INFINET and the Payment Systems¹ By S.P.Talwar

Ladies and Gentlemen,

1. I am very happy to be here today to inaugurate the VSAT-based communication network. Undoubtedly this is a formal occasion but also an occasion that opens a new chapter in the history of India's banking technology. I am also happy that this event marks the very first major successful project undertaken by the Institute for Development and Research in Banking Technology (IDRBT). Let me also take this opportunity to express my deep appreciation of the efforts put in by the professionals of IDRBT, RBI and the Hughes Escorts Company people who were associated with this project.

2. Recent developments the world over have brought into sharp focus the important role payment systems play in the development of the financial sector. The Reserve Bank of India has given high priority to bringing about efficient payment systems as one of the central banking functions. In fact, the design, management, regulation and supervision of electronically based payment systems would soon become the major focal points of policy deliberations in our country. We, in the Reserve Bank, are moving inexorably towards the goal of providing an effective, efficient and speedy payment and settlement system.

3. The Indian banking and financial scene witnessed dramatic changes in recent years, partly due to the thrust of liberalisation and partly due to the dynamism imparted by innovative ideas and products. The main driving force of such heightened activity is the need to provide first class service to customers of banks and other financial entities at affordable costs. And customers, on their part, have also become sophisticated and have articulated very convincingly of their needs and the appreciation they have for prompt and value-added service. Banks therefore, have devoted considerable attention to the processes that help their products to be acceptable. Technology provided the key to such processes. In the last few years, it is no wonder that the banking sector has seen a virtual cornucopia of new products: credit cards, tele-banking, ATMs, quick collection facilities for outstation cheques, retail EFT, Electronic Clearing Services – ECS – Debit and Credit for repetitive payments like dividend, interest, utility bills, Internet Banking, etc. Now there are indications of moving towards the introduction of smart cards, debit cards, on-line banking for e-commerce and financial EDI for straight through processing.

4. On its part, the Reserve Bank has initiated many reforms to further the speed and reliability of financial operations and to contain financial risks of the system, through the carrier of information technology. The RBI has, over the years, given guidance on the introduction and spread of computerisation in banks. Since about the early eighties, a number of Committees set up by RBI have given their recommendations on various issues relating to computerisation including the feasibility of introducing MICR / OCR technology for cheque processing, mechanisation in the banking industry, communication network for banks and SWIFT implementation, computerisation in banks, technology issues relating to payments system, cheque clearing and securities settlement in the banking industry. Electronic funds transfer and other electronic payments are being developed. The banking sector has

¹ Inaugural Address by Shri S. P. Talwar, Deputy Governor, Reserve Bank of India delivered on June 19, 1999 at the inauguration of the "INFINET" held at the Institute for Research and Development in Banking Technology, Hyderabad.

benefitted greatly by implementing some of these recommendations; decision making is gradually becoming technology-driven with a view to optimising the profitability and efficient customer service. It is also becoming increasingly obvious that computers and communications are essential to revolutionise the very nature of payment products, their clearing and settlement.

5. Computerisation efforts among the Public Sector Banks (PSBs) in India, which account for over 80% of the assets of the entire banking system, has been substantial. Of the 45,439 branches of the PSBs as on September 30, 1998, as many as 3,668 branches serving customers directly had been fully computerised with a complement of more than 65,000 computer nodes/PCs. A total of 6961 branches have been partially computerised – with Advanced Ledger Posting Machines, Electronic Accounting Machines and Personal Computers. Of the 336 service branches, 149 had been fully computerised and 166 had been partially computerised.

6. The PSBs had installed 194 Automated Teller machines (ATMs) all over the country; they had issued over 8.5 lakh credit cards and over 32,000 debit cards. The latest in this area of activity has been the issue of SMART cards.

7. For international interconnectivity of computers and for cross-border transactions, 568 branches have been connected to the S.W.I.F.T. Internal interconnectivity of branches has been established at 571 branches using internal captive networks while148 branches are on the RBINET.

8. All the data which I provided now reveal the extent of computerisation in the banking industry. Time has now come to consolidate the efforts of computerisation by banks. Till recently, the computerisation efforts of banks have been, by and large, branch centric. Computerisation of activities performed at branches has been the target for improving efficiency and productivity. The focus now, as I mentioned earlier is on improved customer service. Inter-linking the computers at various branches has become the need of the hour. While I must accept that some initiatives have been taken in this direction, the INFINET would give the much required fillip in enabling information flow across branches of banks. INFINET would thus be the backbone for transmission of messages, information, data and funds for the entire banking sector in the country,

9. The initiative of the Reserve Bank in setting up the Institute for Development and Research in Banking Technology (IDRBT) and the Indian Financial Network (INFINET) using satellite-based VSAT technology, in co-ordination with the public sector banks and IDRBT has now succeeded. Today is the proud moment for the entire banking and financial sector, as the INFINET is being inaugurated. It is a project to which we have devoted a great deal of our time, attention and resources for almost the last two years. The INFINET stands for our commitment to utilise the best of leading edge technology to enable the banking sector to achieve international standards. With the operationalisation of the INFINET, one of the biggest bottlenecks of our times, namely the lack of connectivity of banks, would be eased to a great extent.

10. Very Small Aperture Terminals (VSATs) have been installed in all the sixteen offices of the Banking Department of the Reserve Bank, at the Ministry of Finance in New Delhi and at selected sites of the public sector banks. For the present, the use of the network will be limited by the constraint of the transponder space allocation. The one-eighth of transponder

space allocated on extended C-band on INSAT 2B would need to be expanded, as user institutions put more applications on the network and as more institutions join the INFINET User Group. The demand for communication bandwidth will increase as the users find the utility of the network to be immense, and it would therefore be necessary to eventually get a whole transponder to be allocated for purposes of networking. I believe that the network will increase so quickly that the sooner the transponder space is increased the better it will be for the financial sector as a whole.

11. As we look back at the processes we adopted to get to the stage at which we are today, one important point would strike as critical. When a Closed User Group for the INFINET was formed in July 98 with representatives of the RBI, IDRBT, IBA and a representative of each of the Public Sector banks who are members of the network, we took a momentous decision. For, the INFINET User Group would be required to address issues such as the inter-bank applications, design and development of message formats, preparations for test mode and the various issues which may arise during the implementation of the project. The User Group has, through smaller and more focused Working Groups and Sub-groups, been working on these issues and the work on identification of inter-bank applications, design and development of message formats, appointment of a consultant and sizing up of hardware and software requirements is at an advanced stage of completion. One important aspect on which the Reserve Bank has been concentrating, and on which all bankers will have to attach utmost priority, is standardisation. The standardisation of hardware, operating systems, platforms and application software throughout the banking industry is a necessary condition for the payment system reform to take-off successfully.

12. Why has the Reserve Bank attached so much significance to this project? The INFINET will help to optimise the funds flow management by banks, aid decision making, enable faster reporting of Government Account transactions and flow of Government funds, and improve customer service all around. As economic activity grows, there would be a need for speedier funds flow and safer channels for its transmission. Satellite communication scores over traditional terrestrial modes on both counts, speed and security.

13. The provision of a country-wide network is only the beginning. For effective and optimal utilisation of the INFINET, computerisation of bank branches is imperative.

14. The INFINET would give impetus to bank computerisation to cover bulk of banking business and to interface with the banking system. The computerisation now available in the banking sector will give added emphasis on standardisation of Hardware, Operating system software, software – which would all help in better housekeeping. Because housekeeping itself would more or less get standardised for the entire banking sector. Interconnectivity would ensure optimal utilisation of funds and also availability of VSAT – not only for funds transfer but also for information flow which would result in better supervision, monitoring at the level of controlling offices, and decision making at the corporate level.

15. All major bank branches in commercially important cities of India should be brought under total computerisation as expeditiously as possible. The next step is the linking of all computerised branches to their service branches, Treasury / Funds departments and controlling offices. Connectivity to Treasury / Funds department will ensure optimal utilisation of funds and connectivity to controlling offices will aid in empirical decision making. All banks should aim at putting in place such intra-bank hierarchical networks. Once intra-bank connectivity is complete, and with inter-bank connectivity being provided by the INFINET, more than 70 per cent of banking business can have the advantage of access to an on-line real time environment.

16. Against the background of the incipient use of new technologies, the Reserve Bank appointed in September 1998 a Committee on Technology Upgradation in the Banking Sector, with membership drawn from the Government, the RBI, banks and academic institutions associated with information technology. The main purpose of the Committee was to examine the scope and methods for technological upgradation in the banks and financial institutions, and the associated aspects such as suggestions for legislative amendments, establishment of standards related to platforms, messages, security, etc. The recommendations given by the Committee cover various areas such as communication infrastructure and usage of the INFINET, standardisation and security, outsourcing of technology and services, computerisation of Government transactions, data warehousing, data mining, management information systems, legal framework for electronic banking and other related issues. These recommendations are being closely examined.

17. As the central bank, one of the primary concerns of the Reserve Bank is the operation of a safe and efficient payment system for the efficient conduct of monetary policy. In a modern economy, the link between economic activity and money is effected through the payment process whose efficiency is determined largely by the efficiency of the payment system. Inefficiencies in the payment process create time lags between the initiation and the completion of a payment transaction. By providing a means for quick, safe and efficient movement of funds and information, INFINET would help to improve the effectiveness of monetary policy.

18. While I have concentrated on the impact that INFINET would have on the future payment systems in the country, I would also like to add the benefits that INFINET would bring on other areas of usage. I envisage the usage of the INFINET backbone for information exchange between banks – for example, credit information on borrowers' accounts could be shared among banks to their mutual advantage. Information which is essential for management to take decisions on various matters, perpetuation of guidelines, circulars etc., would all be transmitted through the INFINET. Inter-bank communication which some times tends to take a long duration could get completed very quickly over the INFINET. Transmission of data for warehousing purposes, and for the requirement of RBI for offsite surveillance, information to controlling offices from branches – these are all some of the areas which would work using the INFINET.

19. The INFINET by its very logic has no constraints on its reach. As we liberalise the financial system and bring about integration of different markets, both within and outside the country, payment transactions will not just be confined only to our borders. Cross-border transactions will increase sharply. The vision for tomorrow encompasses both domestic and international sectors being served by the INFINET. I can visualise that in the not-too-distant future, a seamless integration of markets, with funds and data flowing without any delays and settlements effected without lags and large value funds transfers taking place on a real time on-line basis. All these developments, taking place with the aid of technology, will provide satisfaction to the ultimate users of our services. And we are all here sharing and working for the common objective of serving our customers. Let us therefore re-dedicate ourselves to the task and work towards expansion and best use of the INFINET.

Thank you.