

RWANDA INTEGRATED PAYMENTS PROCESSING SYSTEM (RIPPS)

1. Background on RIPPS

The Rwanda interbank payment system is supported by an Automated Transfer System branded “Rwanda Integrated Payment Processing System (RIPPS)” which comprises of the Real Time Gross Settlement (RTGS) system and the Automated Clearing House (ACH). RIPPS was established in 2011.

The RTGS settle credit transfers on real time from the time they are submitted to the system by the participant; therefore, eliminate the credit exposures associated with systems that defer settlement in order to allow a netting process to be carried out. It also settle all net positions from clearing systems (Internal ACH, VISA, MASTERCARD, SMARTCASH). The RTGS is also linked to Central Security Depository to enable securities (equity and debt) to be transferred and settled against payment on real time (delivery vs payment). The CSD was also established in 2011. The settlement cycle is respectively of T+1 for debt securities and T+2 for equities. The Central Securities Depository (CSD) component accommodates all securities (both equities and debt) issued in Rwanda in a book entry form. The CSD includes also an integrated primary trading (auction) module and an application (tightly linked with the RTGS function of the ATS) for the settlement of securities transactions, following the principle of Delivery versus Payment (DvP).

The ACH process bulk payment (multiple credit transfers) with a clearing time of 2 hours, 3 times per. This operating schedule has a significant impact in reducing the settlement lag and therefore the credit risk. Further, in order to enhance efficiency of payment systems, the BNR together with the Rwanda Bankers Association, implemented in Cheque Truncation System (CTS) in 2017 with the objectives of fast tracking and securing cheque payment process. Currently, cheques are cleared twice a day. All cheques submitted to the clearing in the morning are settled at 4 PM while those submitted to the system in the afternoon are settled at 10 AM the next day.

In order to improve regional payments settlement, the RIPPS is linked to EAPS (East Africa Payment System) and REPSS (COMESA Regional Payment and Settlement System).

2. RIPPS operating schedule

The system operates from 7 AM to 6 PM with various schedule based on the payment instruments in the following manner:

- i. Cheque: cheques exchanged between 7:00 am to 1:00pm settle the same day at 4:00 pm while cheques exchanged between 1:01pm to 4:00 settle the following business day at 10:00 am. This is globally the shortest period ever.
- ii. Credit transfer: RTGS credit transfers settle in real time (within 1 minute) while multiple credit transfers settle every 2 hours.

- iii. Cards : Net position on card payments of T+0 are processed in RTGS for settlement at T+1

Considering the above RIPPS arrangement, RIPPS execution time for interbank customer transaction is as follows:

- i. Cheques: 3hours-9 hours maximum for morning session and 21hours for the rest of cheques
- ii. Credit transfer: in real time (single transfer) and 2 hours (in bulk through ACH)
- iii. Cards: 24 hours
- iv. Mobile banking and internet banking: depending on when they reach RIPPS system (real time for RTGS and 2 hours for ACH transactions).

NBR started the project of RIPPS upgrade with the objectives of improving operational resilience and the functionalities of the high value payment system, offering greater access and, strengthening end-to-end risk management and improve the functionalities of the high value payment system. On 13rd November 2020, the first phase went live where RIPPS changed the messaging standards from ISO 15200 to ISO 20022. The second phase of the project activities which includes extension of RIPPS access to non-bank financial institutions, 24/7 operating mode, and direct debit feature will be finalized during 2021.

3. Benefits from RIPPS

a. ATS

- i. **Improved process**
 - **Less manipulation required in the process:** This results in greater speed, accuracy, reliability and predictability. Hence it is also be easier to manage.
 - **Fewer errors:** Since transactions are only manipulated at source, the number of error sources is greatly reduced.
 - **Better float predictability and management:** The fully automated process is more predictable and therefore more manageable. Better management allows for the earlier detection of potential risks as well as opportunity. Hence float can be optimized at levels that were not perceived.
 - **Reduction in paper items:** There is a direct relationship between transaction cost and paper. The elimination or reduction of paper results in a reduction in operating costs.
- ii. **Time saving**
 - **Faster movement of transactions:** Improving the velocity of money benefits the whole economy since the same franc can do more work within a given timeframe. Corporates and Consumers alike enjoy better predictability and accuracy and therefore be able to reap the benefits of optimizing their cash resources.

- **Faster settlement & finality:** The automation within the system will accelerate the flow of transactions and funds through the system, but will also allow for speedier reconciliation, settlement and finality.

iii. **Better Risks management**

- **Reduction of settlement risk:** By reducing the time between release of a transaction and receipt of settlement, the risk that the bank goes insolvent is lessened. The more the window between transaction and settlement is narrowed the smaller the risk. Hence the desire for Real-Time settlement for very large value transactions or for gross net settlement of the smaller value items
- **Reduction of fraud:** Experience has shown that the criminal elements are adept at exploiting natural delay in the banking systems. By shortening these delays and eliminating the points of manipulation, we are severely restricting the opportunities for fraudulent activity.

iv. **Accurate and fast Information**

- **Timely delivery of clearing statistics:** Due to the automation which the infrastructure of RIPPS offers, data on payments and clearings activity are available more frequently and closer to the actual time of the occurrence. Hence participants can react to potential risks and opportunities in a more timely and competitive manner.
- **More accurate reporting of payments & clearing activity:** The automation upon which RIPPS is built facilitates greater accuracy in reporting of payments statistics.

b. CSD

The principal function of a Central Securities Depository is to "immobilize or dematerialize securities, assuring that the bulk of securities transactions are processed in book-entry form. CSDs may also have the capability for trade clearance, safe custody and settlement processing of securities.

The CSD gives investors lower risks associated with transferring paper certificates such as theft and accidental loss. Also, the cost of performing transactions through a Central Securities Depository is cheaper than performing transactions with certificates of ownership.

As securities are held electronic in the CSD, their circulation becomes easy. This increases liquidity thereby improving market efficiency.

c. Regional integration

The implementation of the RIPPS allows the country to connect to regional payment systems, viz, the COMESA REPSS and EAPS.

c.1. REPSS

- REPSS is a multicurrency (settling in EURO and USD) payment platform that facilitates member countries to transfer funds more easily within COMESA. REPSS started LIVE operations on 3rd October 2012 with 2 countries (Mauritius and Rwanda).
- The following benefits are expected from the system:
 - It guarantee prompt payment to the exporter, at the latest by the next day that the importer deposits the required amount at its Central Bank;
 - It build trust amongst traders that would lead to an increase in intra-regional trade and drastically reduced the cost of making intra-regional trade transactions;
 - The whole process is fully backed by Central Banks and is therefore more secure.
 - It level the playing field by getting all commercial banks to deal directly with one another, without having to go through banks outside the region; and
 - It eliminates the need for confirmed Letters of Credit and ultimately would get trade transactions to be effected on open accounts.

c.2. EAPS

EAPS is a cross border payments system that facilitates payments and money transfers across East Africa Countries.

- The settlement is done in East African currencies (Tanzania, Uganda, Kenya shillings and Rwandan and Burundian francs).
- The system fastens regional payments
- It eliminates exchange cost as it uses regional currencies

d. Cheque truncation system

The NBR along with the Rwanda Bankers Association implemented cheque truncation system in 2017.

- The system eliminates the time, money and manpower wasted during physical movement of cheques (from banks to clearing house) thus, providing better service to customers.
- The Cheque Truncation system reduces the scope for clearing-related frauds and there is no fear of losing cheque in transit.

4. RIPPS Participants

i. ATS participants

1. I&M Bank Rwanda Plc
2. Banque Populaire du Rwanda Plc
3. Bank of Kigali Plc
4. Guaranty Trust Bank Rwanda Plc
5. Access Bank (Rwanda) Plc
6. ECOBANK Rwanda Plc
7. COGEBANQUE Plc

8. Urwego Bank Rwanda Plc
9. Banque Rwandaise de Développement Plc
10. ZIGAMA CSS
11. KCB Rwanda Bank Plc
12. Equity Bank Rwanda Plc
13. Bank of Africa Rwanda Plc
14. UNGUKA Bank Limited
15. AB Bank Rwanda Plc
16. NCBA Rwanda Plc
17. UMWALIMU SACCO

ii. CSD participants

- CSD stock brokers

1. BARAKA Ltd
2. CDH Capital Ltd
3. SBG BROKERAGE Ltd
4. MBEA Ltd
5. FAIDA Ltd
6. CORE BROKERAGE Ltd
7. BK Capital Ltd
8. AFRICAN Alliance