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The Modern Integrated Payment System: The Iran Experience to Date

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Abstract

The payment system is a mechanism which enables cash-transfer (electronically) from one account to another regardless the location of the holding branch of each account. An integrated payment system covers all the inter-banking payments in a synchronized and continuous structure, and includes Real Time Gross Settlement System (RTGS), Automatic Clearing House (ACH), and the Scrip less Securities Settlement System (SSSS). The Central Bank of the Islamic Republic of Iran, in order to play its role and to fulfill its responsibilities, has pursued the establishment and implementation of the real time gross settlement system (RTGS) as the main infrastructure of settlement, while also has developed the electronic inter-banking billing system (Sahab) to offer a variety of real time cash-transfer for small payments. These two infrastructures will be fully in operation by the end of the current year. The ACH and SSSS systems will also be considered in the next phase, in which the operating priority is connecting such systems to the RTGS system.

The purpose of this article is to study the status and characteristics of electronic banking and the method of implementing it in Iran. Also, it is concluded, considering the significant increase in the successful transactions in the Shetab center and, the outstanding performance of the payment orders in RTGS, the hardware and software performance of the banks are after all satisfactory. However, despite the trivial proceedings made in such development of the electronic banking, there still exist some obstacles and difficulties which, are fully addressed in the following article.

Keywords: Integrated payment system, electronic banking, real time gross settlement system (RTGS), Shetab network.

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INTRODUCTION

The plan of the integrated payment system, as a national project which provides the main background of electronic money transfer, has been developed, and defined since 2001 by continuous follow ups and benefiting from the best domestic and international consultants and using the experiences of other developed countries, and its practical phases are now carried out. By finishing the implementation phases of the items of such project, all the inter-banking payments will be fully performed electronically and on-line. Also, such project includes mechanisms to support the real time big sums of payments, high number of small payments, Scrip less Securities (partnership papers) settlement system. Thus, it seems that by full an interaction of the banking network, the integrated payment system could make a conceptual change and a major movement in the country's banking operations (ISC, 2004).

INTEGRATED PAYMENT SYSTEM PROJECT AND ITS MAIN ITEMS

Due to the significant progresses of the communications and information technology and considering the necessity of the integrated and coordinated movement of the banking network in order to offer modern banking services based on technology to the public, the integrated payment system project has been initiated with benefiting from an international consultant at the Central Bank of the Islamic Republic of Iran and by establishing high leading and executive commissions and ten expert task groups with due cooperation of managers, and experts of the banking network of the country. The main purpose of this project is due integration of the method of offering electronic banking services using the facilities of the communications and information technology facilities at the whole banking network in order to promote the level of the services offered to the bank customers. An integrated payment system, in a reasonable situation, will be implemented and operated within a period of two to three years time (ISC, 2007). A well operated and optimized integrated payment system calls for an automated inter-banking scheme by the banks of the country. Thus, the banks play the crucial role in the integrated payment system and they must be ranked by the central bank which, yet still the necessity of such classification is not realized.

The most important principle of the integrated payment system is to create and introduce a reliable basis with the least risk in order to perform the clearing and settling between

the banks in a fast and accurate manner. Such groundwork is composed of three main principles, RTGS, ACH, SSSS, which have the responsibilities of clearing and settling mechanism of all the inter-banking payments, and the exchange of such base covers all the inter-banking payments all over the country (CBI, 2007).

It is important to mention that the aforesaid three principles will have only the responsibility of the basis of clearing and settlement of inter-banking payment in electronic format. In other word, the banking network members are responsible for developing the internal banking systems of electronic services to their customers and connecting them to the basis of clearing and settling in order to operate the integrated payment system (The High Council of Banks Meeting, 2004)

It is evident that the occurrence of any non-coordination between the internal development of the banking network and implementing the basis of clearing and settling will eventually result in significant reduction of the total effectiveness of the payment system and will cause a waste or stop in the investments performed in this regard.

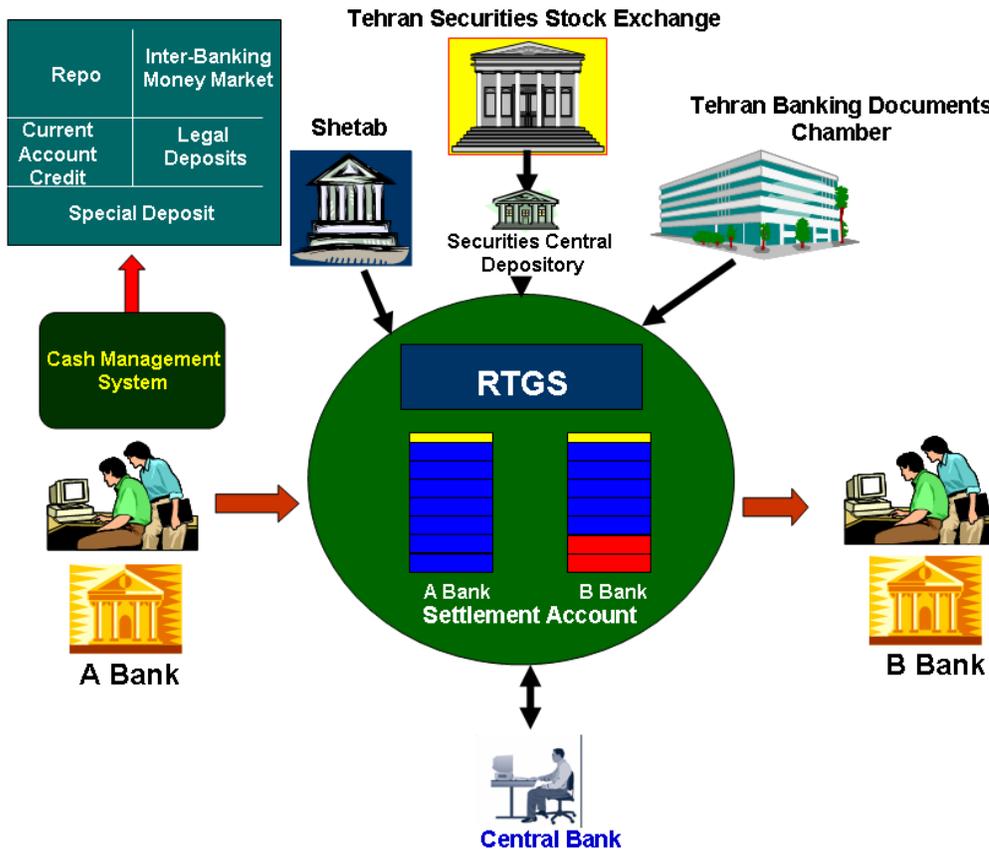


FIGURE (1): The current status of the integrated modern payment system (ISC, 2007)

THE CURRENT STATUS OF THE PAYMENT SYSTEM IN IRAN

Cash transfer in Iran is traditionally performed via cash or semi-cash (Iran Check), or the inter-banking coded checks. Traditional cash transfer has the following disadvantages (Iranian Banking Institute, 2007):

- requiring physical referring to the origin and destination banks branch
- non-safety in performing the transfer
- requiring humans resource and processing at the branches and the exchange centers
- lack of the concept of payment order as a document

Cash is now transferred in Iran through either of the following methods:

The small scale cash transfer using the facilities of Shetab Center

Due introduction of the modern tools of electronic payments in Iran returns to the year of 1991 and initiation of the services of the Bank Sepah AberBank, when the first samples of these cards with a possibility of withdrawing from the ATMs were introduced. During the past years, most of the banks of the country have generated the services of card-based withdrawing to their customers, which due operation of such services have been made generally with the aim of developing the usage of the electronic cashiers instead of the branches cashiers, as well as cash-based delivery to the customers.

Bank cards network came into the Islamic Republic of Iran in the year 2002, and by starting the operation of the in-banking data exchange network (Shetab) as the national switch and a link placed among 17 banks card switches all over the country, has caused usability of all the cards issued by the banks at all the ATMs and sales terminals (shop-based card readers) and the increasing statistics of its transactions indicate a general welcoming to such services (Rahimi , 2007). It should be mentioned that from the year 2004, the number of transactions of Shetab center shows an annual growth exceeding 80 percent (CBI, 2007). For the time being a variety of services are offered to the customers through banking cards, from which the following are considerable (Iranian Banking Institute, 2007):

- Receiving cash (in the form of banknotes) from ATMs
- Electronic paying, using the cards at sales terminals
- Transferring cash from any account to the any other (both accounts at the same bank)
- Transferring cash from one card at a bank to any other card at another bank, which this service is performed under the in-banking electronic draft system (Sahab).

The payment order at Sahab has only one transfer, for which the date of payment order issuance and effective date are the same. At this system, transfer is performed in real time format and the amount is promptly transferred to the account of the receiver. After performing such transfer, the respective result is announced to the one who issued the payment order and the respective in-banking settlement is performed through the Shetab center and after due settlement of all the daily exchanges of the aforesaid center.

Large scale amounts transfer using the Real Time Gross Settling System_(RTGS)

In the past electronic and real time cash transfer was not possible among the branches of a certain bank, and also the possibility of transferring amounts in real time and electronic format between the banks was not possible. Now before implementing RTGS, the banks made the possibility of performing electronic and on-line exchanges in

between the branches and also their central offices by changing their internal system and being equipped with the core-banking accounts system. However, still inter-banking electronic and real time cash transfer is not possible. But by implementing RTGS, this possibility is not complete and the banks have the possibility of performing inter-banking exchanges, in addition to the exchanges among their own branches (Iranian Banking Institute, 2007).

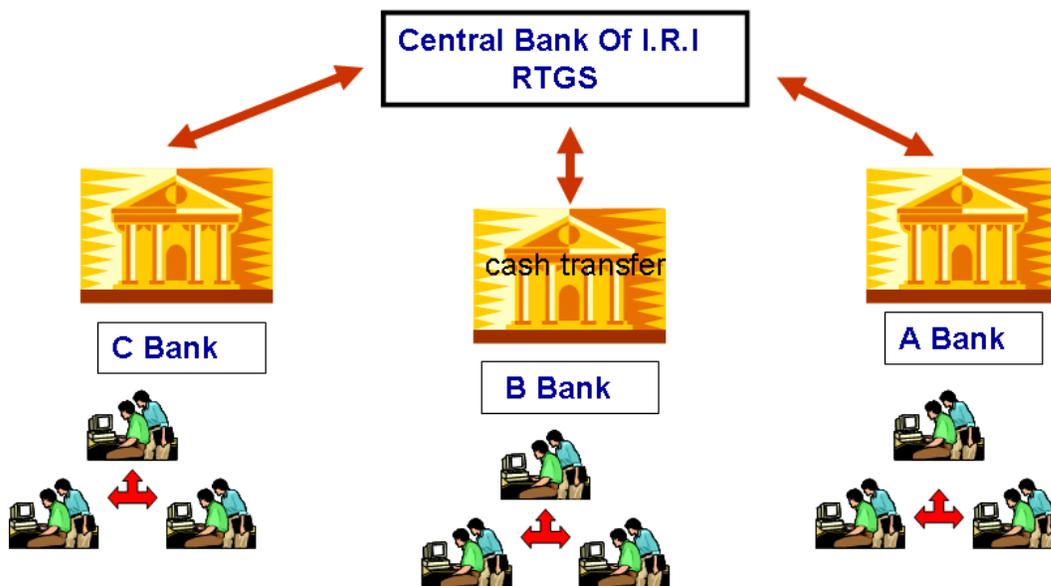


Figure (2): real time cash transfer, for the time being and after implementing RTGS (Rahimi,2007)

In fact, implementing RTGS at the Central Bank and generating the possibility of inter-banking settling for all the operations among the trading banks will be a new phenomenon in the country's banking system. When the country's trading banks are insured that the inter-banking Rial-based settling will be performed by the Central Bank in the shortest possible time, then the bank will be able to offer better and more services to their customers, including that each bank will be able to give services of the customers of any other bank as well. Thus, the customers will not be limited to one bank and will be able to refer to any other bank as well.

Implementing RTGS was initiated in Iran in 2006. Special network, namely MQ, was used in Iran instead of SWIFT, for the message format on the communicating basis of the VSAT. Till now, three phases of implementing RTGS have been operated and its final phase will be operated during the current year.

- the first phase : daily settling of the Shetab center operations
- the second phase : daily settling of checks and banking documents exchange chamber in Tehran and the whole country operations
- the third phase : the bank-to-bank operations specialized for transactions among banks.
- the fourth phase :customer-to-customer operations (this will be put into operation during the current year)

However, according to the scheduling program, it is necessary that the fourth phase should have been finished in Mar.-Apr. 2007, but due to lack of Rial-based cash at the country's banks –which resulted in debiting of the banks to the central bank, due successful completing and commissioning of third phase lasted till the 21st of May.

CONCLUSION

Despite of the significant proceedings performed in developing the electronic banking, there also exist some obstacles and difficulties that the elimination of which, would effectively help develop of an efficient electronic banking in future. Among them, one could refer to public awareness and encouraging people to use electronic banking services. The public must be well instructed to make best use of these services as well as, reassuring them of how secure and comprehensive these facilities are. The importance of such scheme should be recognized by the banking system of the country and must be treated as a “must do” in order to achieve a precise and perfect system. Unfortunately, the statistics confirm that a very small number of public members are using these services which could be overcome by this latter issue. Another concern which could be raised regarding the service is the unavailability of a high quality telecommunication facilities and the need of training courses for the banks' employees. Also the governmental bodies may play a major role in development of the service by providing the possibility to use the sales terminals, to receive the payments from the referrers by devoting of any budget to supply the payment commission by card, doing so at some offices such as the customs, municipalities, communicating offices, passport offices, etc, where the referrers are required to pay to those organizations, there will be no need to pay for in bank and presenting the payment slip any more. Regrettably, the usage of credit cards in Iran is quite low, therefore, issuance of the credit card instructions by the central bank and due notification to the banks of the countries, and facilitating the sales terminals with credit card machines would encourage the credit card owners to pay with their cards which could also be effective in due development of electronic banking in Iran.

In a modern payment system, a set of informatics infrastructures (including software, hardware, and high volume and high band-width lines), banking rules, legal rules, and international standards would work together to provide the basic requirements for a variety of financial exchanges in electronic format. This would clearly illustrate that in order to reach a modern payment system in the country, not only the central bank is responsible, also the trading and specialist banks, the ministries of telecommunication and information technology, finance, commerce, petroleum, and energy, as well as the judiciary shall have a share in operating this modern payment system. In fact implementing the modern payment system in the country, considering the current status of the trading banks, calls for a fundamental and subsequent changes in the banks of the country. To conclude, the achievement of modifications mentioned above would provide Iran with a modern infrastructure of payments and the trading banks of Iran will be able to offer better services to their customers. In addition, the higher mobility of the assets will supply the capital required to perform the projects all over the country which, eventually will result in a decrease in the expenses and besides, remarkably reduces the level of risk within the society as well as the banking system.

REFERENCES

Central Bank of Iran Web site, WWW.web.cbi.net/Simplelist /2571.aspx

Central Bank of Iran, (2007), Report of performance and outcomes of the Iranian Central Bank on wages and salary (p.1).

Iranian Banking Institute, (2007), Inter- banking cash transfer, Electronic banking seminar (pp.1-10).

Iranian Banking Institute, (2007), Real Time Gross Settlement System (RTGS) Electronic Banking seminar (pp.2-24).

Informatics Services Company, (2004), the Modern Payment System in Iran (P.2).

Informatics Services Company, (2007), payment system in Iran, Electronic Banking Seminar (PP.4-12).

Rahimi, masoud, (2007), Summary of Report of Settlement and Payment System Development in Electronic Banking (PP.4-6)

The High Council of Banks meeting, (2004), the Position and Procedures of Wages and Salary System (P.5)