



Distributed Ledger Technology (DLT) and Crypto Assets Glossary

A Glossary of Terms Used in the ISSA DLT Papers, March 2022



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Foreword

DLT and Crypto assets are still a relatively novel area. The ISSA DLT Working Group (WG) has created and continues to create new thought leadership and reports on this emergent technology and product set.

The glossary that ISSA has used continues to develop but rather than add the same material to each report, the DLT WG has decided to centralize the Glossary on the ISSA website so that it can be a standalone reference material for use with ISSA papers as well as for interested parties who need a comprehensive glossary of terms used within the market.

It will be updated as new terms are identified and used by ISSA.

Target Audience

This paper is addressed to market intermediaries, such as custodian banks, clearers, brokers as well as to asset managers, issuers, industry associations, financial market infrastructures specifically as CSDs, exchanges and CCPs, regulators, FinTech providers and those interested in DLT and Crypto assets.

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GLOSSARY OF TERMS USED IN ISSA DLT PAPERS

Application Programming Interface (API)	A set of sub-routines definitions, communication protocols and tools for sharing data between different systems.
Account-based CBDC systems	Distribution of the CBDC will involve the transfer of a claim recorded on one account to another account at the CB.
Asset-backed Tokens	Tokens backed by holdings of underlying assets. See 'Digital non-native (or asset-backed) tokens'.
Asset Tokens	These tokens represent assets such as participations in real physical underlyings, companies, earnings streams or entitlements to dividends or interest payments. In terms of their economic function, the tokens are analogous to securities.
Bitcoin	A crypto-currency issued on the first public blockchain network created in 2009 that aims to compete with fiat currencies as a means of exchange. It has no intrinsic value, asset backing or links to other projects, and is not backed by any authority such as a central bank. Bitcoins are not securities, but commodities (at least within the USA).
Blockchain	A database that places records of transactions in blocks on a DLT network. Each block is linked (or 'chained') to the previous block, using cryptographic signatures that make the transactions they contain immutable. This allows blockchains to operate as distributed ledgers, which can be shared with anyone without fear that the data they contain will be manipulated.
Central Bank Digital Currency (CBDC)	A fiat currency issued in digital form, backed by a central bank.
Crypto Asset	Includes payment tokens (central bank digital currency, stablecoins and crypto-currencies), securities tokens (digitally native or asset-backed) and utility tokens. A crypto-asset shares the characteristics of a digital asset (see below) and, in addition, allows for issuance, termination, ownership and transfer of ownership to be guaranteed via cryptography.
Crypto-Currency	Often used as a synonym for payment or exchange tokens to distinguish them from utility or securities tokens.
Digital Asset	An asset in binary form that comes with a right to use, that has clearly defined notions of issuance, termination, ownership and transfer of ownership, a definable monetary value, which may be between specific counterparties and which may be based on a right to use or may be based on the principle of limited supply. A digital asset is not necessarily analogous to a security.
Digital Asset Securities	Digital assets which are securities.

Digital Token	A transferable unit generated within a distributed network that tracks ownership of the units, usually through the application of blockchain technology.
Digital Currency	A currency which does not exist in physical form.
Digital Financial Asset	A term used to distinguish financial assets in digital form from other assets, such as images, videos and texts that are also rendered in digital form.
Digital Native Tokens	Digital assets that originate on a distributed ledger.
Digital Non-native (or Asset-backed) Tokens	Assets represented digitally on a distributed ledger.
DLT Asset	An asset transacted on a Distributed Ledger Technology (DLT) platform.
DLT System	A system of electronic records that enables independent entities to establish a consensus around a shared ledger without relying on a central authority to provide or authenticate the authoritative version of the records. The consensus is established by the authoritative ordering of cryptographically validated ('signed') transactions made persistent by replicating the data across multiple nodes and tamper-free by linking them via cryptographic hashes. The shared result of the consensus process serves as the authoritative version of the records.
DvP1 (Delivery versus Payment model 1)	A securities settlement mechanism that links a securities transfer and a funds transfer in such a way as to ensure that delivery occurs if and only if the corresponding payment occurs. DvP1 typically settles securities and funds on a gross and obligation-by-obligation basis, with final (irrevocable and unconditional) transfer of securities from the seller to the buyer (delivery) if and only if final transfer of funds from the buyer to the seller (payment) occurs. [Source: BIS, 16 Jun 2015]
DvP2 (Delivery versus Payment model 2)	A securities settlement mechanism that links a securities transfer and a funds transfer in such a way as to ensure that delivery occurs if and only if the corresponding payment occurs. DvP2 typically settles securities on a gross basis, with final transfer of securities from the seller to the buyer occurring throughout the processing cycle, but settles funds on a net basis, with final transfer of funds from the buyer to the seller occurring at the end of the processing cycle (Source: BIS, 16 Jun 2015)
Electronic Currency	Synonymous with digital currency.
Ethereum	A public blockchain network launched in 2016 and a crypto-currency that aims to compete with fiat currencies as a means of exchange. It has no intrinsic value, asset backing or links to other projects and is not backed by any authority such as a central bank. Ethereum is not a security but a commodity (at least within the USA).
Fiat Currency	Domestic legal tender that is issued by governments rather than backed by a physical commodity such as gold.

Fork	A 'hard fork' can be defined as a software change to the DLT protocol that introduces a permanent split between the new and the old protocol, making them incompatible (backward incompatible). A 'soft fork' can be defined as a change to the DLT software that is 'backward compatible' meaning that unlike 'hard forks', there is no splitting or branching out of the blockchain.
Fungible Token	A token that is interchangeable with an identical token and divisible into smaller units.
Issuing and Paying Agent (IPA)	An Issuing and Paying Agent ensures delivery of the security to investors having received the subscription amount and the delivery of that amount to the issuer. During the lifecycle of the security coupons or dividends can be paid to the investors and the IPA will again ensure that these are paid on behalf of the issuer. The same occurs at redemption/maturity of the security.
Litecoin	A crypto-currency that aims to compete with fiat currencies as a means of exchange. It has no intrinsic value, asset backing or links to other projects and is not backed by any authority such as a central bank.
Non-fungible Token	A token that has unique characteristics which make it neither interchangeable nor divisible into smaller units. CryptoKitties is an example.
Repo Markets	A repurchase agreement is a short-term loan, collateralized with securities, with an agreement to buy back (or repurchase) the securities. Typically, securities are exchanged for cash and most often the collateralized securities are high grade government issued debt instruments. Repo transactions are conducted either in a bi-lateral manner between the counterparties (or) in tri-party basis where a clearing bank or agent acts as intermediary between the counterparties. The tri-party agent manages the collateral selection, substitution, valuation, margin management and life-cycle management for a fee.
Payment Tokens	These are synonymous with crypto-currencies or stablecoin and have no further functions.
PMI	Payments market infrastructure, such as the Real-Time Gross Settlement Systems (RTGSs), operated by central banks or the Automated Clearing Houses (ACHs), used by commercial banks to net payments prior to submission to an RTGS.
Securities Lending Markets	A securities lending transaction involves collateralized lending of specific securities by the owner to another party in exchange for a fee. Cash or other securities are generally used as collateral. The securities lending transaction allows owners to earn additional return on long term assets. Custodians play a significant role in securities lending by acting as securities-lending agents by providing services to asset owners looking to lend their securities.
Securities Token	A token giving the holder an entitlement to underlying assets, companies, earnings streams, dividends, interest payments or other tokens. They are sometimes treated as securities.
Smart Contract	Self-executing computer code that performs pre-defined tasks based on a pre-defined set of criteria or conditions. Smart contracts cannot be altered once deployed, since only this can guarantee faithful fulfilment of contractual obligations. A smart contract could, for example, be used to instruct a regular interest payment on a bond to be made to registered investors.

Stablecoin	A class of crypto-currency designed to eliminate the price volatility of crypto-currencies by backing them with real assets, fiat currencies or a mixture of both. A SC whose price reference is the US Dollar, for example, would be backed 1:1 by US Dollars in a custody account. Investors redeeming the SC would receive one US Dollar for each SC.
Token-based CBDC Systems	The digital version of cash. Users would be able to withdraw digital tokens from banks and they would be exchanged outside of the central bank's accounts.
Token versus Token (TvT)	Entirely digital transaction settlement on a DLT network in which the exchange of value is made between an asset-backed or digital native token and a payment token.
Tokenised securities	A term used to distinguish tokens regulated as securities from tokens which are not regulated as securities. However, they can encompass asset classes that are not generally securitised, such as fine art and real estate.
Utility Tokens	Tokens which are intended to provide digital access to a current or prospective application or service.
Virtual currency	Synonymous with crypto-currency
Wholesale CBDC	CBDCs designed for use among financial intermediaries only