



South African Reserve Bank

**FINANCIAL MARKETS DEPARTMENT**

**An implementation paper on the  
Modifications to the Money Market Operations of the  
South African Reserve Bank**

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## **MODIFICATIONS TO THE MONEY MARKET OPERATIONS OF THE SOUTH AFRICAN RESERVE BANK**

Implementation paper by the South African Reserve Bank:

This paper describes the new framework and envisaged broad functioning of the Reserve Bank's operations in the domestic money market. The implementation programme of the new framework will commence on Wednesday, 25 May 2005.

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Further copies of the paper are available on the Reserve Bank's website at [www.reservebank.co.za](http://www.reservebank.co.za)

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## **1. INTRODUCTION**

- 1.1 The Reserve Bank announced in a press release dated 3 June 2004 that it is currently reviewing its operations in the domestic money market and assessing the functioning of the money market in general.
- 1.2 Following the announcement, the Reserve Bank embarked on a series of discussions with its major counterparties participating in its refinancing operations in order to obtain their views and ideas on how these procedures and related issues could be improved upon.
- 1.3 A money market survey was also conducted by means of a questionnaire distributed among all the major participants in the domestic financial market.
- 1.4 A consultation paper encompassing the outcome of the discussions held with various institutions, as well as the suggestions and issues raised in the questionnaire by the participants in the survey, was circulated for comments to the Money Market Liaison Group (MMLG) at its inaugural meeting on 10 December 2004. The consultation paper and consequently also this implementation paper were shaped by their comments including also those of other interested parties to whom the consultation paper was circulated, as well as by the Reserve Bank's investigations into the operational frameworks of various other central

banks to ensure that our operational framework develops in line with best international practice.

- 1.5 The MMLG was set-up as a central bank initiative supported by money market participants to serve as a forum for all interested parties to regularly review and discuss developments in the structure, functioning and effectiveness of the domestic money market.
- 1.6 The MMLG consists of representatives from ABSA, SCMB, FNB, Nedcor, Investec, Association of Corporate Treasurers of South Africa (ACTSA), Bond Exchange of South Africa (BESA), JSE Securities Exchange, the Public Investment Corporation (PIC), The Banking Association and the International Bankers Association (IBA).
- 1.7 Various comments were received from market participants on the proposals contained in the consultative paper. These issues were discussed at the second meeting of the MMLG on 20 April 2005, paving the way for preparing this implementation paper which describes the modifications to the Reserve Bank's money market operations.
- 1.8 The Reserve Bank last announced certain changes to its refinancing procedures in April 2001 (which became effective in September 2001) aimed at improving the efficiency of its monetary policy implementation framework. Various changes have occurred since then which warrant

some further adjustments to the existing procedures. One recent such development was the elimination in February 2004 of the Reserve Bank's oversold foreign exchange forward book, which had a major impact on money market liquidity in the past.

1.9 This implementation paper sets out the Reserve Bank's modifications to the refinancing system, the implementation programme of which will commence on Wednesday, 25 May 2005. The Operational Notice, which clarifies the procedures governing participation in the Bank's refinancing operations, is currently being updated and will be published on the Bank's website prior to the implementation date mentioned above.

1.10 Although the purpose and current procedures of the Reserve Bank's operations in the money market have been explained in detail in the consultative paper, they are summarised below for ease of reference. Moreover, they provide useful background as to the reasons behind the modifications.

## **2. PURPOSE**

2.1 The purpose of the Reserve Bank's operations in the domestic money market is to implement the Monetary Policy Committee's (MPC) interest rate decisions while meeting the banks' combined liquidity needs, and so contribute to the stability of the banking system as a whole. At the core of this process lies the fact that a central bank, as

the ultimate provider of liquidity in the banking system, exerts control over the supply of funds in the interbank market. Central banks have the ability to determine the conditions that equilibrate supply and demand of funds in the interbank market. Hence, they can directly influence short-term rates in the money market and thus the structure of interest rates across the financial system. This forms one of the principal transmission channels through which monetary policy impacts on the economy, including movements in the general price level. The modifications announced in this paper will not in any way change the Reserve Bank's monetary policy framework.

- 2.2 The purpose of this implementation paper is to announce certain modifications to the Reserve Bank's accommodation/refinancing system in order to:
- 2.2.1 streamline the Bank's refinancing operations to make them simpler and more transparent. The aim is to have an efficient, safe and flexible framework for liquidity management in the money market, including access to and use of central bank money;
  - 2.2.2 encourage the banks to take more responsibility for managing their own individual liquidity needs in the market and thereby test their credit-standing in the market on a regular basis (in line with the philosophy of Basel II); and

- 2.2.3 promote a more active money market in South Africa, as more active trading amongst money market participants should promote more liquid and deeper money markets, benefiting the country's financial infrastructure as a whole by way of improving the price discovery mechanism through enlarged competition among regular players in the interbank money market.

In order to better understand the reasons behind the changes to the refinancing system, the current procedures warrant a brief summary.

### **3. CURRENT MONEY MARKET OPERATIONS**

- 3.1 The Reserve Bank currently aims to supply liquidity to the banks to enable them to hold required cash reserve deposits with the Bank and to provide them with sufficient funds to square off their positions at the end of each settlement day.
- 3.2 The liquidity requirement is re-estimated each week and the required amount is provided at the main weekly repo auction, usually conducted on Wednesdays at 12:00. The transactions have a maturity of seven days. The Reserve Bank's estimation of the liquidity requirement is not disclosed prior to the auctions, which means that the banks do not know what their collective need is.
- 3.3 The amount supplied at the main repo auction is limited to the estimated liquidity requirement. Should the combined bids exceed the



estimated liquidity requirement, the latter amount is allocated to the banks on a pro rata basis i.e. they each receive a similar percentage of the amounts bid with the total allocation equal to the estimated liquidity requirement. However, should the banks tender for a smaller amount than the estimated liquidity requirement, they are then provided with their individual bids which means that the total amount allocated would be smaller than the estimated required amount.

- 3.4 Funds at the weekly repo auction are provided at the repo rate as determined by the Monetary Policy Committee (MPC). This ensures that market rates are anchored to the policy rate, which is the way in which monetary policy is transmitted to the economy.
- 3.5 For some years up until 2003, a huge structural money market surplus first needed to be drained in order to create a meaningful liquidity requirement in the domestic market. This liquidity overhang was largely associated with losses encountered (at times) on the Reserve Bank's oversold foreign exchange forward position (forward book). The subsequent expansionary impact on money market liquidity was neutralised through various so called "open market operations" namely: SARB debentures, long term reverse repo transactions, foreign exchange swaps and money market foreign exchange swaps with counter dollar deposits, which at one stage reached a level of more than R50 billion. The structural surplus has now declined substantially owing mainly to: the partial settlement of the Gold and Foreign

Exchange Contingency Reserve account (GFECRA) by the National Treasury; the outright selling of securities from the Reserve Bank's bond portfolio; as well as the recovery in the exchange rate of the rand which has generated profits on the forward book. The oversold foreign exchange forward position was squared-off in February 2004 which means that the forward book will no longer be an important factor in liquidity management. In the past, it has often complicated the banks' own liquidity calculations because they could not reliably determine what amounts of liquidity would be drained by the Reserve Bank in order to sterilise the expansions related to the losses on the forward book. Having dealt with this important structural constraint, the Reserve Bank feels that it can now introduce measures which it believes will encourage banks to take more responsibility for managing their own individual liquidity needs.

- 3.6 If in practice the amount supplied in the main weekly repo auction turns out to fall short or exceed the banks' combined liquidity need by more than R100 million, the Reserve Bank generally squares off this position at the end of each settlement day through supplementary auctions. A supplementary repo auction is announced to provide additional liquidity to the banks or any excess liquidity is drained by means of a supplementary reverse repo auction. These overnight operations are conducted at the repo rate, i.e. without penalty, because the shortfalls/surpluses normally arise due to under/over-estimation of the market's liquidity needs by the Reserve Bank. The Reserve Bank may

occasionally impose a penalty, by leaving the banks to resort to the final clearing mechanism where short positions are funded at 150 basis points above the repo rate and surpluses absorbed at 150 basis points below the repo rate. Final clearing auctions are available to the banks at their discretion. They may typically decide to utilise this facility if the final position at square-off time is less than R100 million, because the Reserve Bank will then refrain from offering supplementary clearing auctions. Should the banks fail to avail themselves of the final clearing facility, any shortfalls on their settlement accounts are automatically squared at the marginal lending rate i.e. at 500 basis points above the repo rate. Surpluses on their settlement accounts attract no interest.

- 3.7 If, during the week, it turns out that the actual liquidity need varies substantially from the calculated requirement (i.e. the amount allotted at the weekly main repo auction), the Reserve Bank will steer the overall need back towards the target by supplying or draining liquidity overnight through the use of foreign exchange swaps.
- 3.8 Besides the facilities described above, the banks also have automatic recourse to their cash reserve balances at the Reserve Bank, provided that they comply with the minimum daily average amounts which need to be kept on these accounts over each maintenance period.
- 3.9 The Bank is of the opinion that a major disincentive for the development of the depth and breadth of the interbank market lies in

the Bank's practice of squaring-off the banks virtually every day by means of a supplementary repo/reverse repo auction (i.e. at the prevailing repo rate). This practice dampens the banks' responsibility to participate more actively in the interbank market, because of the assurance that the Reserve Bank will either accept any surplus cash or finance any shortfall at the repo rate.

#### **4. MODIFICATIONS TO THE RESERVE BANK'S MONEY MARKET OPERATIONS**

4.1 The supplementary square-off facility will be abolished as a regular feature. However, the Reserve Bank will maintain the option to conduct a supplementary square-off auction (i.e. at the repo rate), if some unexpected developments cause a large shift in liquidity conditions, or in the case of a substantial over- or under- estimation of the market's liquidity needs by the Bank. Supplementary auctions will, therefore, only be conducted on infrequent occasions, where the Bank considers them necessary to assist the orderly functioning of the market.

4.2 The marginal lending facility (MLF) will be abolished because it is no longer being used for monetary policy purposes. It is mainly used for the automatic funding of banks' short positions on their SAMOS settlement accounts at the end of the settlement cycle. This happens mainly owing to administrative errors on the side of the banks and the amounts involved are small and insignificant. However, the need still

exists to encourage banks to square-off their positions in the position window period, either by accessing their cash reserve accounts or the standing facilities at the Bank (assuming that it does not offer a supplementary clearing auction). Some form of penalty will, therefore, still apply on unsettled positions on the banks' settlement accounts at the end of the settlement cycle. For this reason overdrawn or debit positions will be settled at the SAMOS penalty rate of five hundred basis points above the prevailing repo rate. Credit balances will not earn any interest because banks should for, prudent risk management purposes, still be encouraged to minimise the outstanding balances on their settlement accounts.

- 4.3 The abolishment of the supplementary square-off facility (as a regular feature), implies that, besides the main weekly repo auction, banks will still have access to their cash reserve balances at the Reserve Bank and to the final clearing (or standing) facilities, which will henceforth be renamed "standing facilities". The latter facilities are available in the form of a repo or reverse repo transaction maturing on the following business day. The respective interest rates are currently set at a spread of 150 basis points above (for the final clearing repo or overnight borrowing rate) or below (for the final clearing reverse repo or overnight deposit rate) the repo rate. The width of the interest rate corridor usually depends on underlying market conditions. For example, pressures experienced in several foreign exchange markets during the late nineties have led various central banks to accept

greater day-to day movement in interbank overnight rates. Hence, the corridor has been widened in some countries. In South Africa, the corridor was originally set at a spread of  $\pm 150$  basis points in September 2001. Financial conditions have stabilised since then, and the spread above or below the repo rate will from 25 May 2005 be reduced to 50 basis points. Banks will have daily access to the standing facilities between 10:00 and 14:30 provided that they can deliver eligible collateral. Only clearing banks will have recourse to these facilities during the relevant square-off window periods subject also to the provision of suitable collateral. Although the standing facilities will be available to the banks at their discretion, the Reserve Bank will closely monitor utilisation of these facilities. Too frequent use of the standing facilities would signal that the spread is too narrow (i.e. not punitive enough), thereby discouraging the square-off of banks in the interbank market among themselves. Such behaviour may result in the spread being adjusted. The Bank could also decide to adjust the spread in a non-symmetrical way, i.e. penalising borrowers more, relative to depositors, or *vice versa* depending on trends observed.

- 4.4 Since the supplementary square-off facility will be abolished as a regular feature, it may imply more extensive use of their cash reserve accounts by the banks. In order to provide the banks greater flexibility in managing their own liquidity positions (against the abolishment of the almost daily-offered supplementary square-off facility), the current rule in terms of which banks first have to withdraw funds from their cash

reserve accounts before being allowed to make a deposit, will also be abandoned once the modifications are implemented.

- 4.5 Since September 2001, the Reserve Bank has discontinued disclosing its estimated liquidity requirement to the banks at the announcement of its weekly main repo auctions which means that the banks do not know the size of their collective need. The idea was to create some uncertainty among the banks regarding the overall liquidity position in the market, forcing them to trade their positions actively in the interbank market without relying passively on the Reserve Bank to ultimately deal with the final square-off position at its repo rate. This envisaged incentive for improving the functioning of the interbank market did not materialise as anticipated. It has consequently been decided that the Reserve Bank will, prior to the auction on Wednesdays, resume announcing its estimate of the market's daily average liquidity requirement for the coming week including also the expected range (i.e. the highest and lowest values) of the liquidity requirement for the week ahead. The banks will then be invited to tender for the amount they deem appropriate for their individual needs and the full amount tendered will be allocated to them, irrespective of whether the combined amount tendered exceeds or falls short of the Reserve Bank's average liquidity estimate for the week. Surpluses/shortfalls which may arise during the daily settlements will generally not be accommodated by the Reserve Bank. Instead, the banks will normally be expected to entertain end-of-day square-off

positions by accessing either their cash reserve balances or the standing facilities at the Bank. Only when sufficiently large positions arise at square-off time, which may adversely impact on money market interest rates and conditions, will the Reserve Bank consider offering a supplementary clearing facility. However, supplementary clearing auctions might be offered more often at or near the end of the maintenance periods in order to assist the banks to comply with the averaging of their cash reserves.

- 4.6 While the Reserve Bank is of the opinion that, as a rule, it would be more beneficial to allot the banks' combined liquidity tender in full, it will always do so within reason. This means that, should the extent of the over-bidding pose a threat to the orderly functioning of the money market, the Bank reserves the right to reduce the overall allotment to a reasonable amount. It is, therefore, foreseen that in the (unlikely) case of a huge combined over-bidding, the banks' bids will be allotted on a pro-rata basis. In the event of a combined underbidding, the latter amount would naturally be allotted. It is hoped that this procedure, of meeting the banks' combined bids in full, will encourage the banks to calculate their individual liquidity needs as accurately as possible and that their respective bids will reflect their individual liquidity needs. A more reliable signal of underlying liquidity conditions will be of far greater benefit for both the Reserve Bank and the banks.



- 4.7 Although the Reserve Bank will aim to keep the liquidity requirement during the course of the week within the announced range, the liquidity requirement will fluctuate from one week/auction to another. This fluctuation will mainly reflect the expected weekly changes in note-flows. This means that the liquidity requirement during the last week of the month will generally exceed those during the second or third week of the month owing to substantial increases in notes and coin in circulation at month-ends. However, the expected changes in the liquidity requirement will be conveyed to the market prior to each weekly auction and the daily liquidity requirements will be managed by means of fine-tuning operations to remain within the range announced on Wednesday. Fine-tuning may take the form of offering a supplementary clearing facility by the Bank or may include trading in instruments such as forex swaps, SARB debentures or other securities, either outright or on repo.
- 4.8 As indicated in the Consultative Paper, it is the Bank's intention to broaden its definition of eligible collateral to also include all government guaranteed securities. This means that some securities issued by Trans-Caledon Tunnel Authority (TCTA), the National Roads Agency (NRA), Transnet and Telkom might be considered for inclusion in the eligible collateral pool. It has since transpired that some of the securities issued by these institutions consist of bonds, (which trade as discount instruments and which are already dematerialised) while others are short-term money market securities (which normally trade as

interest-add-on instruments and which are still in paper scrip format). In some cases, the total amounts in issue are relatively small (below R1 billion), which means that despite being government guaranteed, the liquidity on some of these instruments would be relatively low. As a result of the issues mentioned above and taking into account the current endeavours to dematerialise all money market instruments before the end of the year, it has been decided to delay an announcement on the possible expansion of eligible collateral until a later stage. This will allow more time to deal with the various administrative-, systems- and statutory issues, hence preventing the Reserve Bank from announcing “piecemeal” changes to its pool of eligible collateral. Market participants will be informed about developments in this regard. As a result the planned expansion of eligible collateral will not commence with the implementation of the other modifications announced in this paper.

## 5. SUMMARY OF MODIFICATIONS

The Reserve Bank hereby announces that as from 25 May 2005:

- 5.1 The supplementary refinancing facility will be abolished as a **regular** daily square-off facility for the banks. Supplementary square-off auctions will henceforth only be conducted on infrequent occasions, for instance if unexpected developments cause a large shift in liquidity conditions.

- 5.2 The marginal lending facility will be abolished as a monetary policy instrument. To encourage banks to square-off their positions in the position window period, overdrawn or debit positions on their settlement accounts will be settled at the end of the settlement cycle at the SAMOS penalty rate, which is currently set at five hundred basis points above the prevailing repo rate.
- 5.3 The final clearing facility will be abolished as an end-of-day window and replaced with standing facilities at the Reserve Bank providing overnight repo or reverse repo facilities for all banks available daily between 10H00 and 14H30 (and until the closure of the position window for clearing banks).
- 5.4 The spread between the repo rate and the standing facilities will be reduced from the current 150 basis points to 50 basis points on either side of the repo rate.
- 5.5 The Reserve Bank will, prior to the repo auctions on Wednesdays, resume announcing its estimate of the market's daily average liquidity requirement for the coming week including also the expected range (i.e. the highest and lowest values) of the liquidity requirement for the week ahead. The full amount tendered for by the banks will then be allocated to them within reason.

- 5.6 The rule, in terms of which banks first have to withdraw funds from their cash reserve accounts before being allowed to make a deposit, will be abolished.