



Romania's new polymer redenomination series

On 1 July 2005 the National Bank of Romania, as part of its redenomination program, issued a new series of Guardian® polymer banknotes. The five previous banknote denominations – from 10,000 to 1,000,000 lei – have four zeroes removed and a new high denomination, the 500 lei, has been introduced. There are also four new coins - the 1 ban and the 5, 10 and 50 bani.

The new notes and coins went into circulation on 1 July and will co-circulate with the previous series up until the end of 2006, with the latter gradually withdrawn from circulation. The old currency will cease to be legal tender (although it will be exchangeable for an unlimited period thereafter at branches of the National Bank of Romania). Dual pricing in both old and new lei will last until the end of June 2006.

The new series has been well received by cash handlers and the public. The National Bank of Romania has stayed with Guardian® polymer substrate, stating that the advantages of Guardian® are:

- it is more wear and tear resistant
- has relatively low costs per unit, and
- provides enhanced security against counterfeiting.

The colour and appearance of the new notes are similar to the previous series, and the portraits are unchanged. The size of each note has been changed to correspond with their euro counterparts to lower the downstream costs of any adjustments to processing equipment. The new 1 leu and 5 lei notes are offset printed, the other four in double-side intaglio (previously only the

1,000,000 lei was printed in intaglio on both sides). Some of the other features specific to the previous L1,000,000 note have also been extended to the other denominations, specifically the 50, 100 and 500 lei notes, including micro-perforation. All the

denominations include complex transparent windows taking the design of an image that appears elsewhere on the note, while the 10, 50, 100 and 500 feature an emboss of the face value in the window. Each note features an iridescent stripe on the reverse.



Mugur Isărescu, Governor, National Bank of Romania, at the launch.

The National Bank of Romania is continuing with the use of polymer as the substrate for all denominations. It first issued a polymer note – the L2,000 (which was withdrawn from circulation in 2004) – in 1999. New versions of the 10,000, 50,000, 100,000 and 500,000 lei on polymer were issued from

2000 onwards and in 2003 a new high denomination 1,000,000 lei note was introduced. The decision to introduce the new series on the same substrate is strong endorsement for Guardian® polymer. Not only is the currency recognised as the first fully redenominated polymer series in Europe,

but Romania is one of the growing number of countries (along with Australia and New Zealand) that uses the substrate for all its denominations. Several other countries have multiple polymer denominations, and Guardian® has now been issued in 23 countries around the world.



Romania's new 1 and 5 lei polymer banknotes



Romania's new 10 and 50 lei polymer banknotes



Romania's new 100 and 500 lei polymer banknotes

Polymer successful in Vietnam ATM's

In 1996 there were only 2 ATM's in Vietnam. By 2002 there were around 50 and by 2003 some 200 ATM's. By May 2005 the number had grown to over 1,100 and sometime between 2006 and 2010 the State Bank of Vietnam estimates the ATM population will grow to over six thousand. While those figures are most impressive, it is since 2003 that the major growth has occurred. What happened in 2003? The State Bank of Vietnam launched the VND50,000 and VND500,000 in December of that year. It wasn't long before ATM's were regularly dispensing the VND50,000 and in April 2004 the VND100,000 was launched and it too became an ATM denomination.

To operate efficiently and reliably ATM's need currency of a good standard. No surprise that ATM growth in Vietnam really got moving after the launch of polymer notes.

IPCA spoke with Ms. Nguyen Xuan Quynh, Manager Customer Services at the ANZ Bank in Hanoi. Ms. Quynh is responsible for the Bank's cash operations.

IPCA: The ANZ Bank has been very successful in Vietnam and I understand that is recognised by banking industry commentators.

Ms. Quynh: Yes, we are very proud to have been awarded the title of Best Foreign Bank in Vietnam for 3 years running by "Finance Asia" magazine.

IPCA: The ANZ Bank was one of the first banks in Vietnam to operate ATM's. What has been your experience with the new polymer notes as compared to the paper notes.

Ms. Quynh: The polymer notes are remaining in very good condition being much cleaner and maintaining a higher level of quality. Paper notes often caused problems in our ATM's when poor quality notes caused jam ups which required our people to open up the machine and remedy the problem. That is costly especially when it occurs outside normal working hours.

IPCA: Do you spend much time sorting notes for ATM fitness?

Ms. Quynh: With polymer notes we have reduced the amount of sorting time by approximately 75%. This is making a significant contribution to cost reduction.

IPCA: What checks are carried out for counterfeits?



Ms. Nguyen Xuan Quynh (Manager Customer Services, ANZ Bank in Hanoi)

Ms. Quynh: The Bank's policy is to check all notes for authenticity which accounts for much of the sorting time I mentioned previously. We believe that identifying a counterfeit of the new polymer notes will prove to be much easier but to date we have not found one.

IPCA: In Vietnam the use of small desk top note counting machines is wide spread. There are many different makes and models. What has been the Bank's experience with such machines?

Ms. Quynh: Generally speaking we have had no problem although some machines seem to have difficulty in accepting a mixture of paper and polymer notes. I would expect that as polymer takes over and the paper notes are phased out such an issue will no longer exist.

***Polymer notes are used successfully in ATM's around the world. In fact Australia has the sixth highest ATM density (ATMs per million people) in the world, demonstrating the significant benefits of using polymer in ATM machines.*

***Source: Retail Banking Research Ltd.*



A customer uses an ANZ Bank ATM in Vietnam

Polymer.

Your questions answered

Q. For countries which are using polymer and paper bank notes together, how does this effect cash handling machines such as bank note sorting machines and ATMs?

A. Experience in a number of countries has shown that it is possible that cash handling equipment can process both paper and polymer with minor adjustments. In this case, some equipment has to be set with slightly different tolerances to accommodate both types of banknotes. It is recommended that changing from paper to polymer currency be done quickly with minimum impact to the equipment.

For note counting machines, the major difference is that the polymer does not compress while the paper does. The implication is that the thickness settings for the polymer notes are real while the paper tolerances are adjusted according to pressure within the machine.

For ATMs, the notes require separation so only one type is installed in a cassette. For processing on counting machines, no such separation is required although throughput performances may be reduced slightly if run together. Polymer notes are capable of superior processing throughputs when compared to paper in processing machines.

Q. Is polymer less effective than paper in maintaining embossing?

A. Because of its resilience, polymer substrate will not emboss as deeply as achievable on paper substrate, but will maintain its emboss for the life of the note. Paper has a much shorter life than polymer and it soon loses its stiffness by being handled.

The embossed feature on a paper banknote has a shorter life as the depth of the emboss is lost because the structure of the cotton fibres has a tendency to change back to a flat position. Emboss in paper is particularly vulnerable in wet and humid conditions, and will start losing its definition soon after the banknote is issued.

International events

Conference	Location	Date	Website
2005-06			
Cross High Security Printing Conference	Hanoi, Vietnam	September 14-15, 2005	www.cross-conferences.com
60th Annual Meeting of the World Bank Group & International Monetary Fund	Washington DC, USA	September 26-27, 2005	www.imf.org
Currency Conference	Montréal, Québec, Canada	October 2-5, 2005	www.currencyconference.com
Pyrabelisk Security Printing Conference	Bucharest, Romania	January 25-26, 2006	www.pyrabelisk.com
Intergraf Conference	Rhodes, Greece	May 17-19, 2006	www.intergraf.org



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