Towards an Integrated Payment System* A. Vasudevan

The rationale for having in place an efficient payment system is well known and universally recognised. Most countries constantly strive to improve the existing systems by reorienting and refurbishing the prevailing accounting practices, and organisation methods and systems, and by upgrading the technologies. A large number of countries, besides rationalising the existing payment modes, introduce newer payment methods to suit the changing needs of their economies. The Indian case typically falls in the category of countries that innovate and rationalise the payment system.

One does not need to itemise the various payment modes that are prevailing at present in India: they are known to all those who are familiar with the banking landscape. But what is more relevant in today's context is to devise an overall system that brings about an integration of various modes of payment together with finality of their settlement. This is simply because the Indian economy is no longer autarkic, producing goods and services for its own consumption and distributing the entire domestic product on lines reminiscent of barter. It has become predominantly commercial, with self-consumption being a relatively small proportion of the total product. The size of commercial transactions has grown sharply in the last three decades and odd, with the result cash, in pure form, can hardly be a sound, riskless basis for effecting payments and settlements. The growing interface with the rest of the world and the increasing integration of domestic financial markets has further relegated the importance of cash in the order of preferred payment modes. These developments have made it necessary for the Indian authorities to appreciate the need for bringing about operational efficiency, speed, and timeliness of payment transactions as also to be vigilant on a sustained basis to contain, and if possible reduce, financial risks in the national payments system. There cannot be any relaxations in this regard: large payment system floats, frauds or irregularities, long delays in processing and settling payments, breakdowns in payment facilities and legal hurdles cannot just be afforded because they impose large costs and threaten the very objective of establishing a sound financial system.

The Reserve Bank of India, being positioned at the critical core of the processes that involve payments and settlements, has to promote and foster financial stability as well as the soundness of the financial system. For, after all, the Reserve Bank's liquid liabilities, and especially reserves balances, are the instrument in which the bulk of domestic payment obligations would have to be settled, at any rate, in a strict legal sense.

Let us pause here for a while and ask ourselves as to whether the interest of the Reserve Bank of India in the efficiency of the payment system exists because of its role as a supplier of liquid cash. The answer to this question is that one has to go beyond this reasoning. For, we all know that inefficiencies in the payment system would cause shifts, often sharp and unpredictable, in the demand for, or shall we say supply of, monetary base or reserve money. But this is clearly not enough of a reason for seeking an efficient payment system. When changes in the payment system occur due to financial sector reforms as is the case at present, the Reserve Bank has to closely examine the very impact of these changes on monetary policy making and the processes that underlie the critical policy decisions. The Reserve Bank would need to ensure consistency between payment-based demand for reserves and its stance of monetary policy. In this context, it has to, for example, determine the quantity limits for its regular credit or support facilities. The Bank would also have to make it clear about the pricing of such facilities. Besides, the Bank would have to influence interbank interest rates in a manner that they bear a predictable relationship with other interest rates in the financial system. This would imply that the Bank will have to weigh the pros and cons of managing price (interest rates) or quantity (reserve money) variables and weigh them in view of the financial sector reforms and in the light of the shifts in the demand for reserves.

The need of the hour consists not merely in improving the payment system but also in integrating the various components of the system. Designing an integrated system would first require a clear appreciation of the architecture and the role of the associated binding agents of payment and settlement transactions across markets - local, national and international. It then needs to proceed step by step, beginning with consolidation, then with development and finally with integration of payment system.

Consolidation would essentially imply efficient management of the existing paper based systems, expansion of clearing and settlement activities to cover all the centres of banking activity, computerisation of clearing and settlements, improvement in the collection, processing and settlement of inter-city cheques, and setting up of regional and zonal clearing grids. Development initiatives would have to focus on the delivery of payment services through upgradation of technology in the existing cheque clearing services, standardisation of technology platforms, development of technology and introduction and expansion of such electronic payment services as electronic clearing and electronic funds transfer and other services (e.g., ATM cards, and smart cards). Integration will involve interfacing of paper based as well as electronic payment services with securities and funds transactions, across the markets - money and securities markets, both national and international - through a reliable, secure, and speedy communication network. The essence here is of speed and the settlements have to be on a real time basis.

The implementation of such an integrated payment and settlements system would not be possible without careful planning and without enunciating a well defined strategy. Sequencing of IT-based projects, time planning, technology development to take care of standards, operational procedures, security of data as well as risks and speedier deliveries would all form part of such a strategy. The strategy would, in other words, focus on migration from net settlements to Real Time Gross Settlement (RTGS) systems.

It is with a view to moving ultimately to RTGS system that the Reserve Bank has gone in for a robust communication backbone through the establishment of a VSAT-network. The Institute of Development and Research in Banking Technology (IDRBT) set up by the Reserve Bank of India at Hyderabad would house the hub server and manage the network.

All the Reserve Bank's offices will have VSATs and will become operational once the network is pressed into service. Over time, banks also would have enough VSATs at all the points of their critical operations and decision-making, and be active participants of the network. It is necessary, therefore, to undertake preparatory work towards eventual adoption of RTGS system. The RTGS system may proceed on the basis of an embedded centralised Government securities transactions system and money market dealing systems together with high value clearings so that the major financial sector segments would be effectively integrated on a nation-wide basis.

It would be necessary to address the possible risk areas and the ways to guard against them. For, after all, electronic fund transfers would be in place well before the integrated payment system gets stabilised and this will mean that mechanisms and arrangements to authenticate electronic funds-based messages and digital signatures would need to be established. Such electronic messages may have to be provided with suitable support of law. If necessary, appropriate amendments to the existing enactments may be undertaken.

The switchover to an integrated on-line real time payment system would need a very high level of security, and capacity to sense signals that foretell imminent uncertainties and risks. It is for this reason the financial sector that opts for real time operations will have to ensure that right persons with adequate IT and risk management skills are there to manage it. It is also essential that such persons are available for operating the system for considerable length of time. In addition, the integrity of the system should be sustained by strong payment oversight mechanisms, which could well complement, if necessary, the existing supervisory arrangements.

The gains that accrue to the economy due to the operation of an integrated payment system are many. Transaction costs will get reduced, delays in settlement sharply cut, risks minimised, and real, financial and technology sectors will get interlinked. The allocative efficiency that is generated as a result will improve the productivity of the economy and help promote growth.

^{*} Address by A. Vasudevan, Executive Director, Reserve Bank of India at the Conference of Chiefs of Computer Policy Programming Department (CPPDs) and Principals of Staff Training Colleges at the National Institute of Bank Management, Pune on September 18, 1998.