#### **Trading of Government Securities on the Stock Exchanges**

### **Draft Scheme for comments**

# [Objective

With a view to encouraging wider participation of all classes of investors, including retail, across the country in government securities, the Government, the Reserve Bank of India (RBI), and the Securities and Exchange Board of India (SEBI) propose to introduce trading in government securities through a nation wide, anonymous, order driven, screen based trading system of the stock exchanges, in the same manner in which trading takes place in equities. This facility will be in addition to the present system of dealing in government securities through the Negotiated Dealing System of the RBI. Besides expanding the investor base and providing country wide access to the government securities market, this measure will also help in reducing time and cost in trade execution by matching orders on a strict price time priority. It is also expected to enhance the operational and informational efficiency of the market as well as its transparency, depth and liquidity. This paper develops an implementable market design for trading of government securities on exchanges. The paper is being placed simultaneously on the web sites of the Ministry of Finance and Company Affairs (www.finmin.nic.in), the RBI (www.rbi.org.in) and the SEBI (www.sebi.gov.in) for comments from public. Such comments may be sent to Dr. Sashank Saksena in Ministry of Finance (ssaksena@finance.nic.in) or Mr. H. R. Khan in Reserve Bank of India (cgmidmc@rbi.org.in) or Mr. P. K. Bindlish in Securities and Exchange Board of India (pkb@sebi.gov.in) by January 9, 2003. These comments will be taken into account before taking a final decision in the matter.]

# 1. Introduction —the present market design

1.1 At present most of the secondary market trades in government securities takes place through bilateral negotiations. In common parlance, this is a telephone market. The deals are negotiated directly by counter parties who are usually banks, financial institutions, primary dealers, mutual funds or are negotiated through brokers. Since February 2002, the RBI is providing an electronic platform called Negotiated Dealing System (NDS) for facilitating negotiated dealing in government securities. The NDS also provides an interface to the Securities Settlement System (SSS) of the Public Debt Office of the RBI to facilitate settlement of transactions in government securities. All outright trades in government securities done or reported on the NDS have the facility of guaranteed settlement extended by the Clearing Corporation of India Ltd (CCIL) through the process of novation. All such trades can either be settled through the CCIL on gross basis for securities and on net basis for funds or can be settled through the RBI – SGL on gross basis for funds and securities. Only the NDS members can route their deals done among themselves for settlement through the CCIL. Outright transactions in government securities for cut-off amount Rs.20 crore and below (face value) and all repo trades are settled through the CCIL. For outright transactions in government securities of face value above Rs. 20 crore, option is available to members to settle either directly through the RBI-SGL or through the CCIL.

- 1.2 One of the basic objectives of the NDS is also to provide online price information of transactions in government securities. In order that the NDS can meet this objective, transactions concluded outside the NDS by the NDS members, are also required to be reported on the NDS. But to use the NDS, the entities are required to be members of INFINET, a closed user group network which serves as a communication backbone. Since only those entities which are permitted by the RBI to maintain Subsidiary General Ledger (SGL) accounts or current account, can become members of the INFINET, the direct participation in the NDS is thus restricted to such entities. NDS members offering Constituent Subsidiary General Account (CSGL) facility, however, can deal or report transactions on behalf of their clients (Gilt Account Holders) on the NDS.
- 1.3 RBI has also permitted the banks and financial institutions to transact in debt instruments amongst themselves or with non-bank clients through the members of the National Stock Exchange (NSE) and those of the Stock Exchange, Mumbai (BSE) and the Over the Counter Exchange of India (OTCEI).
- 1.4 The NSE provides a separate Wholesale Debt Market (WDM) segment. While this segment has the facility to match trades, mostly it has been used for reporting of negotiated deals. The settlement of these deals is done directly between the counter parties on a trade for trade basis without netting and also without the involvement of the stock exchange and its settlement guarantee fund. A similar facility is also available with the BSE. The OTCEI, though permitted by the RBI on similar lines as BSE and NSE, has not yet operationalised the facility.
- 1.5 It can be seen from above that the present model for secondary market trading in government securities is distinctly different from that of equity trading. Unlike the equity market, participants in secondary market in government securities is restricted to banks, financial institutions, mutual funds, Foreign Institutional Investors (FIIs), Trusts etc. Consequently there is no country wide access for retail participation. The trades are done through negotiations, with the knowledge of counter parties and usually over the phone rather than the trades being matched on an anonymous automated price time priority mechanism.

# 2 Growth of the government securities market

2.1 The aggregate turnover (in central and state government dated securities and T-bills) through the SGL (including outright and repo transaction) has grown more than twelve times in the last six years between 1995-96 and 2001-02. It touched a level of Rs.1,573,893 crore in 2001-02, recording an increase of 125% over Rs.698,121 crore in the previous year. There was also a nearly equal growth in the turnover of government securities on the WDM during the same period.

**Table 1: Transactions of Government Securities** 

			(Rs crore) Share of		
Year	On SGL	On WDM			
			<b>WDM</b> (%)		
1995-96	127,179	9,988	7.85		
1996-97	122,941	38,308	31.16		
1997-98	185,708	103,585	55.78		
1998-99	227,228	95,280	41.93		
1999-00	539,232	293,887	54.50		
2000-01	698,121	414,095	59.32		
2001-02	1,573,893	927,604	58.94		

2.2 Recent data available from the BSE (Table 2) which commenced reporting of trades in Government securities since January2001, shows that the volumes have been modest though an increasing trend is noted.

Table 2: Transactions of Government Securities on the BSE Wholesale Debt Segment

Items	February 2002	March 2002	1			•	O	Septem ber 2002	
Turnover (in Rs crore)	164.71	71.74	88.37	20.97	42.55	323.26	443.82	267.82	490.2
No. of trades	160	180	103	31	72	75	77	45	114
No. of trading days	22	21	23	25	25	27	26	23	19

# 3 Proposal for a new market design for trading in government securities

- 3.1 The Government, the RBI and the SEBI propose to allow trading in government securities through the anonymous order driven screen based trading system of the stock exchanges which will facilitate participation by all classes of investors and increase market access across the country. This facility of trading of government securities on the stock exchanges would be in addition to the present NDS of the RBI which will continue to remain in place.
- 3.2 The essential elements of the secondary market design for such trading of government securities on stock exchanges are discussed in the following paragraphs.

# Definition of Government securities

3.3 The Government securities are included in the definition of securities in the Securities Contracts (Regulation) Act, 1956 (SCRA) and mean a security created and issued by the Central Government or a State Government for the purpose of raising a public loan in a form specified in the Public Debt Act 1944.

# Government securities eligible for trading

3.4 Technically all outstanding and newly issued government securities are eligible to be traded on the exchanges. Currently about 154 central government securities and 539 state

government securities are listed on the WDM segment of the NSE. To begin with, it is proposed that all outstanding and newly issued central government securities would be traded on the automated, anonymous, order driven system of the stock exchanges. The treasury bills, state government and other securities which are eligible as government securities would be included in phases by the RBI in consultation with the SEBI. The RBI will notify the exchanges the list of outstanding central government securities as well as the list of new securities as soon as these are issued as indicated in paragraph 3.6 below.

# Permitted Exchanges

3.5 As mentioned in paragraph 1.3 the banks and financial institutions have been permitted by the RBI to transact in debt instruments amongst themselves or with non-bank clients through the members of the NSE, BSE and the OTCEI. It is proposed that government securities would be allowed to be traded on the automated, order driven system of these exchanges only.

# Listing

3.6 The Government securities are deemed to be listed at issuance under the bye laws of the NSE and BSE. In order to disseminate information to the market about the securities that are eligible to be traded on the exchanges, the RBI would immediately after the closure of an issue, inform the permitted exchanges and the depositories, the amount, tenure, coupon, and such other particulars viz. ISIN code as may be considered necessary by the RBI for describing and identifying the security. The RBI will also provide the exchanges and the depositories, a list of outstanding government securities which could be traded on the permitted exchanges. The exchanges upon receipt of the notification from the RBI shall immediately disseminate the information to the market through the ticker facility as well as through their web-sites. The list of securities which would be traded on the permitted exchanges would also be placed on the web site of the RBI.

# Trading model

- 3.7 In view of the familiarity of the market and its participants with the systems, processes and procedures followed for secondary market trading in equities, it is proposed to adopt the equity trading model for trading of Government securities on the permitted exchanges. Apart from its familiarity, this model has several advantages. No additional infrastructure or connectivity issues need to be resolved to use the equity trading model for trading in government securities. There would also no requirement for a fresh membership on the exchanges or on the clearing corporation/ clearing houses to trade on government securities. Discussions with the NSE and BSE have indicated that they are in a position to commence trading in government securities as soon as they receive the necessary permission.
- 3.8 The elements of this model are as follows:
  - Trading at the exchanges

- Order driven system
- Anonymous trade matching
- Order matching principle -price time priority
- Rolling settlement
- Intra-day multi-lateral netting of obligations
- Settlement of obligations by all clearing members through exchange clearing corporation / clearing house
- Settlement of securities through the depository

#### Settlement Basis

3.9 Like equities, the government securities would be traded on the permitted exchanges by T + 3 rolling settlement. The settlement cycle would be further shortened along with the shortening of the settlement cycle for equity trading.

#### Guarantee for Settlements

3.10 The clearing corporation and clearing house would provide the financial guarantee for settlement of obligations to its clearing members, as they do for equity market. For this purpose, the permitted exchanges would be required to set up a trade or settlement guarantee fund distinct and separate from the fund used to guarantee trades for the equity market. The clearing corporation/house should have automatic access to the use of the settlement guarantee fund without any reference to the exchanges.

#### The clearing and settlement process

3.11 The trades executed during the day would be passed on to the clearing corporation / clearing house for carrying out clearing functions. The clearing corporation/clearing house shall take into account all the trades for a day and derive at clearing members/participants obligations, by intra-day multilateral netting. At the end of every T day for settlement purpose, each clearing member will have a single obligation for a security- settlement, (i.e. securities to deliver or receive) and will have a single funds pay-in obligation for a settlement, (i.e. funds to pay or receive) on the T+3 day. The same practice is now being followed for equity trades.

# Funds and securities settlement

3.12 In the case of equities, the exchange clearing corporation / clearing house provides funds pay-in obligations to the clearing banks apart from the clearing members. Accordingly pay-in is received in the different clearing banks, and the net surplus/deficit is moved between the clearing banks so as to effect payout. The funds payout is then effected by the clearing banks through the clearing corporation/house account to the accounts of clearing members and onwards to client accounts. The entire pay-in is completed by 11.30 am and payout effected by 3 p.m. on the same day upto the level of clearing members. Wherever client accounts are within the same bank, the credit at client level is also completed on same day, thereby funds are available to a client end of day for any instructions he may want to give.

- 3.13 Like in funds settlement, the exchange clearing corporation/clearing house provide the securities settlement obligations to the depositories which then effect the pay-in from the different clearing members' accounts to Clearing corporation/Clearing house account by 11 am in the morning and effect payout of securities upon receipt of instructions from the clearing corporation/clearing house that funds pay out has been successfully completed.
- 3.14 In the case of government securities, a similar procedure will be applicable. Firstly, all pay-in of funds must necessarily be clear funds. For example, the pay-in must not be contingent upon the outcome of any clearing to be conducted on that day. Therefore, either the clients must provide clear funds in their accounts or their bankers consciously provide credit. Secondly, instructions for pay-out of securities would be given by the depositories only after they receive a confirmation from the clearing corporation /clearing house about the pay-in and pay out of funds..

It is recognised that until RTGS is introduced the system does not assure finality of payment in RBI's books. The clearing banks, therefore, are required to be sufficiently alert to the risks of providing intra-day credit against uncleared effects to the clearing members.

3.15 The SGL account holders would be free to continue to hold government securities directly in SGL as they are doing now or hold securities in SGL through the CSGL account of NSDL or CDSL. The RBI would include the balance in government securities maintained by the banks in the depositories in the measurement of SLR. Further to facilitate the settlement by the SGL account holders, the RBI would establish a "value free transfer" mechanism through which the SGL account holders would be able to transfer securities from their SGL accounts to their own accounts with the depositories on T+1 or T+2 day.

# Dealing with failures of shortages of funds and securities

3.16 Currently, funds shortages of the clearing members are made good by the clearing corporation / clearing house, so as to insulate against systemic risk. The same procedure would be applied for the trades in government securities also. Failure to deliver securities by clearing members in the case of equity market trades are met through an auction mechanism. With the shortening of settlement cycle, the auction mechanism is being replaced by a close-out procedure through a financial transaction, so as to complete the settlement in toto. The financial close- outs are carried out at a price which is price arrived at on the basis of average of the price of the security in the last 6 months with a discount of a certain percentage.

In the case of government securities, all transactions should ordinarily result in delivery of the sold securities. In the exceptional event of a delivery failure, the financial closeouts would be resorted to. The close out would be worked based on the price trend for similar securities or using Zero Coupon Yield Curve (ZCYC) valuation for prices and

adding a stiff penalty factor to the same. Further, those entities which frequently default (more than three times in a half-year (April – September and October – March) in making deliveries will be barred from trading for a period of 6 months from the occurrence of the third default. Further, if after the restoration of the trading facility, the concerned entity defaults again, it will be permanently debarred from trading.

#### **Risk Management**

**Margins** 

- 3.17 The present risk management mechanism for, equity trades is through mark-to-market margin and VAR based margin, in addition to exposure norms. As the volatility borne out by the ZCYC constructed by NSE on the basis of last five years data for trading in government securities is much lower than for equities, the margin levels would be less than in case of equity. It is proposed that to begin with, there should be mark-to-market margin along with exposure norms calculated conservatively on the basis of worst case volatility scenario on the ZCYC. Margins based on such volatility estimates works out to around 15% in addition to mark to market.
- 3.18 In addition to the above the permitted exchanges would have to design and build intra day risk containment system for positions on government securities. This would be prerequisite for obtaining permission to trade government securities on an exchange.

# Participation of brokers

Capital requirement of brokers for eligibility

- 3.19 If retail participation in government securities is to be encouraged, it would be necessary to involve brokers in the secondary market trades. Currently, the capital requirement for brokers in the equity market is Rs. 30 lac for the BSE and Rs. 1 crore for the NSE. These capital requirements would be suitably enhanced by SEBI for a broker who would be eligible to trade in the government securities on an exchange and any broker registered with SEBI for the equity market would be eligible to deal in government securities provided the condition of minimum capital requirement is satisfied. Ultimately the concept of trading member and professional clearing member which is applicable to the derivatives market would be introduced by SEBI for all markets, both the equity and government securities market.
- 3.20 Brokers will not be allowed in the settlement process for any regulated entity i.e. banks, primary dealers, all India financial institutions & deposit taking non-banking financial companies. The RBI would instruct all its regulated entities to use the custodian banks to settle trades. Besides, the banks, primary dealers and institutions may be allotted a custodial code and settle on their own behalf. Eventually we may look at a mechanism similar to derivatives of Professional Clearing Members for dealing in the G-secs market. This is working well in the derivatives market.

SEBI, IRDA and the government may respectively take decision regarding use of brokers for settlement in respect of mutual funds, insurance companies and provident funds.

#### **Short Sales**

3.21 Currently, RBI does not allow government securities to be sold unless the entity is holding such securities at the time of sale. Hence, intra-day shorting is prohibited. Since the proposed scheme involves government securities trading where all transactions will be netted and settled on DVP 3 basis, the system will not be able to prevent intra-day shorting. In a rolling settlement environment, intra day shorts will necessarily have to be closed and deliveries effected for the net positions. In view of this, intra-day shorting will be permitted on the exchanges for all entities subject to the regulation that all transactions will be delivered on T+3 and penalties as indicated in para 3.16 above will be applicable in the event of delivery failures.

# Reporting and inspection and other requirements

- 3.22 The permitted exchanges would be required to send weekly reports to the RBI in a format prescribed by the RBI, about the size of funds moved through the clearing banks in amount and also expressed as a percentage of their cash balances published in their latest available public reports. This would enable the RBI to monitor the banks' exposure to the payment system. In addition, a mechanism for exception reporting to the RBI, covering, inter-alia, settlement failures, off-market trades, etc on a daily basis will also be put in place.
- 3.23 The exchanges would provide screens and telecommunication facilities to RBI toenable RBI to view the market on a real time basis.
- 3.24 The SEBI will associate the RBI in the inspections of the permitted exchanges and the depositories for their operations of the in the government securities market.

# 4. Regulatory jurisdiction

4.1 The regulatory jurisdictions between the RBI and the SEBI have been clearly enunciated under the notification S.O. 183 (E) dated March 1, 2000 issued by thegovernment under the Securities Contract (Regulation) Act, 1956. According to the notification in relation to any contracts in Government securities, money market securities, gold related securities and in securities derived from these securities and in relation to ready forward contracts in bonds, debentures, debenture stock, securitised debt and other debt securities shall also be exercisable by the Reserve Bank of India.

Provided further that such contracts entered into on the recognized stock exchanges shall be entered onto in accordance with, -

- (a) the rules or regulations or the bye-laws made under the SCRA, 1956, or the SEBI Act, 1992 or the directions issued by SEBI under the said Acts;
- (b) the rules or guidelines or directions issued under the RBI Act, 1934 or the BR Act, 1949 or the FERA, 1973 by the Reserve Bank of India;

(c) the provisions contained in the notification issued by the RBI under the SCRA, 1956.

# 5. **Implementation**

- 5.1 After the formal announcement of the policy to allow trading of government securities on the order driven system of the exchanges, the SEBI would issue a circular outlining the model, margin requirement, settlement guarantee procedure, creation of separate settlement guarantee fund, procedure for fund and securities settlement and for close-outs etc. In addition, SEBI may also amend the Broker Regulations if necessary at a later date to provide for introduction of clearing and trading members, who will be registered as such with SEBI and the exchanges for the purpose of G-sec trading. The RBI would also issue suitable instructions for their regulated entities.
- 5.2 The NSE and BSE which already have a debt segment have expressed their readiness to introduce trading in government securities immediately. However to clear any operational difficulty, it would be reasonable to give a fortnight's time from the date of issuance of SEBI circular for commencement of trading.