

**Settlements** 



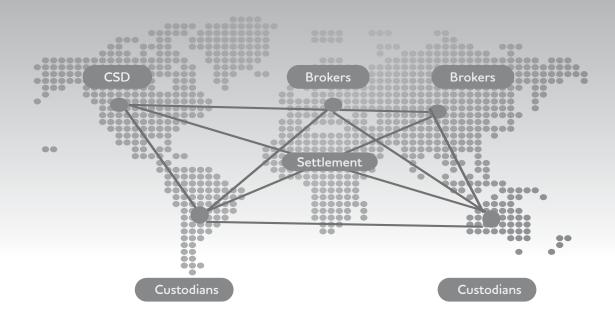


# Background

Globally, OTC trade settlements are typically characterized by a host of challenges that include delays, operational inefficiencies due to involvement of multiple intermediaries, continuous exchange of messages between these intermediaries and higher transaction costs. This problem is further accentuated by duplication of information in siloed, legacy platforms and a lack of access to real-time changes in trade status thereby leading to a need for daily reconciliation routines and manual intervention. Importantly, delays in settlement result in increased counterparty risk and in collateral being locked up to service margin obligations arising from unsettled trades. Most regulators are therefore pushing for settlement reforms, including shortened settlement cycles, mandating CCPs, and increased transparency for all stakeholders.

## Re-imagining Trade settlement on Blockchain

These challenges can be addressed leveraging blockchain technology, by setting up a private, permissioned Blockchain ecosystem which allows market participants to operate as nodes. Such an ecosystem can be set up and run by Market Infrastructure providers such as the Stock Exchange/Central Securities depository/Central banks as they can be natural providers of such an eco-system. Quartz Settlements facilitates Delivery versus Payment (DvP) settlement of tokenized assets held on the ledger. The solution comes with Smart Contracts that enable validation and matching of off market trades as well as real-time, final, irrevocable settlement of these assets on the Quartz blockchain ledger.



#### **Business Benefits**

- Ability to process and settle transactions real time (T+0)
- Increased transparency and improved Settlement efficiencies
- Potential to disintermediate intermediaries, leading to simpler process flows, lower costs
- Reduced systemic risk, as the distributed nature of Blockchain eliminates single point of failure
- Eliminates data duplication and hence reduces reconciliation efforts with market participants
- Elimination of messaging overheads, real time access to holdings and transactions

## The Quartz Advantage

- Ensures data integrity with cryptographic encryption of data, making it immutable
- Quartz Gateway provides easy connectivity to the blockchain ecosystem, thus facilitating collaboration
- Administration and Monitoring of the ecosystem through the Command Center
- Restricted access to ensure greater data security, combined with robust Data privacy features

#### About Quartz

Quartz provides foundational technology, tools and business components that harness the power of next-gen technologies including DLT, AI/ML for organizations across varied industries. Quartz caters to organizations across Industry segments including Financial Services, Banking, Supply Chain, Energy & Utilities and eGovernance. Backed by awards from the Asian Banker (Best Fraud Prevention Technology Implementation 2023), Financial Technology Forum (Best New Post Trade Solution of the Year 2022), Asset Servicing Times (Outstanding Innovation Award 2022) and recognition from Analysts (ranked #1 Best Performing Fraud Management Solution by IBS Intelligence 2022) Quartz can help organizations operate at the forefront of technology innovation.

To know more about Quartz, please write to us at tcs.quartz@tcs.com or visit our website https://www.tcs.com/quartz

#### About Tata Consultancy Services Ltd. (TCS)

Tata Consultancy Services is an IT services, consulting and business solutions organization that has been partnering with many of the world's largest businesses in their transformation journeys for over 56 years. Its consulting-led, cognitive powered, portfolio of business, technology and engineering services and solutions is delivered through its unique Location Independent Agile<sup>™</sup> delivery model, recognized as a benchmark of excellence in software development.

A part of the Tata group, India's largest multinational business group, TCS has over 601,000 of the world's best-trained consultants in 55 countries. The company generated consolidated revenues of US \$29 billion in the fiscal year ended March 31, 2024, and is listed on the BSE and the NSE in India. TCS' proactive stance on climate change and award-winning work with communities across the world have earned it a place in leading sustainability indices such as the MSCI Global Sustainability Index and the FTSE4Good Emerging Index. For more information, visit www.tcs.com