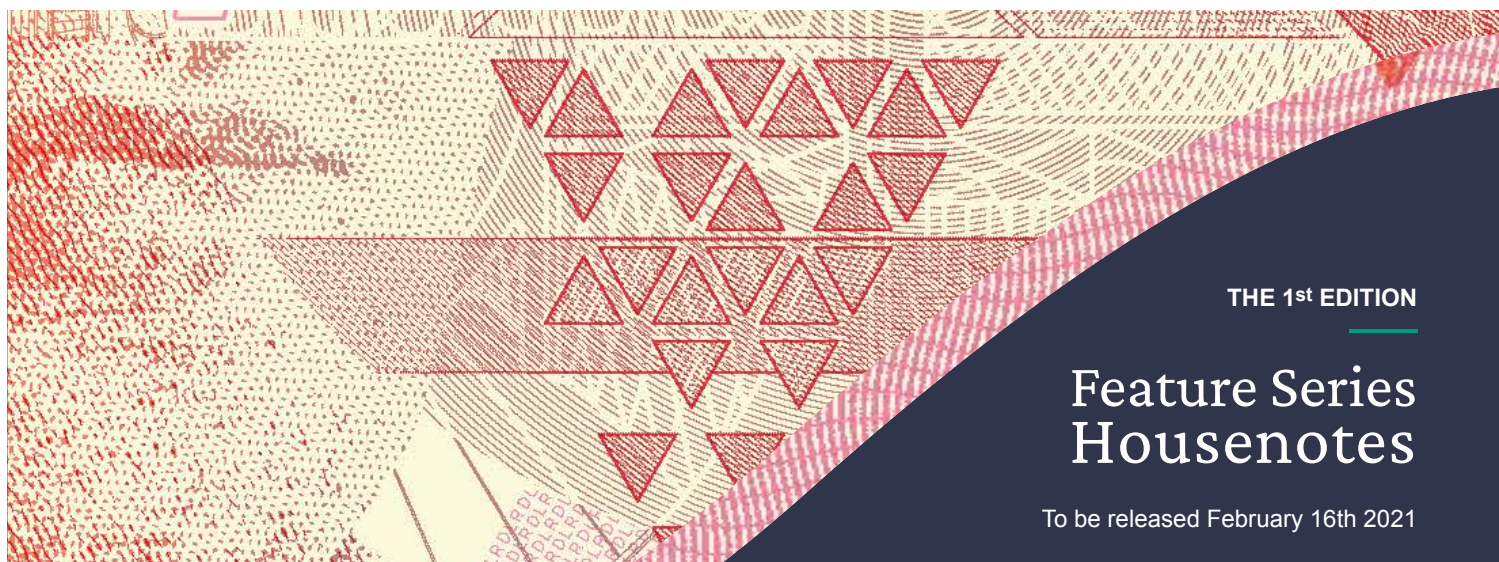




Top 5 currency trends for 2021

Second polymer line progress

De La Rue increases polymer supply to Bank of England



THE 1st EDITION

Feature Series
Housenotes

To be released February 16th 2021

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introduction

As we enter a new year we take the opportunity to review 2020 and the unique challenges it posed. As vaccinations roll out across the world, we hope that 2021 is a better year for us all.

We are delighted to end 2020 with the news that De La Rue has won the majority share of the Bank of England £5, £10 and £50 denominations. This is the first time that De La Rue will supply SAFEGUARD® for the £5 and £10 denominations and following previous awards for £20 polymer supply, means that every Bank of England polymer denomination will now be on De La Rue's SAFEGUARD® polymer substrate. I want to congratulate everyone who worked so hard to make this happen.



As we enter 2021, I am delighted to announce that we are expanding our production facility at Westhoughton with a second polymer production line which will become operational by the end of 2021 and will create 70 new jobs over the next two and a half years.

Our webinar series continues with "Polymer in the Cash Cycle" taking place on the 3rd February, details on how to participate can be found in the newsletter.

Also in February we will be hosting our first ever Keynote event. This is 30 minute streamed event where we will take you through our plans, new products and features. Alan Newman, Product Director will be launching our stunning new housenotes. The Keynote will be available to stream from delarue.com at 12pm GMT on the 16th February, we hope you can join us.

If you'd like any more information about anything in this newsletter or you would like to register for the next webinar please contact us at currency@delarue.com.

A handwritten signature in dark ink, appearing to read 'R. Euling'. The signature is stylized and fluid, written on a light background.

Ruth Euling, Managing Director

De La Rue Currency Keynote event

Streaming from 12pm GMT, 16th February 2021
at delarue.com



DeLaRue

We would like to invite you to the De La Rue Keynote event on the 16th February.

Ruth Euling, Managing Director of Currency will guide you through the successes, developments, new features and plans for De La Rue. Alan Newman, Product Director, Currency will launch our stunning new housenotes and review the latest products and features we have been developing.

The Keynote will be available to stream at www.delarue.com from 12pm GMT on the 16th February.

For more information please contact currency@delarue.com

Trading Update

Published on 28 January 2021 by De La Rue plc

De La Rue plc (LSE: DLAR) ("De La Rue" or the "Company") today announces a trading update for financial year 2020/21 starting 29 March 2020, and developments in its polymer banknote strategy.

The Company has seen positive trading in this financial year, with good progress on the implementation of its Turnaround Plan. As a result, the Board's expectations for adjusted operating profit for the financial year 2020/21 are in the range of £36 million to £37 million, compared with current market expectations of approximately £34 million.⁽¹⁾

The Board is confident of these expectations, absent any significant unforeseen COVID-19 related event. The Company remains diligent on its COVID-19 safety measures and has year-to-date effectively mitigated the challenges of the pandemic.

The improved expectations are largely driven by a strong Currency division performance. De La Rue recognises that the pandemic is causing some delays in securing new government revenue solutions contracts with overseas governments by its Authentication division, due to disruption in procurement processes.

De La Rue also announces that it has decided on a UK location for the expansion of manufacturing capacity for its SAFEGUARD® polymer substrate. The additional production line will be located in a recently acquired building adjacent to its existing premises in Westhoughton, near Bolton, creating operational efficiencies. The Company expects the new line to be fully operational before the end of calendar year 2021 and that it will more than double current polymer production capacity. De La Rue plans to recruit up to an additional 70 people during the next two and a half years as part of this investment.

As a result of the continued positive momentum of customers switching to De La Rue's SAFEGUARD® polymer substrate, and to create more possibilities in relation to future expansion, the Company now plans to spend approximately £20 million on its polymer strategy, an increase on the approximately £15 million previously indicated. Total aggregate 3-year investment for the Turnaround Plan remains unchanged at £79.8 million.

Clive Vacher, CEO of De La Rue, said, "I am delighted to announce the investment in manufacturing and job creation in the North West of the UK, as we continue to grow our polymer market share globally. The Currency Team have done a remarkable job in bringing De La Rue's SAFEGUARD® polymer substrate to a position of industry leadership. It is a fitting endorsement of the technical and operational capabilities of our Westhoughton site, that we have made the decision to concentrate our polymer substrate manufacturing into this Centre of Excellence."

De La Rue expects to announce its results for the full year ended 27 March 2021 on 26 May 2021.

De La Rue plc's LEI code is 213800DH741LZWJXP78.

(1). Market expectations are based on the average of published notes from Investec and Numis Securities

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Full statement and cautionary disclaimer can be found at [delarue.com](https://www.delarue.com).



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series

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Feature Series Housenotes

To be released February 16th 2021

delarue.com/currency



Ran Dhihafaheh Series: from inception to launch



Mel Huttunen
Country Director
Currency

This month marks the five-year anniversary of the introduction of the Ran Dhihafaheh series into circulation by the Maldives Monetary Authority (MMA). The new series was issued on 26th January 2016. Local artist, Abdullah Nashaath, did the design and ensured that the new banknotes had a unique and authentically Maldivian look. Today this series remains an exemplar of a modern looking banknote series and retains a distinctive, original watercolour style. De La Rue and representatives of the MMA recently reflected on the story behind this stunning series of banknotes.

The Ran Dhihafaheh series replaced a paper banknote series that had been circulating since 1981. After over thirty years in circulation inconsistencies had gradually evolved into the previous banknote series; lower denominations were more frequently used, which meant they were printed more often and had more opportunities to upgrade their security features. The MMA wished to improve the security of their banknotes and decided to do so by transitioning to a new series of banknotes.

A project team was established that included team members with currency, finance and design experience. This team established a detailed project plan and conducted research into what was needed. Decisions were made to transition to SAFEGUARD® polymer banknotes, to update the denominational mix to reflect user needs and to maintain similar note sizes to help ensure the notes retained some familiarity. This new series of banknotes were the first entire family to be issued fully on SAFEGUARD® polymer substrate.

“We wanted to move to polymer because it was secure and durable and it helped us to eliminate the technology gap that we were facing.”

Great care was taken to ensure that the banknotes provided personal elements for the Maldivian people. The horizontal serial

“We wanted to move to polymer because it was secure and durable and it helped us to eliminate the technology gap that we were facing”

Mariyam Hussain Didi, Assistant Governor

numbers include a prefix lettering from their own language (which is replicated in English for the vertical serial numbers). The series name, Ran Dhihafaheh, represented the year that the series was originally planned to be introduced. A design competition was set up to help engage the public from the early stages.

As part of the design competition an Advisory Committee was established to select the best design. Judges were tasked with selecting a unique design, with a futuristic idea and artwork that was appropriate for a banknote. An artist was selected from a portfolio of their previous artwork, a written concept for the design series and a complete design of one note. 29 - proposals were received and reviewed by the Advisory Team. Artists were narrowed down via a review of their portfolio, then by a presentation and interview. A De La Rue designer provided a training session for the three finalists, who were then asked to submit designs for the whole family before Abdullah Nashaath was selected as the winner.

It was important that the security features were integrated as part of the design element. Design and origination work was a close collaboration between De La Rue, the artist and the MMA. The artist and a member of staff from the MMA were hosted by De La Rue and worked on the designs at De La Rue's head office in the UK. The designs were adjusted for design consistency across the notes.

The new series pushed the design rules and represented an exciting development in the design possibilities associated with SAFEGUARD® banknotes. Each banknote has specific, technically complex features to enhance the security of the note and tactile features to aid the visually impaired. Furthermore, each denomination has a clear theme that is amplified via a pattern that features in the all-over iridescence substrate pattern, the banknote print and in the secure window of the SAFEGUARD® polymer. For instance, the background pattern in the 20

Rufiyaa represents an aerial view of islands and reefs. The pattern varies according to the theme for each denomination.

For the launch of the series a comprehensive awareness campaign strategy was developed and an advertising agency was selected to prepare educational material and to manage the launch event. An awareness campaign was conducted throughout the Maldives using all media channels (television, radio, social media, an app and printed materials). De La Rue and the MMA conducted information sessions for large cash handlers. The launch event was the 1st November 2015, which was followed by a road show that ran from the 20th November to the 25th January 2016. This road show involved MMA staff visiting all 187 inhabited islands, all industrial islands and 98 resorts that were operational at the time.

The new series was issued into circulation on the 26th January 2016, with an official issuing ceremony held at the office of the President. A ceremonial transaction was conducted at a local market because that is where almost every transaction is based on cash. Despite the ambitious timelines of the project the MMA describe their overall polymer experience advantageous as expected. Importantly they have no counterfeit issues and after five years they now have enough unfit notes for a single offline shredding session.

Five years later and these banknotes retain strong security elements and a modern, uniquely Maldivian aesthetic. De La Rue remains proud to have worked with the MMA on this iconic series of banknotes and honoured by its ongoing close relationship.



De La Rue expands UK manufacturing operations

Second polymer line announced

Today De La Rue announces the expansion of its UK manufacturing base in Westhoughton, Bolton. This expansion will enable De La Rue to more than double the amount of SAFEGUARD® polymer banknote substrate that it produces. The expansion involves investment in new equipment, technologies and the acquisition of a building that is adjacent to De La Rue's existing premises. This will allow De La Rue to leverage their existing polymer manufacturing skills and to maximise operational synergies from the existing site. As part of the expansion a second line for polymer banknote substrate production will become operational by the end of 2021. The investment will generate up to 70 new jobs over the next 2.5 years.

The number of banknote denominations on polymer have more than tripled in the eight years since the first SAFEGUARD® polymer banknote was issued into circulation and 2020 was a record year for SAFEGUARD® production. Today polymer banknotes represent 3% of all banknotes issued into circulation every year and 13% of all denominations. These numbers are projected to grow. 67% of 102 banknote issuing authorities surveyed in 2020 said they were 'likely' or 'very likely' to convert to polymer. De La Rue is investing in and supporting customers with the significant trend of transition from paper to polymer notes. The acquisition means that Westhoughton will form a super-site and become a Centre of Excellence for Security Feature and SAFEGUARD® polymer substrate supply.

Commenting on the developments, Deputy Leader of Bolton Council, Councillor Martyn Cox said: "The expansion of De La Rue is fantastic news and the creation of seventy jobs over the next two and a half years is very welcome, these jobs are coming at a time when many people are unfortunately losing theirs and is really significant for the people of Bolton."

De La Rue wins majority polymer supply for Bank of England



*Paul Dunworth
Commercial Director
Currency*

The Bank of England has awarded De La Rue the majority share of its polymer substrate volumes for the £5, £10 and £50 denominations over the next three years, beginning July 2021. De La Rue won a 65% share of the total volume tendered across the 3 denominations.

De La Rue is the sole producer of Sterling banknotes and has worked closely with the Bank of England since 2003. In recent years the partnership has resulted in the manufacture of over five billion new polymer banknotes at the Bank's facility in Debden, UK. Some of the most technically complex banknotes in the world are printed at this facility.

The 'Churchill' polymer £5 entered circulation in September 2016, followed by the 'Jane Austen' polymer £10 one year later. The 'Turner' polymer £20 entered circulation in February 2020. SAFEGUARD® polymer substrate was introduced as part of a dual sourcing strategy on the new £20. The new 'Turing' £50 will follow in 2021.

This is the first time that De La Rue will supply SAFEGUARD® polymer substrate for the £5 and £10 denominations and following previous awards for £20 polymer supply means that every Bank of England polymer denomination will now be on De La Rue's SAFEGUARD® polymer substrate.

We are delighted to have been granted this latest substrate award by the Bank of England. Our operations in Westhoughton and Debden are the cornerstone of our growth strategy for currency and print including the conversion of customers worldwide onto cleaner and more secure SAFEGUARD® polymer banknotes.

Top Five Currency Trends for 2021

Dr Nikki Strickland
Head of Product Marketing
Currency

#delarue

With COVID19 still continuing and a new variant emerging the disruption to our lives and the way we work is set to continue into 2021. Yet there is a sense of determination and optimism for the year ahead. NASA captured the current sentiment with the recent quote “in 2020 we persevered. Now, with the energy of the most powerful rocket ever built, we step into 2021.”

If 2020 demonstrated one thing it was the resilience of our industry and our ability to adapt. Many processes and interactions went digital, encompassing everything from conferences to proof approvals. Manufacturing operations changed working patterns, processes and restructured sites to protect employees and to enable essential currency products to be safely produced. Those involved in the distribution and destruction of cash put appropriate precautions in place to protect workers. Banknote issuing authorities ensured that access to cash was protected. New banknotes continued to be introduced into circulation and new banknote denominations continued to be converted to polymer. 26 new, upgraded and commemorative notes designed by De La Rue were issued into circulation. This number is in line with historic norms and so is a huge testament to the ability of issuing authorities to continue, despite unprecedented challenges.

That's not to say that 2020 was a 'normal' year in any way. It took time for the data to establish that banknotes were not spreading COVID19. A minority of banknote issuing authorities had to take additional steps to protect access to cash. Some central banks sterilised and quarantined banknotes in response to COVID19. Others investigated the risks and put out statements that cash posed no greater threat than other physical surfaces. In some countries central banks highlighted the importance of cash and encouraged retailers to continue accepting it. Some state print works delayed trials, focussing on essential day-to-day operations only. In some countries digital and online payments have increased in popularity. Central Bank Digital Currencies (CBDCs) made advances and gained an

increase in positive sentiment. Counter-intuitively, given the reduced opportunities for people to spend, banknote demand surged as people ensured they had what they needed, central banks sought to raise the quality of notes in circulation and those working in the cash industry ensured that the infrastructure providing access to cash was fully operational. This is the context within which we make our predictions about the trends for the year ahead.

#1

Climate Change

Climate change grows even more in importance

At the start of 2020 it seemed likely that the conference agendas were going to be dominated by the topic of the environment. COVID19 delayed many of the events and distracted some of the discussions but the environment remained high on many agendas. Some experts claimed that the disruption caused by COVID19 has been negligible compared to the future environmental crisis and the threat that climate change poses to humanity. Many central banks now consider climate change within their macroeconomic analysis and financial decisions.

Suppliers into the currency industry are increasingly recognising that reducing the environmental impact of banknotes and the cash cycle is fundamental to ensure the longevity of our industry. Measuring the environmental impact and being transparent with data (for instance sharing data with the Carbon Disclosure Project, as De La Rue has done for over a decade), will become the norm for all suppliers. Ultimately a shift to clean, renewable energy will complement efforts to reduce the energetic cost of running

#currency

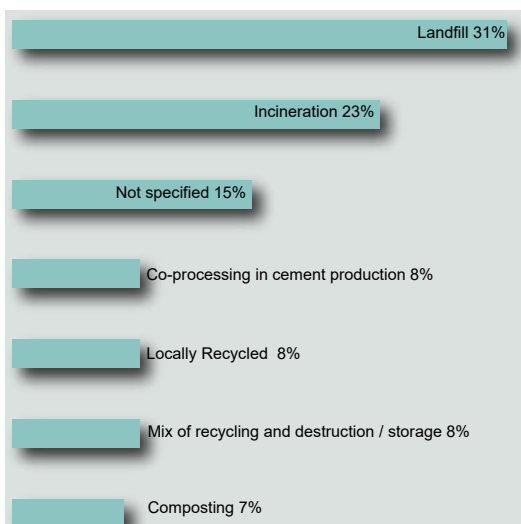
#cbdc

operations. We will see the industry shift to more sustainable energy and combine with carbon offsetting for operations to become 'carbon neutral' in the coming years.

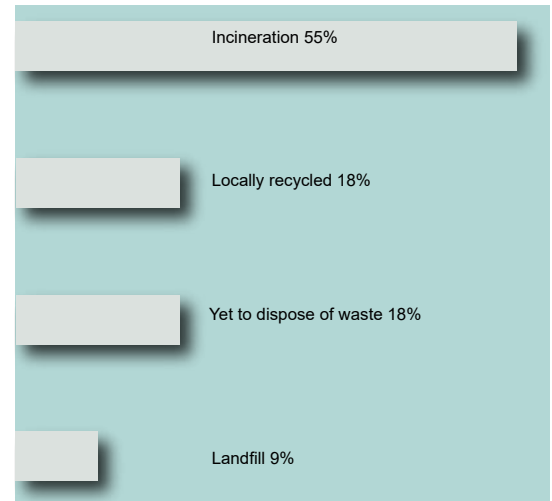
A major challenge we face as an industry is the environmental impact of the physical materials involved in the cash cycle. In this area we will see a trend towards more durable banknotes that need replacing less often and that consequently require less transport for replacement or sorting. Polymer will be part of the solution and has the added advantage of being a purer substrate that can be recycled.

End-of-life destruction will also become a hot topic – a survey of 25 banknote issuing authorities showed that most banknotes are sent to landfill or incinerated at the end of their useful life. This will change as more central banks are enabled to recycle their polymer waste. Where local recycling options do not exist then shipping to the UK is a viable and relatively low impact solution, even from countries far away. And solutions are under investigation to support banknote issuing authorities with low volumes of used polymer banknote waste. 100% of De La Rue's polymer waste is recycled and we expect to support more banknote issuing authorities recycle their waste in 2021.

Disposal methods - paper



Disposal methods - polymer



#2

Central Bank Digital Currencies

CBDCs move up the hype curve and become better understood

2020 saw an increase in interest in CBDCs, with the first nationwide CBDC launch in the Bahamas. Facebook's Libra was scaled back whilst activities in China have been keenly watched. Retail and wholesale CBDC research projects and pilots are underway, with central banks exploring use cases such as the extent to which distributed ledger technology (DLT) can make cross-border payments faster and less expensive. 80% of central banks are thought to be engaged in some type of CBDC related pilot or research. However, as we enter 2021 there are many unanswered questions regarding the risks, benefits, security, interoperability and general practicalities of CBDCs.

"There are potential benefits to this [CBDC] technology, not least from central banks wanting to minimise the control that the private sector has over digital cash."

De La Rue has been closely monitoring and engaging with this area as it may be an interesting solution to several payment scenarios. Our experience with DLR Analytics™ highlights that the best solution and the best way to add value with any new technology requires careful evaluation up front.

For central banks with a fully functional cash cycle and digital/mobile payments network the drivers for CBDCs are less immediately obvious. There are potential benefits to this technology, not least from central banks wanting to minimise the control that the private sector has over digital cash. In the wholesale CBDC space the efficiency and cost saving benefits seem clearer and it is here we expect the pilots to have the most success during 2021. With the growing dominance and examples of digital payment monopolies in the private sector increasingly discussed CBDC may well offer something distinct. No matter which way it goes 2021 is set to be the year where the future role and importance (or not) of central bank digital currencies is realised.

#3

Banknote upgrades

Banknotes continue to be upgraded to polymer

The disruption of COVID19 didn't stop 11 banknote issuing authorities from issuing new SAFEGUARD® polymer denominations in 2020. Since SAFEGUARD® was introduced the number of denominations on polymer have more than tripled and De La Rue's pipeline suggests this trend is likely to continue. 2020 was a record year for SAFEGUARD® polymer production and 2021 started with De La Rue announcing SAFEGUARD® will be used for every Bank of England denomination in the future.

Throughout 2020 De La Rue explored why central banks are converting to polymer, with the majority of banknote issuing authorities citing reasons such as polymer being cleaner, greener, more secure and more durable than paper banknotes. Some have also alluded to the modern aesthetics playing a role in their decision. Others have talked about the importance of the tactile emboss feature in polymer helping support financial inclusion. 67% of 102 issuing authorities and state printing works surveyed during our the first "Sustainable Confidence" webinar said they were likely or very likely to convert to polymer. De La Rue has now worked with 15 commercial and state printing entities to support them as they transition to polymer.

COVID19 may be increasing the importance of banknote cleanliness when selecting banknote substrate. Whilst it is very well established that no banknote plays a significant role in the spread of COVID19, polymer does have the perception advantage of staying cleaner for longer and being wipeable. The topic of clean note policy routinely came up more frequently in discussions with banknote issuing authorities during 2020 and polymer remains an obvious solution for central banks wanting their notes to look clean for longer and to be wipeable.

De La Rue will more than double its polymer capacity in 2021 so that the growing demand for SAFEGUARD® can be met.

#paymentchoice

#cash

"Many entities that profit from an increase in digital/mobile payments (or the data provided by it) have taken advantage of COVID19 to push digital payments and to propagate the perception that cash is dirty."

#polymerbanknotes

#4

Defence of Cash

The defence of cash gains traction

Banknotes are ubiquitous and cash is often an easy way to pay for goods and to store money. For billions of people around the world they represent the main or only way to pay and save. Significant numbers of people rely on cash and would be vulnerable without it even in the minority of countries where cash usage has declined. However, the perception of the unique benefits of cash and the relative importance of the cash versus other payment methods has been shifting in recent years. As an example, contactless payments are as quick as cash and have grown in popularity as people accept the higher risk of fraud with the convenience of not having to go to an ATM or carry change. In some countries cash is primarily carried 'just in case,' remaining as the last reliable way to pay in the event of a power/internet/mobile network failure. The availability of cash continues to benefit everyone in ways that aren't always realised. The minority of countries where cash is in decline have seen Governments step in, committees established and sometimes even laws passed to help protect access to cash.

Many entities that profit from an increase in digital/mobile payments (or the data provided by it) have taken advantage of COVID19 to push digital payments and to propagate the perception that cash is dirty. In 2020 this led to solidarity in the industry as the International Currency Association amongst others worked to set the record straight and to share the data that demonstrates cash is no worse (in fact some sources suggest better) than other physical objects. The defence of cash has been stronger in 2020 and is set to grow more in 2021. Natalie Ceeney, author of the Access to Cash report, continues to call on urgent action

for the UK government to protect access to cash for those who rely on it. If digital fraud increases, if privacy is violated, if distrust of the banking systems increases, if digital/mobile payment companies are perceived to be taking advantage of users (either via higher fees or misuse of the data they are collecting) then the importance of maintaining access to cash will only further increase. The macroeconomic landscape we are heading into in 2021 makes it likely that there will be examples that highlight why maintaining access to cash as part of the payments mix is beneficial to all.

#5

Banknote demand

Banknote demand to remain strong and stabilise

2020 saw a surge in banknote demand and the growth of cash in circulation around the world. Multiple factors contributed to this demand, including a drive to ensure that the cash infrastructure was appropriately stocked, a concern about the viability of the banking system and improvements in clean note policies (requiring more new banknotes to be put into circulation). In several instances we have observed the surge for more banknotes already return to normal. This aligns with past disruptive events that provide us with multiple examples of cash cycles returning to their original trajectory following the disruptive event.

The Cash Cycle Partnership regional webinars in May 2021 will look at the COVID19 impact on the cash cycles and will examine trends in more detail for central banks who contribute towards DLR Analytics™ data. During February members of the DLR Analytics™ team will be reaching out to users to support any data uploads. Please visit www.delarue.com/currency/events for more information.

#financialinclusion



Polymer: from design to print



Sean McLean,
Design Engineering Manager
De La Rue Currency

Sean has called De La Rue home for almost half of his twenty years in the printing industry. He has hands on experience of our polymer, security features and printed products and brings that knowledge into DLR Design via Design Engineering.

On the 3rd December De La Rue hosted the second of its 'Sustainable Confidence' webinar series, exploring the topic of printing on polymer. We were joined by Malcolm McDowell, Chief Executive Officer, Note Printing Australia and Peter Viney, Plant Manager, De La Rue Debden to share their respective experiences printing billions of polymer banknotes.

At De La Rue we have been designing and printing on polymer for nearly ten years. We have worked in four De La Rue print locations and with fifteen external print partners to quickly and continually advance our understanding of the substrate and its characteristics. Our experience enables us to support others through an accelerated version of our journey, using our know-how and minimising challenges along the way.

Following our experiences and learning, we have come to the conclusion that polymer is a better technical solution for the printing of banknotes. Though it does present some differences and challenges during the early transition phase, the payoff is greater stability, cleaner print and consistency of performance during production.

The Design Engineering in De La Rue is to continuously improve our solutions and to realise the vision for the end banknote design in a way that compliments the manufacturing process whilst fulfilling the needs of the end users. As a printer ourselves, we recognise the need for efficiency and performance in order to keep the total cost of ownership for currency down.

The design and manufacture of any new banknote requires careful consideration. Banknotes are technically advanced and complex, with every denomination being unique. This means that expert know-how, modelling techniques, design rules, proofing prototypes, and sometimes even pre-print trials (or "zero production runs"), are required to optimise the design and machine set up prior to commencing full production. This is the case for both paper and polymer substrates.

All new banknote designs have to balance security feature selection with aesthetic themes, symbolism, meet

"We printed our first polymer banknotes on twenty-five year-old machines without any modifications"

the needs of all end users (including specific groups, such as the partially sighted) and how the notes will interact with the cash cycle. Any changes in size of the banknotes or positioning of machine-readable features will need to be evaluated in the context of the cash cycle, irrespective of whether you are designing paper or polymer banknotes.

There are specific considerations when choosing polymer. The substrate provides a smoother surface to print on, which results in a much finer and sharper printed line compared to paper notes. The size, format and overlapping of printed colours requires careful consideration, using optimised design rules based on a deep understanding of the polymer printing experience, to best realise the benefits of polymer banknote substrate.

The greatest design advantage for polymer is the substrate itself becoming an integral part of the total banknote design. Unlike paper, which carries the design, polymer is a fundamental and active participant in the design. This is something that really excites our designers; and keeps us on our toes in the Design Engineering department!

By integrating all the elements of the banknote into the design, it intensifies the beauty, adding intuitive security and functionality to the banknote. This is delivered via complex windows and striking features, whilst still allowing for control, stability and performance in the printing process.

The flexibility of the substrate also allows for multiple routes to polymerising banknotes, depending on the desired approach. It can be inserted into an existing family as a faithful conversion, where the watermark subject is traditionally replicated in the clear window. This way, with some adaptation of the line work via polymer design rules, we can recreate the existing note and maintain the public familiarity whilst introducing a new substrate. Alternatively, the change to polymer can be used to include more features such as MASK™, GEMINI™ and holograms in the window, whilst maintaining the identity of the current note. Finally, a full new design can be created, taking all elements into

account and tailoring it to the new substrate. Almost all the traditional banknote security features are available on polymer, which means even significant design changes can carry all the familiar features of the previous series in the interest of continuity.

Throughout the process we work in tandem with the print site on a phased transition from design to manufacture, following the banknote from end to end, ensuring the design translates into a high performing banknote. Many of the steps we have taken to this point serve to mitigate risk and enable the printer to faithfully reproduce the banknotes at scale.

Once in manufacture, there are many more points of familiarity between paper and polymer substrate than new users of polymer may expect. We get asked many questions such as whether machines need upgrading; if there will be static issues or whether special inks are needed. We printed our first polymer banknotes on twenty-five year-old machines without any modifications, we don't use anti-static equipment (polymer has coatings which dissipate static) and we modify the inks slightly and add driers. That is not to say that no consideration is needed when changing to polymer, we must respect the differences and account for them. Depending on the age and condition of the machines there may be a delivery or feeder which needs a service, or some slight adjustment to the air in the delivery but this is rare. Polymer has a narrower operating window compared to paper, but this is more than compensated for by the reduction in variation of polymer versus paper. The challenge is only about finding the centre of the new operating window and how to stay there. If we design with polymer in mind, control the printing process and materials with known parameters and techniques then the experience will be comparable, or better, than on paper.

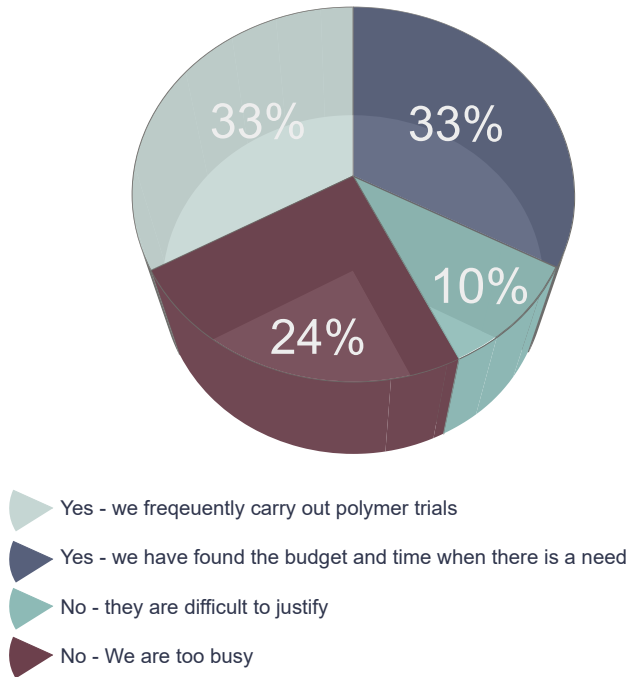
It is well documented now that our Debden site in the UK, coupled with a rigorous Operational Excellence model using techniques from the automotive and aerospace industries, has seen a record-breaking increase in throughput and performance since switching to polymer. They run at speeds of up to 10,000 sheets per hour, on both polymer substrates and paper, switching between as necessary.

Today over one hundred and forty banknote denominations are in circulation on polymer and the number is growing, with more commemorative notes also issued. It was our hope that De La Rue's recent webinar "Printing on Polymer," supported by Note Printing Australia, helped to dispel some of the myths associated with polymer banknotes and demonstrated that it is very possible (and can be advantageous) to print on polymer banknotes.

During the webinar the participants were polled, asking them about their intentions regarding printing polymer, responses can be seen on the opposite page. Responses are split between Central Banks/Issuing Authorities and State printers.

In 2020, De La Rue announced their intention to invest in their polymer capacity, bringing new and improved polymer security features to market. This investment is driven by customer demand, with SAFEGUARD® being De La Rue's fastest growing product.

Are you able to carry out polymer print trials as regularly as you wish?



**SUSTAINABLE
CONFIDENCE**

**Polymer in
the Cash Cycle**

Date
Wednesday, 3 February 2021

Time
08:00 or 15:00 GMT

Supported by

About De La Rue

De La Rue provides governments and commercial organisations with products and services that underpin the integrity of trade, personal identity and the movement of goods. Our market leading Currency Division provides fully finished banknotes, secure polymer substrate and banknote security features to half of central banks and banknote issuing authorities around the world.

De La Rue is the largest commercial printer of banknotes, producing up to 7 billion banknotes per year for half the issuing authorities in the world and designing a third of all banknotes in circulation. Our printing facilities are in Sri Lanka, Kenya, Malta and the UK. In Sri Lanka and Kenya the operations are joint ventures with the governments of those countries, contributing to the local economies and providing the benefits of local banknote supply.

We manufacture a wide portfolio of security features based on the colour-shift holographics and micro-optics platforms. Our security threads, applied, embedded and covert features circulate on billions of banknotes globally. De La Rue also manufactures a highly secure polymer substrate, SAFEGUARD®. Since the introduction of SAFEGUARD® the number of banknotes that have converted to polymer has more than tripled and De La Rue is investing to ensure there is capacity in place to meet the growing demand.

Our global manufacturing footprint provides flexibility, contingency and decades of expertise associated with how to print a diverse range of banknotes globally. This combines with exceptional and seamless product design to ensure central banks have world leading banknotes to be proud of.

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