# GIRO CLEARING AND REAL TIME GROSS SETTLEMENT (RTGS) THE SYSTEM OPERATION DESCRIPTION

On the basis of the Law on the Central Bank of BH, which says: "The basic tasks of the Central Bank performed under the authority of its Governing Board shall be: to promote or to establish and maintain appropriate payment and settlement systems; the Central Bank of BH has established the systems by which interbank payments in convertible marks in BH are performed.

The interbank clearing and settlement system is organized through two payment systems administered by the Central Bank of BH. Those are Giro Clearing and RTGS systems.

### THE GIRO CLEARING SYSTEM- THE OPERATION DESCRIPTION

The Giro Clearing system is an interbank clearing system for transactions in the amounts lower or equal to 10,000.00 of convertible marks. The system includes the participants authorized to perform payment operations as well as the Central Bank of BH. The transactions processed through the Giro Clearing are performed on the same day when they are received in the settlement cycle which they were sent to. The clearing of payment orders of all the Giro Clearing participants is carried out by defining the net position of each individual participant as a result of the settlement of all credits and debits of participants for each clearing cycle.

The collecting of orders, the clearing and settlement of net positions is carried out through the stages in certain time periods, according to the Giro Clearing Operative Rules and the Decision on the Schedule of Operations and Daily Activities in Giro Clearing.

The settlement of net positions of giro clearing participants is carried out at 09:30, 11:30, 13:30 and 15:30, and it is carried out through the settlement accounts in RTGS, according to the Decision on Defining the Operative Rules of RTGS. The settlement is considered final and irrevocable at the moment when the net positions of all the participants are executed in settlement accounts in RTGS.

A decentralized Giro Clearing network is used in Bosnia and Herzegovina. It means that there are three Giro Clearing branches (the Giro Clearing of the Sarajevo Main Unit – Giro Clearing Sarajevo Branch, the Giro Clearing of the Main Bank of RS CBBH – Banja Luka Giro Clearing Branch, and Giro Clearing of Mostar Main Unit- Giro Clearing Mostar Branch), and the central Giro Clearing – Giro Clearing Centre, located in the CBBH Head Office.

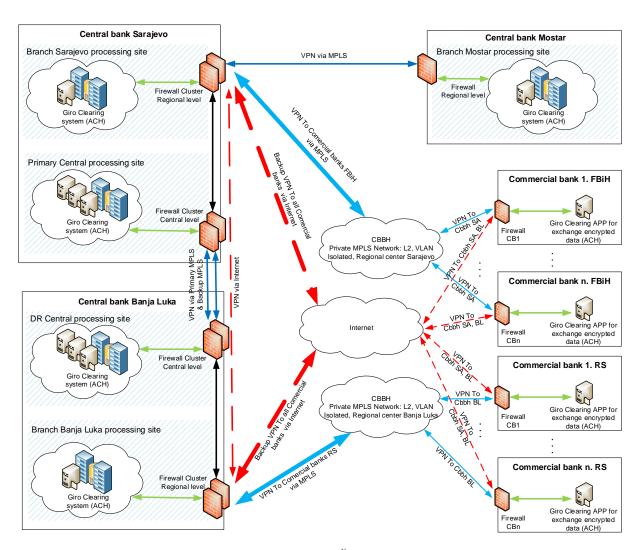
Participants direct their orders towards:

- a) Giro Clearing centre –for orders to banks with opened reserve accounts in an organizational unit of the Central Bank different from the one in which the order sending bank has an open reserve account and
- b) Gyro Clearing branch for orders to banks with opened reserve accounts in the organizational unit of the Central Bank which is the same as the one in which the order sending bank has an open reserve account, as it follows:
  - Giro Clearing branch Sarajevo banks with reserve accounts with MU Sarajevo,

- Giro Clearing branch Mostar banks with reserve accounts with MU Mostar and
- Giro Clearing branch Banja Luka banks with reserve accounts with the MBRS Banja Luka and Pale Branch.
- c) The orders in favour of the Central Bank are sent to GC centre.

The SEPA message format is used in GC, which is in accordance with ISO 20022 and the version of the European Payment Council Rulebook, which the Central Bank determines as the applicable one for internal credit payments and notifies the participants accordingly.

The Central Bank of BH has created a banking-telecommunication network for the needs of Giro Clearing, so all the participants are connected by telecommunication lines to Giro Clearing branches and Giro Clearing Centre.



Slika 1. Globalna shema Žirokliring sistema

The working day in Giro Clearing is carried out in the following way:

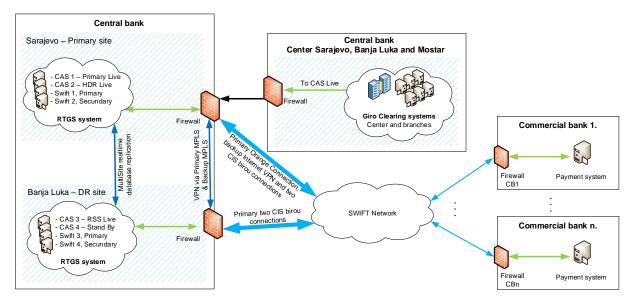
- 1. Starting of the day
- 2. Clearing cycle/s (the number of clearing cycles is determined by the Decision on Schedule of Operations and Daily Activities in Giro Clearing)
- 3. End of the day

The clearing cycle in Giro Clearing is carried out in the following way:

- 1. Receipt of transactions
  - 1.1.Banks send documents with orders,
  - 1.2.Banks receive the delivery notes on successfully taken over/declined documents and/or orders,
- 2. Processing clearing and sending of bilateral or multilateral positions of participants,
- 3. Settlement of net positions in RTGS (bilaterally or multilaterally) and
- 4. Sending results
  - 4.1. Inflows and other documents related to clearing cycle

### REAL TIME GROSS SETTLEMENT (RTGS)-THE OPERATION DESCRIPTION

Real time gross settlement (RTGS) is an interbank clearing system used for transactions above 10,000.00 convertible marks, and its use for lower amounts is optional. The systems performs the settlement of payment orders among participants in real time, i.e. the transactions processed through RTGS are carried out immediately (if there is coverage provided for them in the settlement account). The system is operative each working day from 08:00 to 16:00 hours. RTGS uses the SWIFT communication network and SWIFT payment message formats, as it follows: MT102, MT103, MT202 and MT205.



Slika 3. Globalna shema RTGS sistema

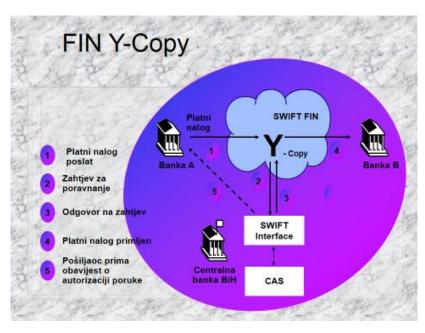
The settlement of all the payment orders, regardless of the payment order amount, sent to be executed by an RTGS participant (all the banks licenced to perform payment operations are participants, as well as the Central Bank of BH) is carried out in RTGS.

The settlement of net positions of participants in Giro Clearing is carried out through settlement accounts in RTGS, according to Decision on Defining Operative Rules of RTGS. Also, the settlement of transactions of other legal persons acting as clearing agents, such as card transaction operators (currently, the only one is Bamcard) is also performed.

The RTGS operative rules, in the part related to the execution of payment orders, say: "Payment orders, having been executed in RTGS, are final and irrevocable". Also, RTGS operative rules define that participants in RTGS system are responsible for providing coverage in the settlement account. Payment orders will be settled if coverage is provided in the settlement account. If coverage is not provided, payment orders will be classified and carried out by priorities. If the participant fails to provide sufficient funds in its settlement account by the end of the day, the Central Bank of BH will cancel the order.

The basic part of the RTGS system is CAS (Central Accounting System), which includes settlement accounts of banks members of internal payment system, where the settlement of payment orders is carried out.

SWIFT Y FIN Copy is incorporated in the system, as one of possible ways of the financial message flow from the sender to the receiver including the settlement in the Central Bank. In practice, Y FIN Copy mode means that the sender's message addressed directly to the receiver, on its way, comes to the Central Bank where a part of the message important for the settlement is copied in the mentioned Y-Copy and it goes to CAS where the sender's account is automatically debited and the receiver's account is credited, if there are sufficient funds in the sender's account. When this operation is done, the system generates a new message, which is returned to Y-Copy and it lets the original message continue its way to the final destination – the receiver bank. Such bank, when it receives a message from the sender bank, can credit the funds for the customer promptly, as by receiving the message it has automatically received the funds in its settlement account in CAS.



Slika 2. Princip rada Swift Y-Copy servisa

## Operative rules and costs of using the payment systems

The Central Bank of BH has passed operative rules for RTGS and operative rules for Giro Clearing defining the conditions under which the Central Bank of BH and participants are admitted into the RTGS and Giro Clearing systems.

The operative rules for Real Time Gross Settlement (RTGS) define the conditions under which participants are admitted in the RTGS system and exit the RTGS system, the conditions for excluding the participants from RTGS, practice and operative procedures of RTGS, procedures for the settlement of participants' clearing net positions, and procedures for the settlement of RTGS participants in special cases.

The operative rules for Giro Clearing define the rights, obligations and responsibilities of the Central Bank of BH related to the Giro Clearing operations, conditions for the participation in Giro Clearing, the rights, obligations and responsibilities of Giro Clearing participants, the way and procedures for clearing and settlement, and procedures in cases when the participant in Giro Clearing is not able to meet its obligations.

The Central Bank of BH is responsible for public disclosure of RTGS operative rules and Giro Clearing operative rules, and all of their amendments and supplements. Operative rules become effective upon their announcement in the Official Gazette of BH, and they are also published in the Official Gazette of Republika Srpska, Official Gazette of the Federation of BH and Official Gazette of BH Brčko District. They are also announced on the web site of the Central Bank of BH.

The Central Bank of BH charges to the participants the costs of service of executing payment transactions through RTGS and Giro Clearing systems, and also a fee for the participation in payment systems according to the applicable fee tariffs of the Central Bank of BH. The charging is carried out by debiting the participants' reserve accounts with the relevant main unit or branch of the Central Bank of BH.

### **CONTINGENCY PLANS**

The Central Bank of BH has been organizing interbank clearing of payment transactions and settlement by means of these two systems since 05 January 2001. In the earlier years of the systems operations, it has never happened that the payment transactions could not be executed on the days when the systems are due to be operative. In order to provide the constant availability of the payment system through RTGS and GC, the Central Bank of BH has prepared contingency plans including the procedures and measures for continuing reliable, proper and legal operations of RTGS and Giro Clearing. In contingency circumstances, the Central Bank of BH undertakes all the necessary measures to provide the continuation of reliable, proper and legal operations of RTGS and Giro Clearing, within the maximum time of two hours.

The Central Bank of BH has provided conditions for the implementation of contingency plans at the back-up site in case it is necessary. The Central Bank of BH provides a dislocated back-up system of RTGS and Giro Clearing Centre in the Main Bank of Republika Srpska of the Central Bank of BH in Banja Luka, which makes possible the continuation of RTGS and Giro Clearing Centre operations in contingency circumstances. In case the Giro Clearing branches are unavailable, participants send orders to Giro Clearing Centre.