

**GIESECKE & DEVRIENT PERSPECTIVE**

# The future of banknote processing

## – more service for cash

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New research by RBR shows that cash remains the predominant retail payment method in Europe. While cashless payments are increasing, the amount of cash in circulation continues to rise.

Giesecke & Devrient (G&D) is a major supplier of banknote paper, banknote printing and currency automation systems. The *Bulletin* recently had the opportunity to meet with Ralf Wintergerst, Group Senior Vice President and Head of the Banknote Processing Division at G&D, to discuss current market trends and future opportunities relating to cash handling.



**Ralf Wintergerst**

*Group Senior Vice President and Head of the Banknote Processing Division  
Giesecke & Devrient*

**Banking Automation Bulletin (B):** *What are the current market trends in cash handling – e.g. the role of central banks in distributing and managing cash?*

**Ralf Wintergerst (RW):** We are observing a steady rise in circulating cash and banknote volumes for processing, with central banks showing increasing flexibility in their response to commercial bank requirements to optimise overall cash cycle costs. According to the European Central Bank (ECB), the amount of cash in circulation in the Eurozone has more than tripled since the euro was launched. The new ECB guidelines on reissuing banknotes (known as recycling) enable significantly more effective and cost-efficient cash provision by authorising commercial banks to process and re-circulate banknotes themselves. Important considerations here are the flexibility of supply conditions and compliance with fitness criteria to ensure sufficient

banknote quality for automation. In our experience, central banks play different roles in the cash cycle depending on the country. Some of them focus on defining parameters and framework conditions for cash provision and limit themselves to spot checks and destruction of banknotes no longer suitable for circulation. Others, however, play an active role in automated banknote processing.

**B:** *Are there any geographic differences – e.g. between more mature and emerging markets?*

**RW:** According to industry estimates, the total volume of banknotes in circulation worldwide rises by around three percent each year, so almost every country is facing increased demand for banknote processing. The proportion of cash in the emerging economies is very high and the banknote quality is often not consistently good enough to enable efficient, automated banknote processing. Banknotes are still largely counted and sorted by hand. Although the appropriate technology is available, its use is not yet widespread. Differing population densities, particularly between cities and sparsely populated rural areas, also result in regional variation. Concrete central bank specifications for commercial banks regarding machine-based authentication and the removal of unfit banknotes from circulation are resulting in the gradual improvement of banknote quality.

In developed countries, too, clean and high-quality banknotes are a key component in optimising cash cycle costs and preventing counterfeiting. They are also an important prerequisite for the use of self-service terminals.

**B:** *Banks in certain countries are keen to reduce the amount of cash they hold and process (e.g. by moving to cashless branches), and alternative means of payment are reducing the role cash plays in society. What does the future hold for providers of cash handling solutions?*

**RW:** Cash is still the world's number one payment method. It offers a high level of convenience and can

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be used anytime, anywhere. Widespread availability of cash from ATMs without fees is a key competitive factor in ensuring customer loyalty. By optimising their processes, commercial banks can reduce their cash reserves and outsource banknote recycling services to cash-in-transit companies. Where G&D is concerned, we are well prepared. Our portfolio offers players in the cash cycle the right product for every workflow and performance requirement.

Processing of small and medium quantities of banknotes, for instance by bank branches and retailers, is also becoming increasingly automated. G&D therefore provides cash-handling products for all commercial fields of business. Our products range from cash deposit terminals for back-office use through payment terminals for the retail sector, to sensors and banknote identification modules for self-service machines.

We are seeing a rise in cashless payments for small sums, such as at subway kiosks and supermarket checkouts, using cards or mobile telephones with Near Field Communication (NFC) technologies. Speed is important here to avoid keeping customers waiting. We view this not as a conflict, but as an opening for complementary payment methods. G&D is one of the world's leading suppliers of both banknotes and smart card-based solutions for electronic payment. Our developments and products complement and enhance one another. A good example of this is the Pecuron – a multifunctional payment terminal especially tailored to the requirements of retail customers. This supports all common means of payment. As well as accepting banknotes and coins, vouchers and customer cards, it allows payment by cashless methods such as debit cards, credit cards with PIN or signature, and NFC-enabled cell phones.

**B:** *How is the current financial crisis affecting the industry and what are the main challenges for suppliers to the banking sector?*

**RW:** It is not possible at this time to accurately predict the effects of the financial crisis on the economy in general or on G&D as a supplier. However, we are not currently seeing any significant impact on the actual cash cycle. The supplies of cash in circulation largely come from central bank currency reserves.

As expected, banks in the commercial sector are rather more cautious about investing in technology than had been the case over the past few years.

However, they are taking advantage of opportunities to cut costs with improved products and processes, to secure their competitive abilities.

While it is true that providers of banknote technology must reckon with decreased order volumes, G&D occupies a solid position and our situation is stable.

**B:** *G&D recently announced record results for 2008 – what are the main reasons for this success?*

**RW:** Innovation and reliable products are the key to customer satisfaction and form the foundation of our success. At G&D, our portfolio is especially tailored to meet our customers' requirements. This is particularly true of our comprehensive banknote offering, extending from production through automated processing to destruction.

We also focus on long-term relationships with our customers, allowing us to determine their wishes in good time and set about implementing them. This combination is another key success factor, giving our customers the confidence that in Giesecke & Devrient they have a supplier they can trust.

**B:** *Cash handling technology previously reserved for central banks is now available to retail banks and cash centres – what are some of the advantages this brings?*

**RW:** Product and process innovations result from a combination of customer requirements and technical possibilities. The challenge is to cut costs while simultaneously raising the quality of banknotes in circulation. All areas of cash processing are now being automated. Increased productivity of banknote processing equipment and improved sensors for uninterrupted authenticity checking and fitness sorting contribute to a reduction in costs.

Our latest product, the BPS M7, is part of our range of high-speed processing systems for central banks and cash centres and can process up to 120,000 banknotes per hour. This places it among the best-performing banknote processing systems worldwide. Our systems are also set apart by their high-precision measurement technology and highly reproducible inspection and sorting results. This applies both to simple, tabletop devices for bank branches and to medium and high-speed systems for cash-in-transit companies and central banks.

The open hardware and software architecture enables systems to be reconfigured at any time to reflect changing requirements and ensure future-proof investment for our customers. ■

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