

DLT INFRASTRUCTURE PLATFORMS

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PLATFORM NAME	COMMENTS	CONSENSUS MODE	CONTROL ON PARTICIPATING NODES	MARKET SIZE, \$M (updated Apr 2020)	DATA CONFIDENTIALITY	TRANSACTIONS/SECOND PER SHARD	APPROACH TO "SCALING TO INFINITE"	VALIDATION TIME	SUPPORT OF SMART CONTRACTING	COST OF EXECUTION	MATURITY OF THE PLATFORM	CURRENCIES AVAILABLE ON-CHAIN	DEVELOPMENT TEAM ROBUSTNESS	DEVELOPMENT ECOSYSTEM
ETHEREUM (pre-PoS upgrade)		PoW	Public distributed ledger	17,600	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; incentives from both world	2,300	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
TRON	Focus on "Web3", based on Ethereum logic, with 27 elected nodes every 6h	dPos	Pseudo-centralized; incentives from both world	1,200	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)
TEZOS	Focus on on-chain governance	LPoS	Public distributed ledger	1,400	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 enforcement	To be introduced by ad hoc bank; no technical problem	Contradictory comments; lots of mess with the Tezos Foundation	Own language: Michelson
CARDANO		PoS	Permissioning is possible	1,000	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	970	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	340	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	Direct acyclic graph; gossip of gossips	Ultimately public distributed ledger; temporary centralized coordinator	600	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	Permissioning is possible	900	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
ONTOLOGY	Based on NEO	Delegated Byzantine Fault Tolerant	Public distributed ledger	440	Not easy - to be engineered specifically	4000	Sharding, probably like Ethereum	15s	Built-in, Turing-complete	Gas principle	Available	To be introduced by ad hoc bank; no technical problem	Decent	Non-specific programming languages
VECHAIN	Thought from the beginning for traceability and supply chain	In between Proof of Authority and Proof of Stake	Public distributed ledger	120	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
QTUM	Implementation of a VM based on BTC's like UTXO logic	PoS	Public distributed ledger	350	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 Qtum smart contract language
NANO (xrp-BALBLOCKS)	Direct Acyclic Graph	"Vote of representative" nodes on gossips of gossips	Public distributed ledger	70	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	45	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
LIBRA		PoS	Permissioned, governed by corporations	N/A	Transparent	1000	Not envisioned	1s	Built-in, Turing complete	Zero; consortium rewarded by interest on collateral	Yet to be deployed	Libra native	Nascent	Nascent
CONCORDIUM		Proof of Stake (with some refining on incentivization)	Permissioned	N/A	Yes, promise	100x	Sharding	Combination of PoS and BFT allowing for fast confirmation	Built-in, Turing-complete, and promise to make them upgradeable	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		Proof of Stake (with some refining on incentivization)	Permissioned	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	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 combatting	Just starting
ETHEREUM (post-PoS upgrade)		Proof of Stake	Public distributed ledger	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	Direct acyclic graph; gossip of gossips	Only tested in permissioned environments so far	N/A	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
HYPERLEDGER-FABRIC	Permissioned voting-based consensus	Permissioned	Permissioned	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 architected to propose it; all projects separated	IBM & Linux foundation	IBM (with pros and cons)
QUORUM	Banking-oriented; JP-Morgan complication of Ethereum	Ethereum's PoW with validating hashes of messages passed in private	Public network to pass and record information; private data via another channel	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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