An Update
(Upto August 1999)

Department of Information Technology
Reserve Bank of India
September 1999

Contents

FOREWORD

The Reserve Bank of India has been continuously monitoring the status of Y2K preparedness in the banking and financial sector. As part of the exercise, Monographs detailing the steps taken by the banking and financial sector to achieve Y2K preparedness have been brought out in December 1998 and June 1999. These monographs have been widely circulated and placed on the web-site http://www.rbi.org.in of the Reserve Bank to create awareness amongst the public and inter-related sectors on the steps taken by the banking and financial sector to achieve Year 2000 compliance.

As part of its ongoing efforts in the above direction, this Monograph, the third in the series presents the current status on Y2K compliance, details of certification, arrangements for adequate cash to meet any unforeseen circumstances and the information sharing between the various entities, within the banking and financial sector as of August, 1999. In addition, the Monograph lists out the comprehensive and concrete measures taken by the Reserve Bank of India internally to achieve Year 2000 compliance.

The systematic manner in which the problem has been tackled and the drawal of Contingency Plans and dry runs in simulated environment would to a very large extent ensure business continuity. I, therefore, believe that this update will to a large extent help in allaying the concerns of various quarters both nationally and internationally on the status of Year 2000 preparedness in the banking and financial sector.

Mumbai
September 1999

(S.P. Talwar)
Deputy Governor

Year 2000 Preparations in the Banking and Financial Sector

1 The Reserve Bank of India had brought out the monograph on the "Year 2000 Preparations in the Banking and Financial Sector" in December 1998 reporting progress made by the Reserve Bank, Commercial Banks, the Non-banking Subsidiaries, Financial Institutions, Primary and Satellite Dealers and Co-operative Banks up to end of November 1998. The monograph brought out, in particular, the coordinated efforts made by the Reserve Bank, the banks, Government of India, Indian Banks' Association, Associations of Trade, Commerce and Industries, Securities Exchange Board of India (SEBI), Insurance, Power, Telecom and Transport Sectors and others in ensuring Y2K readiness. An update to this booklet was released in June 1999 reporting progress up to end of May 1999. This is the second Update covering the broad approach, strategies and progress made up to the end of August 1999.

2 Monitoring Mechanism

The Working Group on Year 2000 Issues was set up by the Reserve Bank of India under the guidance of Deputy Governor of the Reserve Bank of India to monitor the progress of efforts towards Year 2000 readiness in the Banking and Financial Sector. The Working Group has held three meetings since the publication of the last Update in June 1999. Senior Government officials of the Department of Telecommunications, Department of Electronics and Ministry of Finance, selected banks and Financial Institutions are invited to participate in the deliberations of the Working Group. As directed by the Working Group, the Y2K Project Cell set up in the Department of Banking Supervision of the Reserve Bank has been issuing instructions to banks and financial institutions from time to time covering a broad spectrum of subjects like the remediation framework, the deadline for readiness, the voluntary disclosures on Y2K readiness, the third party certification to derive enhanced comfort, the contingency measures, the maintenance of a desired level of cash by bank branches, etc. In view of certain difficulties reportedly faced by banks and other financial institutions with regard to acquiring Y2K compliant hardware, updates of Y2K compliant systems and application software, the original deadline for compliance set at end March 1999 was extended. However, to impress upon the banks the need to be Y2K compliant as early as possible, meetings were held in the current financial year with public sector banks, private sector banks, foreign banks and other co-operative banks to get first hand feed back on their preparedness and the contingency plans worked out by them.

3. The Department of Information Technology of the Reserve Bank of India has been monitoring the compliance efforts of the Regional Offices of the Bank and Central Office Departments through a system of monthly reporting of the position of compliance by them. In order to ensure that the instructions issued have been implemented and to have on-the-spot inspection of the status of Y2K readiness, officers of the Department undertook visits and submitted reports to Top Management. Departments and Regional Offices have been advised to keep proper records of their test results for Year 2000 compliance for verification and certification by internal inspection team and the third party. The Reserve Bank of India has appointed third party for carrying out verification and Y2K certification of the hardware, operating system, system software, local area network used in date sensitive and critical areas in the Reserve Bank.

4. Contingency Plan

Having made all efforts to ensure Y2K readiness of the hardware, operating system, systems and application software, it was felt necessary to ensure business continuity in case of failure of these systems under circumstances which are beyond the comprehension of human intelligence. In the event of computer disruption on the eve of Year 2000, the back up computer systems cannot be counted on to serve as back up to carry on the processing because the technical architecture of the back up system would be prone to the same problems as the main system. The Reserve Bank, therefore, decided that the standalone PC and/or paper based manual procedures should form an essential part of the contingency plan. In order to facilitate business continuity all the offices and departments of the Reserve Bank of India have been advised to keep update all the important ledgers and registers, which are essential to carry on the day to day business in critical areas. They are in the process of organizing dry runs in simulated environment.

As a contingency measure for clearing and settlement, it was felt that there will not be any need to have standby clearing arrangements on manual basis. In the case of MICR centres at four metros, it has been decided to go for item based clearing on stand alone PC as a contingency measure in the unlikely event of failure of MICR system due to Y2K problem. In the most unlikely event of even the standalone PC not working, it has been decided to have a standby arrangement on manual basis for clearing and settlement operations.

5. Certification

As directed by the Working Group, the Y2K Project Cell of the Department of Banking Supervision of the Reserve Bank has issued instructions to the banks and financial institutions that they may have their systems and applications audited for Y2K compliance from vendors approved by their boards to derive comfort. The commercial banks which are members of Society for Worldwide Interbank Financial Telecommunication (SWIFT) have successfully participated in the mandatory test cycle recommended by the Society. Test Confirmation Letter have been sent by the participating banks to SWIFT.

6. Information Sharing

The interconnectedness of the financial organisations and their various external dependencies make it essential for every bank and financial institution to understand the likely impact of Year 2000 readiness of their customers, correspondents, counter parties and other third parties. Every bank and financial institution would be responsible for conducting its own due diligence review in respect of all its external dependencies. Lack of adequate information sharing and disclosure may impede efficiency of compliance efforts and negatively distort risk perceptions in the market. It needs to be recognised that due to information asymmetry, even incidents affecting individual institutions could provoke disruptions in the market adversely affecting even the most prepared organisations. Banks and financial institutions are therefore, encouraged to voluntarily disclose sufficient information to the public so as to build confidence and enable other market participants to take decisions with regard to their risk exposures. The Reserve Bank has advised the banks to disclose information on the following aspects in the public interest:

- The extent of exposure to the Year 2000 problem.
- What has been done or being done to address the problem.
- Progress in compliance efforts relative to plan drawn by the bank.
- Financial costs incurred in implementing the Year 2000 programme.
- Internal and external testing programmes and contingency planning efforts.

7. Availability of Additional Cash

As India is a cash oriented society, most payments are made through cash. Further, the level of computerization especially networking in banking is fairly low. Very few individuals possess ATM cards to draw cash from the cash dispensing machines. Eighteen Issue Offices of the Reserve Bank at Ahmedabad, Bangalore, Byculla, Bhopal, Bhubaneshwar, Calcutta, Chandigarh, Chennai, Guwahati, Hyderabad, Jaipur, Kanpur, Nagpur, New Delhi, Lucknow, Mumbai, Patna and Thiruvananthapuram issue currency to meet the demand for cash. In addition, 4181 Currency Chests are maintained by the public sector and other banks, to take care of the demand for cash by banks from their customers. Steps have been initiated by the banks, Issue Offices of the Reserve Bank to provide needed cash, as and when the need therefor, arises.

8. The Y2K Readiness in RBI

The Reserve Bank of India has replaced all the 286/386 based computer systems with the latest Pentium II computer systems. The non *Y2K Compliant* computer systems running the date sensitive applications are replaced with *Y2K Compliant* Pentium II based Computer systems. As regards operating systems, Reserve Bank has gone for *Y2K Compliant* versions of Novell NetWare 4.11 or later, SCO UNIX 5.x.x, Windows NT 4.x, DOS 6.22 or later, Windows 95/98 and HP-UX 10.20 or 11.xx. All Offices and Departments of the Reserve Bank have been advised to keep abreast with the latest status by visiting the sites of the respective vendors for downloading the latest *Y2K Compliant* patches and loading the same in consultation with the vendor. Confirmation on putting these products in place, their testing, etc., is being obtained. The Reserve Bank has started the process of third party certification of Year 2000 compliance of hardware, operating system, system software, data base management systems, Local Area Networks, hubs, switches, routers, etc, in Central Office Departments and Regional Offices. It is envisaged that while certifying the Year 2000 compliant position, *Y2K Compliant* patches of requisite operating system, system software, etc., if not already installed, will be installed by the third party appointed for the purpose.

The clearing and payments system have been made Y2K compliant. The *Y2K Compliant* input based software has been developed, tested and supplied to Regional Offices, and the SBI and its associates, who manage clearing houses. The *Y2K Compliant* state-of-the-art technology IBM S/390 Mainframe System at National Clearing Cell at Mumbai has been installed and the clearing operations have been operationalised on the new IBM system since August 21, 1999. The same new systems would become live at New Delhi and Chennai by end October 1999 and at

Calcutta by first week of November 1999. Contingency Plans have been prepared to run input based clearing software at the four metropolitan cities in the case of MICR Cheque processing. As a contingency measure, it is planned to ready the clearing settlement placed on stand alone PC system and, if need be, on a manual basis.

The Departments and Regional Offices of the Reserve Bank were advised to prepare and forward their Contingency Plans to take care of any eventuality resulting from changeover to the new millennium. It is seen from the plans forwarded by the Departments and Offices that necessary steps have been initiated by them to resort to paper based processing if need be by taking print-outs of books of accounts, ledger register starting January 1, 1999 and keep them duly updated.

Table –1 and Table – 2 at Annexure-I gives the Y2K Readiness Status of the Regional Offices, Operational Departments and their Regional Offices, the Central Office Specific Systems and the Training Institutions in the Reserve Bank of India respectively.

9. Monitoring of Y2K Readiness in Banks and other Financial Institutions

The Y2K Project Cell of the Department of Banking Supervision of the Reserve Bank of India continued to monitor the progress of Y2K compliance efforts through monthly reports and proactive response to the significant concerns disclosed by the banks. Supervisory communications to banks and financial institutions also stressed the need to assess the impact of embedded systems, credit/liquidity risk on account of customers/correspondents of the banks being non-compliant and taking remedial action. The focus of the monitoring efforts however shifted from upgradation and implementation to the testing, development and fine tuning of Contingency Plans apart from addressing other associated risks. Besides, banks and financial institutions have been advised to come out with a suitable disclosure by way of Press Release, brochure or otherwise on their Y2K status to create public awareness.

Commercial banks in India have reported full Y2K compliance of their computer systems. Banks have developed Contingency Plans. These Plans are expected to specifically reflect the operating circumstances of individual banks. Banks are also being advised to conduct mock runs in simulated environment of their contingency plans and refine fallback arrangements.

A second phase of targeted on-site verification has since been launched and is likely to be completed by September end.

Reserve Bank of India is following up with the urban co-operative banks. Considering the large number of cooperative banks, the Reserve Bank adopted a risk based approach of concertedly targeting the larger cooperative banks having deposits of Rs.50 crores and above for closer monitoring. All the 29 Scheduled Urban Cooperative Banks in the country have reported full compliance. There are 153 primary urban cooperative banks with total deposits exceeding Rs.50 crores, including the 29 scheduled cooperative banks. The primary cooperative banks in this subset reporting full compliance is 89.55 % of the banks in this group.

National Housing Bank (NHB) has been proactively guiding and monitoring the compliance efforts of the housing finance and other companies registered and availing refinance from them. Out of the 72 Housing Finance Companies whose Y2K compliance efforts is being monitored by NHB, only 25 have reported full Y2K compliance. Reserve Bank has been regularly sharing information on the various initiatives taken through the Y2K Project Cell in respect of Commercial Bank and Financial Institutions with the National Housing Bank.

The Reserve Bank of India is sharing the information with the SEBI and IRA regarding supervisory initiatives on Y2K compliance, while requesting a feedback of the measures being taken by them to address the problem within their jurisdiction. A task force has been set up by SEBI to co-ordinate the efforts and monitor the progress by the institutions under their supervision which have been advised to be Y2K compliant by June 1999. According to the assessment of the Insurance Regulatory Authority, no major Y2K related problems are envisaged.

10. Table – 1 through Table – 6 at Annexure-II gives the Y2K Readiness status as reported by the Banking and Financial Sector.

Annexure-I

Table -1
Y2K Readiness Status of the Regional Offices

Sr. No.	**Name of the Y2K Ready Application Software**	**Name of the Office**
I.	**Banking Department**	
1.	**Deposit Accounts Department**	
	DAD BASIS Version 3.0	Ahmedabad, Bangalore, Bhopal, Bhubaneshwar, Byculla, Calcutta, Chandigarh, Chennai, Guwahati, Hyderabad, Jaipur, Kanpur, Mumbai, Nagpur, New Delhi, Patna and Thiruvananthapuram.
2.	**Public Debt Office**	
	GP Notes, Book Debt and SGL	Ahmedabad, Bangalore, Bhubaneshwar, Calcutta, Chennai, Guwahati, Hyderabad, Jaipur, Kanpur, Mumbai, Nagpur, New Delhi, Patna and Thiruvananthapuram.
	10% (now 9%) Relief Bonds Scheme	Introduced only at Ahmedabad, Bangalore, Byculla, Calcutta, Chennai, and New Delhi.
	9% Relief Bonds Scheme – DEMAT	Ahmedabad, Bangalore, Byculla, Calcutta, Chennai and New Delhi.
3.	**Public Accounts Department**	
	PAD – CTPL Package	Ahmedabad, Bhubaneshwar, Hyderabad, Kanpur, New Delhi, Patna and Thiruvananthapuram. Chennai, Jaipur, Offices will install PAD-CTPL Package during October 1999.
	PAD – Calcutta Package	Bangalore, Calcutta and Nagpur. Byculla, Mumbai Offices will install Y2K Ready PAD – Calcutta Package in October 1999.
4.	**Clearing and Settlement Systems**	
	CPCS 1.11 on IBM S/390	Mumbai It will be replicated at New Delhi and Chennai before end October 1999 and Calcutta by first week of November 1999.
	TPS on HP 9000	Bandra-Kurla Complex, Mumbai
	ECS – Credit Clearing on SCO UNIX	Ahmedabad, Bangalore, Bhubaneshwar, Chandigarh, Guwahati, Hyderabad, Jaipur, Kanpur, Nagpur, Patna, Thiruvananthapuram and four metropolitan cities i.e. Mumbai, Calcutta, Chennai and New Delhi on S/390.

Sr. No.	Name of the Y2K Ready Application Software	Name of the Office
	ECS – Debit Clearing on SCO UNIX	Bangalore, Hyderabad and four metropolitan cities i.e. Mumbai, Calcutta, Chennai and New Delhi on S/390.
	Magnetic Media Based Clearing System (MMBCS)	Ahmedabad, Bangalore, Bhubaneshwar, Calcutta, Chennai, Guwahati, Hyderabad, Jaipur, Kanpur, Nagpur, Mumbai, New Delhi, Patna and Thiruvananthapuram. This will replace existing claim based Floppy Based Input Clearing (FBIC) settlement software.
	Two way Inter-City Clearing	Calcutta, Chennai, Mumbai and New Delhi
	Electronic Funds Transfer (EFT) – Pilot Project	Mumbai, Calcutta, Chennai and New Delhi
	Computerisation of Government Accounts	Central Accounts Section, Nagpur
II	**Issue Department**	
1	Currency Chest, Small Coin Depot and Internal Accounting	Application Software has been tested and introduced at Mumbai (Byculla). It will be replicated at Ahmedabad, Bangalore, Bhopal, Bhubaneshwar, Calcutta, Chennai, Guwahati, Hyderabad, Jaipur, Kanpur, Nagpur, New Delhi, Patna and Thiruvananthapuram by October 1999.
2	Claims Section	Application Software has been tested at Mumbai.
II.	**Establishment and Housekeeping**	
	Establishment Sections/Regional Directors Section	
1	Payroll Processing and House Keeping	Ahmedabad, Bangalore, Byculla, Chennai, Guwahati, Hyderabad, Kanpur, Kochi, Lucknow and Patna.

Table -2
Y2K Readiness Status of Operational Department and its Regional Offices

Sr. No.	Name of the Y2K Ready Application Software	Name of the Office
1.	**Exchange Control Department**	
	ECD Packages	ECD Central Office and its Regional Offices
2.	**Department of Banking Operations and Development**	
	DBOD Packages	DBOD Central Office and its Regional Offices
3.	**Department of Banking Supervision**	
	DBS Packages	DBS Central Office and its Regional Offices
4.	**Rural Planning and Credit Department**	
	RPCD Packages	RPCD Central Office and its Regional Offices
5.	**Department of Non-Banking Supervision**	
	DNBS Packages	DNBS Central Office and its Regional Offices
6.	**Department of Economic Analysis and Policy**	
	DEAP Packages	DEAP Central Office and its Regional Offices
7.	**Department of Statistical Analysis and Computer Services**	
	DESACS Packages	DESACS Central Office and its Regional Offices
8	**Deposit Insurance and Credit Guarantee Corporation**	
	DICGC Packages	Deposit Insurance and Credit Guarantee Corporation and its Regional Offices. DID Module is being replaced with new Application Software., N-15 Application Software will retire.

Table -3
Y2K Readiness Status of the Central Office specific Systems

Sr. No.	Name of the Y2K Ready Application Software	Name of the Department
1.	Management Information System	Department of Currency Management
2.	DAPM Packages	Department of Administration and Personnel Management
3.	DEBC Packages	Department of Expenditure and Budgetary Control
4.	SWIFT Alliance Access and Front/Back Office Forex Applications	Department of External Investment and Operations
5.	DGBA Packages	Department of Government and Bank Accounts
6.	DIT Packages	Department of Information Technology
7.	HRDD Packages	Human Resources and Development Department
8.	IDMC Packages	Internal Debt Management Cell
9.	IECD Packages	Industrial and Export Credit Department
10.	Inspection Department Packages	Inspection Department
11.	Legal Packages	Legal Department
12.	MPD Packages	Monetary Policy Department
13.	Premises Department Packages	Premises Department
14.	RBSB Packages	Reserve Bank of India Services Board
15.	Secretary's Department Packages	Secretary's Department

Table -4
Y2K Readiness Status of the Training Institutions

Sr. No.	Name of the Y2K Ready Application Software	Name of the Institutions
1.	BTC Packages	Banker's Training College
2.	RBSC Packages	Reserve Bank of India Staff College
3.	CAB Packages	College of Agricultural Banking

Annexure-II

Y2K Readiness Status in the Banking and Financial Sector
Table 1: Commercial Banks and Non-Banking Subsidiaries of Commercial Banks

Description	Percentage of Readiness by targeted institutions
Commercial Banks reported to be ready	100.00*
Non-Banking Subsidiaries of Commercial Banks reported to be ready	100.00

*Date-wise reporting by Commercial Banks of their readiness to Y2K is given in Annexure III.

Table –2: Financial Institutions

Description	Percentage of readiness by targeted institutions
Institutions ready	76.92
Institutions whose readiness is being pursued	23.08
Total	100.00

Table 3: Primary Urban Co-operative Banks

Description	Percentage of readiness by targeted banks
Primary Urban Co-operative banks not computerised	49.64
Primary Urban Co-operative banks Y2K ready	38.58
Primary Urban Co-operative banks whose readiness is being pursued	11.78
Total	100.00

Table 4 : Primary and Satellite Dealers in Government Securities

Description	Percentage of readiness by targeted institutions		
	Ready	Readiness is being pursued	Total
Primary Dealers in Government Securities	91.70	8.30	100.00
Satellite Dealers in Government Securities	75.00	25.00	100.00

Table –5 : State Co-operative Apex Rural Development Bank (SCARDB), State Co-operative Banks, Central Co-operative Banks and Regional Rural Banks

Description	Percentage of readiness by targeted institutions			
	Not Computerised	Ready	Readiness being pursued	Total
SCARDB	47.36	26.32	26.32	100.00

State Co-operative Banks	31.04	34.48	34.48	100.00
Central Co-operative Banks	56.64	22.49	20.87	100.00
Regional Rural Banks	53.57	37.25	9.18	100.00

Table 6: State Finance Corporations and State Industrial Development Corporations

Description	Percentage of readiness by targeted institutions			
	Not Computerised	Ready	Readiness being pursued	Total
State Finance Corporations	11.11	33.33	55.56	100.00
State Industrial Development Corporations	21.43	50.00	28.57	100.00

Annexure III

Statement showing dates of reporting Y2K Readiness by Commercial Banks in India

Sr.No.	Name of the Bank	Date of reporting readiness
1	Dresdner Bank A.G.	04-06-1998
2	Bank Nationale de Paris	31-08-1998
3	Sonali Bank	05-09-1998
4	Mashreq Bank PSC	22-09-1998
5	Sumitomo Bank	22-09-1998
6	Societe Generale	24-09-1998
7	Siam Commercial Bank Ltd.	29-09-1998
8	Bank of Tokyo-Mitsubishi Ltd.	08-10-1998
9	Banares State Bank Ltd.	28-10-1998
10	City Union Bank Ltd.	14-12-1998
11	Development Credit Bank Ltd.	02-01-1999
12	Sanwa Bank Ltd.	04-03-1999
13	Cho Hung Bank	05-03-1999
14	Bank International Indonesia	10-03-1999
15	Federal Bank Ltd.	11-03-1999
16	IDBI Bank Ltd.	11-03-1999
17	ABN Amro Bank N.V.	15-03-1999
18	KBC Bank N.V.	15-03-1999
19	Dhanalakshmi Bank Ltd.	20-03-1999
20	Barclays Bank PLC	23-03-1999
21	Duetsche Bank	30-03-1999
22	Bank of Punjab Ltd.	30-03-1999
23	Bharat Overseas Bank Ltd.	30-03-1999
24	Abu Dhabi Commercial Bank	31-03-1999

Sr.No.	Name of the Bank	Date of reporting readiness
25	Bank of America	31-03-1999
26	Bank of Bahrain & Kuwait BSC	31-03-1999
27	State Bank of Mauritius	31-03-1999
28	Jammu & Kashmir Bank Ltd.	31-03-1999
29	Bank of Rajasthan Ltd.	-01-04-1999
30	Indian Bank	01-04-1999
31	China Trust Commercial Bank	05-04-1999
32	Vysya Bank Ltd.	05-04-1999
33	Chase Manhattan Bank N.V.	06-04-1999
34	State Bank of Indore	07-04-1999
35	Karur Vysya Bank Ltd.	08-04-1999
36	Dena Bank	08-04-1999
37	Vijaya Bank	10-04-1999
38	Bank Muscat International SAOG	12-04-1999
39	Bank of Nova Scotia	12-04-1999
40	Andhra Bank	12-04-1999
41	Corporation Bank	12-04-1999
42	Punjab National Bank	15-04-1999
43	Lord Krishna Bank Ltd.	16-04-1999
44	Kurung Thai Bank Plc.	19-04-1999
45	Oman International Bank SAOG	19-04-1999
46	Standard Chartered Bank	19-04-1999
47	SBICI Ltd.	19-04-1999
48	Nedungadi Bank Ltd.	20-04-1999
49	Syndicate Bank	22-04-1999
50	State Bank of Patiala	28-04-1999
51	Overseas-Chinese Banking Corporation	04-05-1999
52	United Western Bank Ltd.	04-05-1999
53	British Bank of Middle East	06-05-1999
54	Hong Kong & Shanghai Banking Corporation Ltd.	07-05-1999
55	Allahabad Bank	08-05-1999
56	Sakura Bank	10-05-1999
57	Commerz Bank A.G.	11-05-1999
58	Credit Agricole Indosuez	12-05-1999
59	Development Bank of Singapore Ltd.	12-05-1999
60	Bank of Madura Ltd.	12-05-1999
61	Union Bank of India	13-05-1999
62	State Bank of India	17-05-1999
63	Fuji Bank	18-05-1999
64	ICICI Banking Corporation Ltd.	18-05-1999
65	State Bank of Hyderabad	20-05-1999
66	UTI Bank Ltd.	22-05-1999
67	Times Bank Ltd.	24-05-1999

Sr.No.	Name of the Bank	Date of reporting readiness
68	Bank of Baroda	25-05-1999
69	Bank of India	27-05-1999
70	American Express Bank	31-05-1999
71	UCO Bank	31-05-1999
72	Canara Bank	03-06-1999
73	Catholic Syrian Bank Ltd.	04-06-1999
74	Ganesh Bank of Kurundwad Ltd.	04-06-1999
75	HDFC Bank Ltd.	05-06-1999
76	Punjab & Sind Bank	07-06-1999
77	State Bank of Travancore	08-06-1999
78	Oriental Bank of Commerce	09-06-1999
79	Arab Bangladesh Bank Ltd.	15-06-1999
80	Sangli Bank Ltd.	18-06-1999
81	Global Trust Bank Ltd.	28-06-1999
82	Credit Lyonnais	08-07-1999
83	Karnataka Bank Ltd.	10-07-1999
84	Bank of Ceylon	12-07-1999
85	Bank of Maharashtra	14-07-1999
86	United Bank of India	14-07-1999
87	ING Bank	19-07-1999
88	Lakshmi Vilas Bank Ltd.	19-07-1999
89	State Bank of Bikaner & Jaipur	23-07-1999
90	IndusInd Bank	27-07-1999
91	State Bank of Saurashtra	27-07-1999
92	Indian Overseas Bank	01-08-1999
93	South Indian Bank Ltd.	03-08-1999
94	Nainital Bank Ltd.	12-08-1999
95	Central Bank of India	13-08-1999
96	ANZ Grindlays Bank	16-08-1999
97	Toronto Dominion Bank	16-08-1999
98	Citibank N.A.	17-08-1999
99	State Bank of Mysore	21-08-1999
100	Morgan Guaranty Trust Company of New York	25-08-1999
101	Tamilnad Mercantile Bank Ltd.	27-08-1999
102	Ratnakar Bank Ltd.	28-08-1999
103	Centurion Bank Ltd.	30-08-1999
104	Commercial Bank of Korea	Bank is in the process of winding up operations in India
105	Hanil Bank	-do-