

May 07, 2005

The Chairman/MD/ CMD/ CEO
Public Sector Banks, Private Sector Banks, Foreign Banks.

Madam/Dear Sir,

Indian banknotes with additional/revised security features

In the wake of increasing circulation of high quality counterfeit notes, particularly, Rs.100 and Rs.500 denominations, the Government of India had constituted a High Level Committee to consider strengthening the security features in our banknotes. The Committee's recommendations were examined and with the approval of the Govt., the Reserve Bank of India has decided to incorporate certain additional security features and make improvement in the existing ones, in the banknotes of various denominations. The new / improved / additional security features, besides acting as a deterrent to counterfeiting, will also enhance the overt features to help public in identifying the genuine banknotes.

2. The issue of banknotes with additional/revised security features is targeted for circulation in near future. New banknotes for the denominations of Rs.50 and above will be introduced during 2005 in a phased manner. As you are aware, the currency verification & processing activities have been mechanized at the RBI. The banks also have been advised to equip themselves with proper and adequate number of currency handling machines so that only the non-issuable notes are sent to the RBI for eventual disposal. The mechanization of currency handling process is under way in the banks. It, therefore, becomes imperative that the banks are aware of the proposed changes in the existing security features so as to attempt suitable adaptation to their machines. Details of new/additional overt security features for the denominations of Rs.50, Rs.100, Rs.500 and Rs.1000 are enclosed. Banks are advised to peruse the list of security features carefully, get them examined, and take appropriate steps for handling these banknotes.

3. A meeting of the Chief Executives of banks to share information on the changes in the security features of banknotes and to create an overall preparedness, will be held on a suitable date for which a separate intimation will be sent. Needless to mention, the

Reserve Bank will run public awareness campaign on these features at the time of putting the new notes in circulation.

Yours faithfully

Sd/-

(U.S.Paliwal)

Chief General Manager

ANNEXURE

**Existing Security and Revised / Additional Security Features of Rs.50,
Rs.100, Rs.500 and Rs.1000 Denominations**

Sl. No.	Feature	Denomination	Existing specification/ security feature	Proposed specification/ Security feature
1.	Paper	All	Banknotes are printed on a special watermarked paper with substrate cotton and cotton rag. This gives the note a unique "feel" and crackling sound. <u>Grammage</u> 82 GSM for Rs 10 to Rs 500 and 87.5 GSM for Rs 1000 <u>Caliper thickness</u> 100 microns for Rs 10 to Rs 500 105 microns for Rs 1000	<u>Grammage</u> 90 GSM (± 3) for Rs 10 to Rs 1000 <u>Caliper thickness</u> 110 microns (± 5) for Rs 10 to Rs 1000
2.	Watermark	All	Mahatma Gandhi watermark with a light and shade effect and multi-tonal lines in the watermark window. This feature is visible when the note is held against light.	Existing security feature will continue.
3.	Secret Watermark	All	Secret additional watermark consisting of the words 'RBI' and the denominational numeral.	Existing security feature will continue.
4.	Security Thread	Rs.1000 Rs. 500 Rs. 100	A readable, windowed security thread, alternately visible on the obverse with inscriptions 'Bharat' (in Hindi) and RBI on notes of Rs 100 and Rs 500 and additionally 1000 for Rs 1000 but totally embedded on the reverse. When held against the light, it appears as a single continuous line. The security thread in Rs.100 and Rs.500 notes fluoresce in blue colour from obverse under UV light. In Rs.1000, the security thread fluoresces in rainbow colour on the visible portion of the windows from obverse under UV light Width: 1.2 mm for Rs 100 & Rs 500 2 mm for Rs 1000	Machine-readable windowed demetalised clear text magnetic security thread with inscriptions 'Bharat' (in Hindi) and RBI on notes of Rs 100 and Rs 500 and additionally 1000 for Rs 1000 with exclusive colour shift. Colour of the thread shall shift from green to blue when viewed from different angles. It will fluoresce in yellow on the reverse and the text will fluoresce on the obverse under UV light Width: 3 mm for Rs.1000 & Rs.500 2 mm for Rs.100

	Security Thread	Rs.50	A readable, blue fluorescent polyester vacuum metalised fully embedded security thread with inscriptions 'Bharat' (in Hindi) and RBI. Width: 1.2 mm	Machine readable windowed demetalised clear text magnetic security thread with inscriptions 'Bharat' (in Hindi) and RBI which fluoresces in yellow on both sides under U.V.light Width: 1.4 mm
5.	Electrolyte watermark	All	Does not exist.	High light watermark of denominational numeral to be located alongside Mahatma Gandhi watermark
6.	Omron anti photocopying feature	Rs 50 and above	Present only in Rs 500 and Rs 1000 notes A banknote with this feature, when copied by a colour photocopier, gives an output with a different colour shade. The feature is developed by BIS and is incorporated into the banknotes by virtue of agreement between Reserve Bank and BIS.	To be included in Rs 100 and Rs 50 also.
7.	Year of printing	All	Does not exist.	Year of printing to be incorporated at the printing stage on the reverse of the bank note.
8.	Optically Variable Ink (OVI)	Rs 500 & Rs 1000	Incorporated in the denominational numeral printed at the center of notes. The colour of the numeral appears green when the note is held flat but changes to blue when the note is tilted. Font size is as under: Rs 500: 13mmx30mm(390 sq mm) Rs 1000:14.5mmx39mm(565.5 sq mm)	Reduced size of font for numerals and revised colour shift from new green to new blue Rs 500: 12mmx27.5mm(330 sq mm) Rs 1000: 12mmx34mm(408 sq mm)
9.	See through Effect	All	The small floral design printed both on the front (hollow) and back (filled up) of the note in the middle of the vertical band next to the Watermark has an accurate back-to-back registration. The design appears as one floral design when seen against the light.	Existing security features will continue with improvement
10.	Latent Image	All	A vertical band on the right side of the Mahatma Gandhi's portrait contains a latent image showing the respective denominational value in numeral. The latent image is visible only when the note is held horizontally at eye level.	Existing security features will continue with improvement

11.	Micro Lettering	All	Micro Lettering feature appears between the vertical band and Mahatma Gandhi portrait. It contains the numeral 10 in Rs 10 notes and additionally RBI in Rs 20 and above. This feature can be seen better under a magnifying glass.	Existing security features will continue
12.	Intaglio Printing	All	The name of the Bank in Hindi and English, the Reserve Bank seal, guarantee and promise clause, Ashoka Pillar Emblem on the left, RBI Governor's signature are printed in intaglio i.e. in raised prints, which can be felt by touch. Presently intaglio is 80 micron at plate making stage. Notes of Rs 500 & Rs 1000 have intaglio printing on the reverse also.	Intaglio effect to be made more prominent with 130 micron in plate making stage only on the obverse of the notes. Notes of Rs 500 & Rs 1000 also will have intaglio printing only on the obverse.
13.	Identification Mark	All	A square in Rs.50, a triangle in Rs.100, a circle in Rs.500 and a diamond in Rs.1000 in intaglio on the left of the watermark window that helps the visually impaired to identify the denomination.	Engraving depth to be increased from 83 microns to 160 microns
14.	Fluorescence	All	The number panels and middle portion of the note have fluorescence ink. The banknotes also have <u>optical fibres</u> . Both are visible when the notes are exposed to ultra-violet lamp.	Existing security features will continue
15.	Optical Fibres	All	Single coloured optical fibres	Dual coloured optical fibres