Current Process and Challenges

The impact of digital technologies and innovation in payments processing is forcing Banks to adopt new technologies or risk falling behind competitors, and disruptive fintechs. The existing Payments landscape involves multiple agents, high transaction costs, and delays in completing a remittance transaction. There is a lack of transparency with respect to the costs and deductions made for completing a transaction as well as huge challenges with reconciliation, stemming from a lack of real-time information on status of the payment transaction as it traverses systems spanning various intermediaries.

These challenges translate into a poor experience – for banks involved in the transaction, as well as end customers and businesses, which are impacted as a result of longer payment processing cycles.

Cross border remittances leveraging DLT based ecosystems

The Quartz Cross Border Remittances solution enables banks/payments systems to connect to newer DLT based payment infrastructures (like RippleNet) for processing of Cross border FX remittance transactions. The Quartz Gateway seamlessly connects the TCS BaNCS Payments system to the blockchain based Payments platform using APIs, and supports services related to FX Quote finalization and debit/credit of beneficiary accounts. Leveraging this approach, existing/core systems operational at banks/ other payment institutions need not undergo changes in connecting to the blockchain platform, as this complexity is absorbed by the Quartz Gateway.
**Business Benefits**

- Near Real time settlement of Remittance instructions
- Significantly lower charges - elimination of FX conversion/agent charges through disintermediation
- Instantaneous tracking of transaction status
- Elimination of reconciliation overheads; Accounting entries can be performed directly in the Core systems, based on status updates
- DLT based payment infrastructure / ecosystems can reduce liquidity needs for banks/ financial Institutions, in managing Cross Border remittances - a huge benefit for the treasury department
- Audit Trail for a complete history of transactions

**The Quartz Advantage**

- API based connectivity to DLT based Payment Infrastructures as well as to other blockchain platforms
- Platform aware - Quartz Gateway is platform aware and ensures simultaneous connectivity to multiple blockchain platforms. For example, Rulebook Schemas provided by DLT based Payment Infrastructure platforms are pluggable to the Gateway thus providing flexibility and cohesive integration capabilities with such newer payment infrastructure ecosystems.
- Service Orchestration features - allows the entire Cross border FX payments lifecycle to be managed in the Core Banking/Payments system

---

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

Tata Consultancy Services is an IT services, consulting and business solutions organisation that has been partnering with many of the world’s largest businesses in their transformation journeys for the last fifty years. TCS offers a consulting-led, Cognitive powered, integrated portfolio of IT, Business & Technology Services, and engineering. This is delivered through its unique Location Independent Agile delivery model, recognised as a benchmark of excellence in software development.

**About Quartz Blockchain Solutions**

Quartz Blockchain solutions comprise intelligent Smart contract development kits, and integration solutions to enable development of high quality code for different Blockchain technologies. They help integrate existing solutions easily with ecosystems / industry networks, and enable the deployment of the solution over a robust enterprise class architectural framework called the Quartz Foundation. Quartz also comprises a set of ‘Designed for blockchain’ business solutions across industries, which enable blockchain-driven transformation.