

## De La Rue

Over the past 200 years, De La Rue has established an unparalleled record of innovation that continues today.

Founded by Thomas de la Rue in Guernsey in February 1813, De La Rue is a trusted partner of governments, central banks, issuing authorities and commercial organisations operating in over 150 countries across the world.



1813

Thomas de la Rue's first commercial venture was in 1813, when he published the first edition of *Le Miroir Politique* newspaper in Guernsey.



1831

The modern playing card was evolved with the invention of a new process – the typographical method. As a result Thomas de la Rue was awarded a Royal Letters Patent from King William IV for the manufacture of playing cards.



1838

To celebrate the Coronation of Queen Victoria, Thomas de la Rue printed a special golden edition of *The Sun* newspaper.



1846

In 1846 De La Rue registered its patent for the first envelope folding machine. In one hour the machine could produce 2,700 envelopes. It was exhibited, with several other De La Rue innovations, at the Great Exhibition of 1851 in London.



1853

De La Rue was awarded the contract to print adhesive fiscal stamps for the UK's Board of Inland Revenue. Not only the first stamps to be surface printed, they were also the first perforated stamps to be issued.



1881

De La Rue developed the first practical fountain pens in 1881, which were later to be developed into the famous Onoto pen.





## 1940s

During World War II, Portals, De La Rue's subsidiary, developed the incorporation of an embedded metallic thread into banknotes to defend against the threat of counterfeit notes.



## 2009

In June 2009, De La Rue secured a 10 year contract to design and produce the new UK ePassport, one of the most secure identity documents in the world today.

The design is based on a theme of 'Scenic United Kingdom', capturing images from across the UK. Sitting behind these images are highly sophisticated layers of security features to ensure the passport's integrity.

In November 2012, just 24 months after production commenced, the ten millionth ePassport was issued.



## 1967

De La Rue jointly developed and installed the world's first through the wall ATM at Barclays Bank in Enfield, UK.

Photo below used with kind permission of Barclays Bank PLC



## 2013

In April 2013 De La Rue won the Queen's Award for Enterprise: Innovation for its super wide Optiks™ banknote security thread with a clear window in the banknote, and the associated papermaking process.

Optiks™ represents a step change in both security thread and papermaking technology.

This is the twelfth time that De La Rue has been honoured with a Queen's Award.



THE QUEEN'S AWARDS  
FOR ENTERPRISE  
INNOVATION  
2013

## 1984

Building on earlier innovations in security thread technology, in 1984 Portals pioneered the revolutionary process for incorporating a windowed thread into a banknote. This has become a well established feature in many banknotes around the world.



## Safeguard™

Safeguard™, De La Rue's polymer substrate, is the result of an intensive four year development and investment programme and provides customers with an alternative substrate offering improved durability.

De La Rue is the only supplier to offer full vertical integration of polymer design, substrate manufacture and printing expertise. Our award winning design expertise ensures that Safeguard™ notes meet the customers' aesthetic and security criteria including novel design elements using clear window areas in the note. Established banknote print processes are all compatible with Safeguard™.

To mark our 200th anniversary, we have produced a sample house banknote using Safeguard™ which depicts a Grey Heron, with the clear window used as a design feature to depict its aquatic habitat.





# Cornerstone®

In response to the problem of folded corners on banknotes in circulation which reduces their useful life, De La Rue launched Cornerstone® in 2003. This innovative approach reinforces and stiffens the corners of the banknote as an integral part of the papermaking process. In the past 10 years Cornerstone® has been incorporated in over 22 billion banknotes.

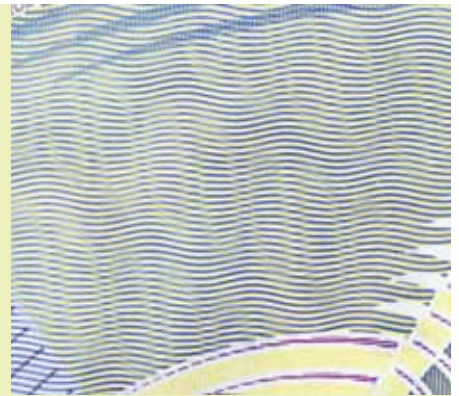
Cornerstone® has also been successfully introduced as a feature in passports, providing additional durability to the paper of the personal data page. In addition, Cornerstone® provides increased security against counterfeiting or substitution of the data page.

Cornerstone® in a passport (right) and in a banknote (below)



# Spectrum™

Spectrum™ is a new print feature which builds on proven latent image technology. The printed image changes as the angle of view is shifted, revealing additional images and colours. Spectrum™ is available in a range of colours and effects, offering considerable design flexibility.



An area depicted as a leaf where the sections of the leaf change colour when tilted

An area on the note which, when tilted, the pattern changes from a linear to a bicolour circular pattern

## SPARK® Orbital™

SPARK® Orbital™ is an innovative ink effect that has been developed by De La Rue as an extension of SICPA's optically variable SPARK® ink technology. By using a novel magnetic process during production, a new effect has been created where a bright ring appears to slip freely within the print area. This is a security feature that is easy for the public to see and understand. It can be developed in a range of designs and colour combinations, has a wide number of applications and is suitable for both paper and polymer substrates.





## Government revenue solutions

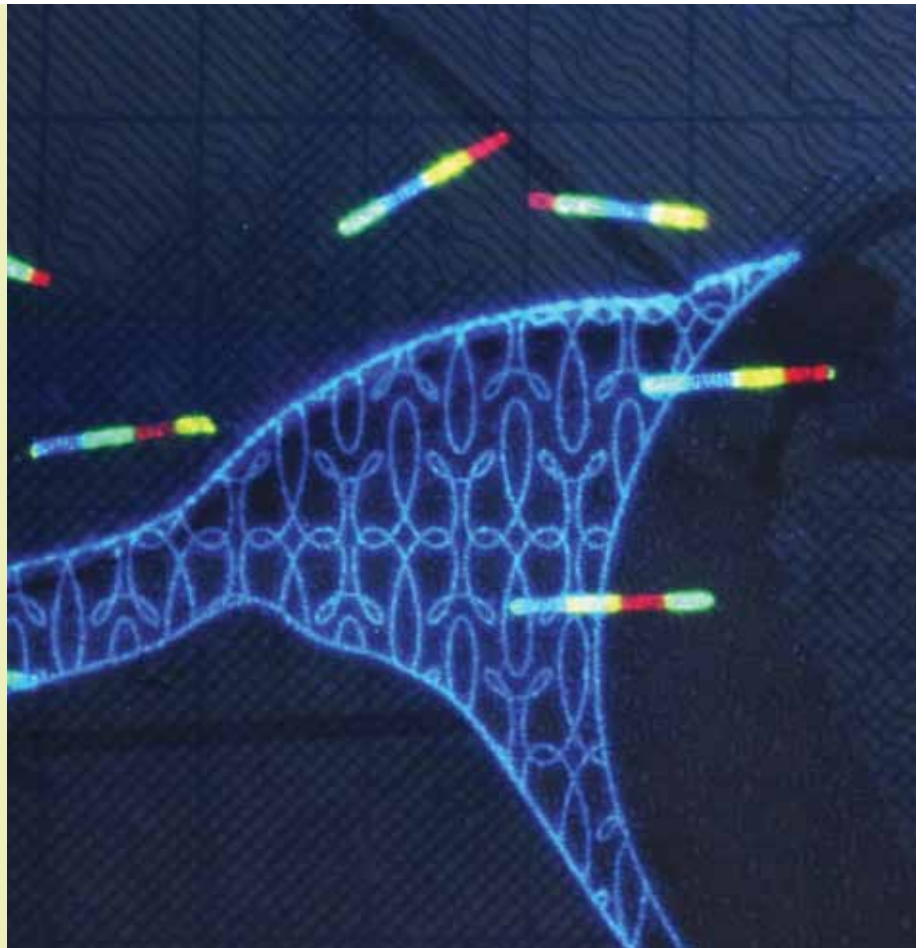
De La Rue has successfully implemented a product authentication system for the Cameroon government. The system is a dual language, web based solution which allows the Ministry of Finance to order and monitor the delivery of tax stamps. The traceability of every stamp is assured by the use of unique codes and handheld scanners, deployed by Customs and Trade inspectors to scan products in real time. This checks whether a label is valid and applied to the correct product.

With many years of experience implementing tax stamp schemes, De La Rue was able to implement this highly complex solution involving numerous products, countries and stakeholders. For our customer this is the first step towards a wider consumer and revenue protection programme and demonstrates real leadership in the reduction of illicit and potentially dangerous goods.



## Banded fibres

In 2009 De La Rue developed a new system for incorporating bands of visible or fluorescent fibres in a tightly controlled area of passport paper. Typically seen next to the spine of a passport book, these bands present a simple but effective countermeasure to page insertion or counterfeiting. The UK ePassport was the first identity document to include this feature, which has since been adopted by other countries.



## Design

De La Rue's award winning design and origination department is the largest of any commercial banknote and security printer in the world. It provides an industry leading centre of excellence for the design of banknotes and security documents.

Banknote design is a complex process which begins with a concept agreed with the customer. The design realisation process must then accommodate all aspects of banknote production including the choice of substrate, multiple overt and covert security features as well as sorting and authentication requirements.

Our team of highly experienced banknote designers has been consistently successful in winning design awards, both for banknotes designed entirely in house and for collaborative projects with central banks.

Our security print experts, using specialist software, handle more than 100 complex design projects a year, from personal identification documents such as passports, to authentication labels and a varied range of other secure print products.





## Holographics

De La Rue has been designing and producing secure holograms since 1987, pioneering and refining classical holography techniques to bring stunning colour and depth effects recognisable in their holographic images.

Commencing with secure labels for video cassettes, De La Rue produced its first banknote holograms in 1993. This led to holograms being specified for other secure documents such as payment cards, identity documents, fiscal stamps and brand authentication devices.



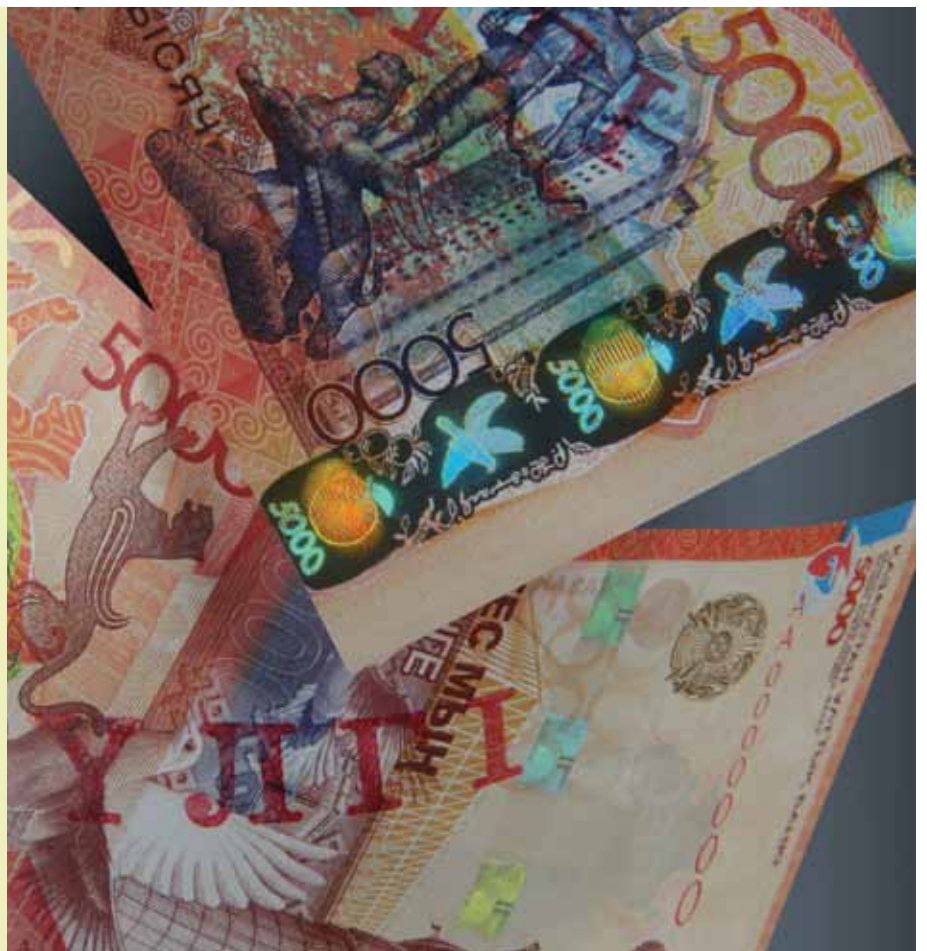
## Kazakhstan 5000 tenge

De La Rue's track record of winning international recognition for banknote design has continued, with the International Bank Note Society selecting the Kazakhstan 5000 tenge note as their 2012 Banknote of the Year.

This banknote was jointly designed by the National Bank of Kazakhstan and De La Rue working in close collaboration. In keeping with other Kazakh banknotes, this denomination has a portrait orientation on the front of the note and a more traditional landscape orientation on the back.

The front of the note depicts the Kazakh Eli monument, the national emblem and the national flag, along with images of flying doves.

High level holographic features include De La Rue's Depth™ security thread, which appears on the surface of the front of the note, and Depth™ stripe which appears on the back.



## R&D

The Group has a track record of successful innovation and is determined that this continues into the future. We are focusing our expertise and investment to accelerate the rate of idea generation and development and enable us to offer customers the very latest technologies. This allows us to provide differentiation and achieve competitive advantage.

Initiatives include:

- Dedicated customer conferences and user groups to understand future customer requirements
- Establishment of several technical partnerships, including with suppliers, allowing us to work with leading edge experts around the world to develop new secure products and solutions
- Collaboration with academic institutions on material science research to gain access to early stage technologies
- Investment in an industry leading technology centre and a new holographics laboratory



Artist's impression of De La Rue's new technology centre

