

# perago:rtgs

Trust and Innovation



## THE SOLUTION



A Real-Time Gross Settlement (RTGS) system is a keystone of a modern economy and is fundamental to the manner in which modern economies facilitate electronic payment services.

The perago:rtgs system is unique in its modular approach in as much as it offers state of the art functionality whilst at the same time providing customers with the freedom and flexibility to align the system to their particular business needs. This is facilitated by the standards based framework within which the Perago suite of solutions are deployed.

The platform makes the perago:rtgs scalable, not only in terms of transaction throughput, but also in functionality. It therefore presents to the central bank not only a funds transfer system, but also business processes that are moulded according to international best practice.

Data integrity, security and confidentiality are fundamental to the design.

With perago:rtgs, Perago has moved beyond standard RTGS functionality. The perago:rtgs is the new generation, comprehensive settlement system with the power and flexibility to grow and evolve as the needs of countries and their financial markets change.

The system is language independent and requirements for non-English interfaces can be accommodated. RTGS systems have traditionally focused on the settlement of domestic currencies in a country. There are, however, certain currencies, e.g. the EURO and US Dollar that are used as legal tender outside the borders of the country of issue as well as increasing regional integration initiatives developing worldwide.

In order to meet this requirement, the perago:rtgs provides for very sophisticated multicurrency functionality with domestic and regional configurations.

The Perago: RTGS system can also be configured to include a clearing component (perago: clear), which facilitates the settlement of payments on a prefunded, credit-push basis (i.e. credit transfers) with finality and irrevocability before a pre-determined cut-off time.

This configuration is in line with the World Bank concept of an Automated Transfer System (ATS), which processes retail and wholesale payments through the same system.

The perago:rtgs solution is fully SWIFT compliant. The system is designed to integrate with the SWIFT network or any private network. It is also designed to align with the BIS and IOSCO Principles for financial market infrastructures.

## KEY COMPONENTS



From a technology perspective, all of the Perago solutions are deployed as a whole within a common services framework.

This means that a customer can derive the benefit of an RTGS which co-exists with any other system on a common framework providing a wide range of ancillary services, including, but not limited to, Business Intelligence, Security and Access, Master Data Management and Business Process Management.

The perago:rtgs system comprises a central RTGS application, a central bank system administration module, a network interface and front-end applications for banks and settlement agents. The central application is also modular, comprising the core settlement engine which provides the essential settlement functionality and various optional business functional modules, which may be added to the settlement engine.

The administration module allows for master file changes, monitoring of the position of individual banks, total industry positions, enquiries and statistics as well as the monitoring of the settlement process and schedule.

The browser-based front-end system for participant banks and settlement agents provides all facilities required to interact with the settlement engine, including facilities to capture funds settlement transactions, manage queued and diarised transactions; request reports; receive notifications and an online position monitor. perago:rtgs can integrate with back office systems for straight through processing (STP) purposes.

The perago:rtgs (domestic) system can be viewed as a hybrid system that has entrenched RTGS principles, but also incorporates the advantages of netting for liquidity purposes.

## KEY BENEFITS



The perago:rtgs provides central banks with the tools to manage and reduce risk in their financial industry and provides the platform for:

- Real-time, secure e-commerce, thus benefiting the entire economy; and
- The perago:rtgs system provides the backbone for funds transfers between banks and also mitigates the risks inherent in these transfers in that:
  - o Settlement instructions are credit push and therefore have to be prefunded.
  - o Settlement place on a gross basis and is final and irrevocable; and
  - o Exposures are visible.

## KEY FEATURES



- Real-time, immediate, final and irrevocable settlement of both single instructions and batches of settlement instructions;
- Diarising facilities for future-dated settlement instructions;
- Various credit facility options for both intraday and overnight credit facilities namely; credit limits, loans secured by pledged collateral and intraday repurchase agreements. The credit facility within the RTGS system can be utilized to secure external sources such as Forex Swaps or Market Operation loans; as well as for Real-time payments. The credit facility modules include sophisticated facilities for managing the credit facilities and underlying instruments. The system also provides for auto-collateralisation, where instead of specific securities, an amount of unspecified securities in a bank's auto-collateralisation account at a CSD can be used as collateral;
- Intraday liquidity can be further supplemented by making statutory reserves available on an intraday basis, managed within the system in line with statutory requirements;
- Users can manage queue priorities and/or allow the system to utilise sophisticated liquidity optimisation and gridlock resolution mechanisms to achieve settlement with minimum liquidity;
- Participants have real-time access to monitor their positions;
- The settlement schedule can be managed by the central bank and can be fully automated to run on a 24x7 programme;
- The calculation and recovery of settlement related charges and interest can be included;
- The accounting component includes full adherence to generally accepted accounting principles (GAAP), as well as the ability to interface to the central bank's general ledger and facilities to enable participating banks to automatically update their accounting systems;
- The system permits authorised agents (such as clearing houses) to provide business services and/or technical infrastructure services to participating banks;
- Numerous enquiries and reports, which may be customised via parameters, are available to both the central bank and settlement banks;
- A regional arrangement where local settlement banks in one country can make payments to, or receive payments from, foreign banks in another country within the region. The authorised currencies that can be settled cross-border are registered in the local RTGS system. The regional central banks act as cross-border service providers and are registered in each other's RTGS systems in order to facilitate the cross-border payments;
- Real-time, immediate, final and irrevocable settlement of both single instructions and batches;
- Statistics on daily utilisation is available and can be extended to include a tailor-made data warehouse which allows analysis with sophisticated tools;
- Additionally a powerful business intelligence (BI) component can be installed enabling the production of custom reports and management information, based on client requirements;
- A high premium is placed on security, the perago:rtgs therefore contains comprehensive functionality to prevent unauthorised access and to ensure system integrity;
- Messages comply with SWIFT standards and are designed to facilitate Straight through Processing (STP) and reconciliation with participants' internal systems;
- The perago:rtgs (foreign) system offers a number of features that support the local settlement of foreign currencies (i.e. currencies issued outside of the borders of a country). perago:rtgs (foreign) consists of a number of modules, which can be configured to provide various solutions; and
- Functionality includes, for example enabling:
  - o The local settlement in other (one or more) authorised foreign currencies;
  - o Participating settlement Banks to inject liquidity into their foreign currency account(s), either from their correspondent bank account in the same foreign currency based on a foreign currency or foreign currency account held for this purpose in the general ledger of the central bank;
  - o Conversely funds can also be extracted;
  - o Credit extensions is against a set credit list; and
  - o Foreign cash reserves.

## COMPLIMENTARY PRODUCTS



Perago:rtgs is part of a greater whole of Perago products which customers can leverage off. These include a Central Securities Depository (perago:csd), Government Payments System (perago:paygov), and a Multi-Channel Payments Hub (perago:payhub).

The above systems all benefit from the flexibility of the Perago360 platform architecture which by default includes a standards based ESB (Enterprise Services Bus), Business Process Management, Business Intelligence, Master Data Management, Integration, Billing and Reporting, Monitoring, Security Access Management, SwiftNet Interface.

Additionally the Perago products suite includes a clearing system known as perago:clear.

## BACKGROUND ON PERAGO



Perago originated from the world of central banking in 1999. Perago originated from the world of central banking in 1999 when a small team of people decided to use their knowhow and experience to build a commercial enterprise focused on financial infrastructure.

After its acquisition by SIA in 2005 (a leading European IT service provider) Perago evolved into an innovative company when a small team of people decided to use their knowhow and experience to build a commercial enterprise focused on financial infrastructure.

Recognised Trust, Superior Business Knowledge and Innovation are the trademark of Perago in helping banks and corporates to streamline any business process quickly and cost effectively.

## BACKGROUND ON SIA



SIA is European leader in the design, creation and management of technology infrastructures and services for Financial and Central Institutions, Corporates and Public Administration bodies, in the areas of payments, e-money, network services and capital markets. SIA Group is currently present in around 40 countries and also operates through its subsidiaries in Hungary as well as South Africa. The company has offices in Milan and Brussels. The Group is made up of six companies: the parent SIA, the Italian companies Emmecom (innovative network applications for banks and businesses), Pi4Pay (services for Payment Institutions), TSP (payment collection services for companies and P.A.), Perago in South Africa and SIA Central Europe in Hungary.

### PERAGO FINANCIAL SYSTEM ENABLERS (PTY) LTD (PERAGO)

Perago is a subsidiary of SIA with and Perago's software development and support centre located in Pretoria, South Africa. Headquarters:

Cambridge Office Park, Teckno Park – Centurion South Africa - 0060

Contact: +27 12 880 0143 [info@perago.com](mailto:info@perago.com)

[www.perago.com](http://www.perago.com)