Central Bank of Central African States (BEAC)

Real Time Gross Settlement System

The Central Bank of Central African States (BEAC, Banque des États de L'Afrique Centrale) launched into live a new Real Time Gross Settlement SYGMA (Système des gros montants automatisé) within the framework of payment and financial infrastructure modernization project. CMA designed the system, adjusted it according to the national regulating authorities and legislation requirements, delivered, installed and setup the software/hardware system. The system was launched into live operations on November 19, 2007.

Integration of the financial sphere

Central African Economic and Monetary Union (CEMAC, Communauté Économique et Monétaire de l'Afrique Centrale) unifies economic and financial markets of 6 countries, namely Cameroon, Congo, Gabon, Equatorial Guinea, Central African Republic and Chad. Total population of these countries amounts to 32 million people; all countries share a single currency and unified financial and banking legislations. 51 commercial banks and 25 other financial institutions of the Central African states (treasuries, cash funds agencies, liquidity and guarantee funds management departments, clearing systems etc.) are the new payment system participants.

Payment system of the global standard in African countries

SYGMA provides globally the requested features of a Real Time Gross Settlement (RTGS) to the majority of the system participants in all six countries of the monetary union. In particular SYGMA complies with the existing requirements of the Bank for International Settlements (BIS) and the World Bank.

Thanks to specifically designed workplaces, the Central Bank and its branches in six countries have a possibility of monitoring the liquidity management of the participant banks’ accounts. In addition to that, the Central Bank and its subsidiaries have an opportunity to eliminate errors which occur during the settlement, as well as track and prevent attempts of an unauthorized access to the system.

In case the liquidity shortage, the participant's settlement account can be automatically topped up with funds by using participant’s securities as collateral. Securities are bought back as soon as there are sufficient funds on the participant’s account. The system has also a modern gridlock resolution algorithm, which is launched by the system administrator in case of payment gridlock. In order to achieve straight-through processing (STP), the system participants have a possibility to integrate their own software applications into SYGMA.

Moreover, SYGMA has been designed with a considerable potential for perspective growth.

Peculiarities of SYGMA

The peculiarity of the BEAC project is that there is one central bank unifying 6 countries. Common rules for the operation of the national branches of BEAC were implemented simultaneously with the CEMAC payment system project. In order to take into account these changes, the system architecture and its business logic of SYGMA had to be adjusted respectively at the same time.

Quick execution of such modifications has been possible thanks to CMA’s own PIE® (Procesware Integration Environment) technology on which SYGMA is based. Purpose of PIE® technology is application integration and development of highly reliable software systems. PIE® technology allows designing new information systems with adjustable business-logic that are capable of flawless interaction with the existing systems.

SYGMA provides access to cash funds operations that is one of the main functions of the system in the united countries. Tellers of multiple BEAC agents in cash departments carry out transactions of money disbursement and depositing them on the bank's accounts on a real time basis using secure access to the SYGMA web-server.

SYGMA also provides additional information to Guarantee Fund departments in the participant countries that allows to carry out distributed liquidity management during business day. SYGMA
also provides integration with stock exchange computation centre (BRVM) both on the STP-technology level and with stock exchange staff access to participants information via the SYGMA web-server. Besides information exchange with the General Ledger System is carried out.

SYGMA carries out information exchange with all the united countries clearing systems and with the clearing system common for CEMAC countries as in the countries of the union operations in national clearing systems are carried out independently.

The localization of the system was done. The interface of all the system’s workplaces is done in French – the main language of the six countries of the economic union.

One of the peculiarities of SYGMA launching to live operations was the Central Bank requirement to pass from system’s pilot operation to live without stopping the services for even one day.

Central Bank of Central African States (BEAC, Banque des Etats de L’Afrique Centrale) is the central bank serving six African countries – Cameroon, Congo, Gabon, Equatorial Guinea, Central African Republic and Chad. The Central Bank Head Office is located in Yaounde, the capital of Cameroon. All countries share a single currency and unified financial and banking legislations.

The main function of the BEAC Central Bank is protection and stabilization of the national currency, maintaining the financial system of the participant countries and providing efficient and uninterruptable functioning of the payment system.

http://www.beac.int/