QUORUM	Banking-oriented; JP-Morgan complexification of Ethereum	Ethereum's PoW on validating hashes of messages passed in private	Public network to pass and record informations; private data via another chanel	N/A	N/A	Yes	1x	Sharding, probably like Ethereum	10s	Built-in, Turing-complete	Gas principle	Available	Finance oriented, assets a priori on-chain	Able to implement Ethereum's developments	Ethereum's

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