PAYMENT SYSTEM OPERATOR SOLUTION

Centralised clearing and settlement for all payment streams

The Traderoot Payment System Operator product features:

- Clearing between participants for multiple payment streams
- Settlement windows, transaction rules and fee rules for each payment stream
- Liquidity dashboards and controllers
- End-to-end reconciliation with extended mark-offs
- Query and dispute management

Messaging protocols

The messages exchanged by the Traderoot PSO solution use the appropriate protocol for each participant and payment stream.

They can be translated into any variety of ISO 8583, ISO 20022, PACS 180 or Base 24 protocols.

The solution integrates with external networks such as Mastercard, Visa, UPI, American Express, Diners Club International and RCSO – TCIB.

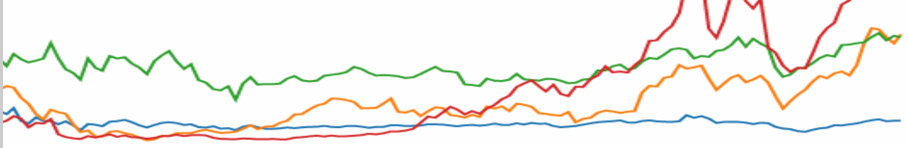
A SOLUTION THAT ENABLES REGIONAL CLEARING OPERATORS (RCOs) AND AUTOMATED CLEARING HOUSES (ACHs) TO PERFORM CLEARING, RECONCILIATION AND SETTLEMENT OF DOMESTIC, REGIONAL AND INTERNATIONAL PAYMENT STREAMS

The Traderoot PSO solution is a tried and tested solution for Automated Clearing Houses (ACHs) and Regional Clearing Operators (RCOs) that need to perform clearing and settlement between participating institutions for multiple payment streams. Each payment stream can be transmitted, processed, cleared and settled according to its own set of rules, regardless of whether the stream is real-time or based on batch files.

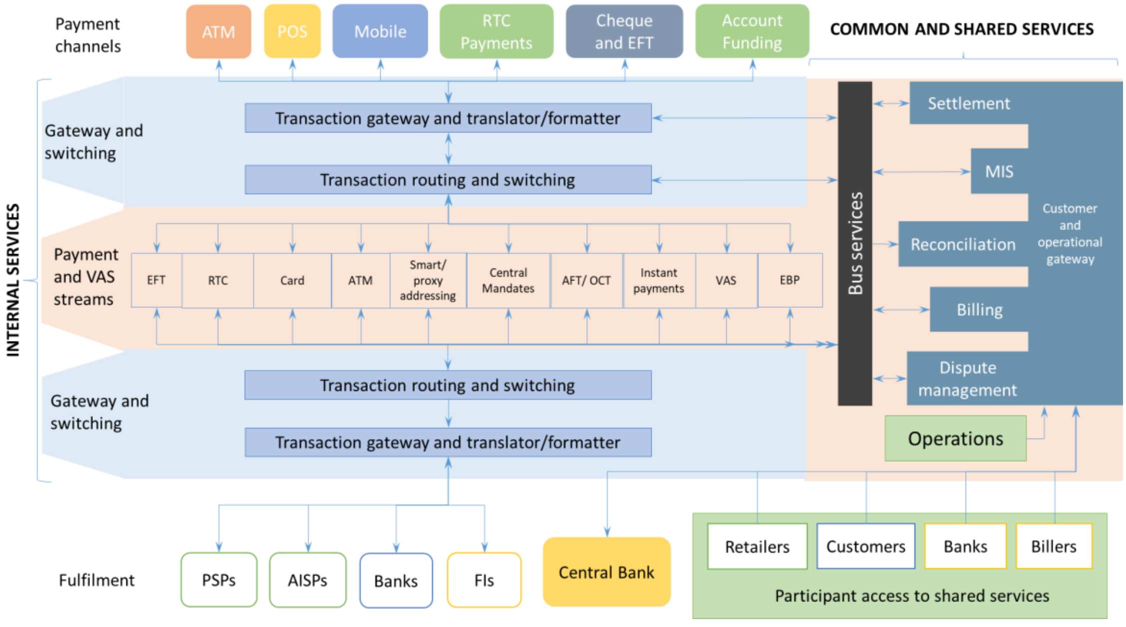
For example, this solution can provide segregated, parallel clearing and settlement for Point-of-Sale card transactions, ATM transactions, interoperable wallets, cash and cheque transactions and all types of EFT transactions, including debit orders and credit transfers. The transactions can be transmitted directly or through highly configurable ETL (extract-transform-load) processes.

The rules that can be customised for each payment stream include settlement windows, clearing SLAs, fees, query and dispute resolution rules, and rules that are applied to individual transactions.

The PSO solution can also perform electronic bill presentment and other value-add transactions. It supports the international PCI PA-DSS security standard and complies with payment association guidelines and regulatory requirements.



Because of its architecture, the **Traderoot PSO solution** can easily be extended to include more participants or to process more payment streams. This diagram shows how:



Integration with RTGS

The Traderoot PSO solution manages liquidity for each participant, maintaining and adjusting their position in relation to the central bank.
Furthermore, it interfaces with the central bank's Real-time Gross Settlement (RTGS) system in the following ways:

- It can square off and then produce MT205 or PACS.009 settlement instructions.
- It can report and produce MT298 notifications.
- It can produce aggregated SWIFT MT transaction sets.
- It maintains liquidity dashboards per payment stream to monitor and control liquidity for participating institutions.

These interfaces can be set up differently for each stream and each participant.

Query and dispute resolution

The Traderoot PSO solution includes a QDMS (Query and Dispute Management System) that enables participants, as well as the national payment authority, to easily log and manage disputes:

- Exception and dispute creation with bilateral workflow using transactional evidence
- Remedial actions such as transaction injection, repayment and reimbursement
- SLA dispute management and reporting

Central mandate management

The Traderoot PSO solution performs central mandate management for all participating institutions.
This enables it to centrally enforce regulations for Anti Money Laundering (AML), Countering the Financing of Terrorism (CFT) and Financial Action Task Force (FATF).

End-to-end reconciliation and reporting

The solution provides end-to-end reconciliation between participants.

Across all payment streams, the Traderoot PSO solution can:

- Annotate reconciled transactions with interchange, billing and settlement data, bank CIF information and fees
- Generate transactional information batches for mark-off or mark-up, independently of the payment stream, and publish them using formal protocols such as Connect Direct, MQ, and SFTP
- Manage and maintain a reconciliation data warehouse
- Produce settlement reports for each participant and for each payment stream

Reconciliation processing, publishing and reporting can be configured to run at required intervals – hourly, daily or per settlement window.

About Traderoot:

Founded in 1999, Traderoot is a strategic financial software development company that licenses advanced business solutions for leading FinTech companies.

We continually strive to deliver on our motto of **Perfecting and Protecting Commerce** by deploying solutions that incorporate open and closed issuing, acquiring, payment and reconciliation services.

For more information, please visit Traderoot Africa at www.traderoot.com
or email us at sales@traderoot.com
Tel: +27 (0) 21 551 5444