

Future Development of Biometric Card Technology & Markets

The current commercial roll-out of biometric EMV cards is largely limited to the premier cards of two major French banks – BNP Paribas and Credit Agricole. More recently (September) Bank Pocztowy in Poland has launched a biometric debit card from Thales/Gemplus. Apart from these, no further EMV roll-outs are apparent. Perhaps the current phased Visa and Mastercard programmes for the removal of magnetic stripes and signature panels from EMV cards are taking the focus away from biometric EMV cards. In addition, these cards are for in-store/face-to-face transactions where the level of fraud is **low**.

Where the level of fraud is **high** – in remote e-commerce transactions, no transaction data is captured directly from the card. Much of this data may be captured via a smartphone or PC, but the current high level of fraud is an indication that the level of security is insufficient. Card account identification and cardholder verification are carried out using data input by the customer (sometimes held by an intermediary). Passwords are sent via another channel, and/or via separate communication with the card issuer. These methods are slow and inconvenient for the customer and the merchant, and expensive for all parties involved in the transaction.

A solution to the problem could be to use the high security features of the biometric card, plus a connection device with a contactless interface to the card, and a link to smartphone/PC/Tablet. The device would be owned by the card issuer, and distributed in parallel with the biometric EMV card, preferably incorporating the functionality of the cardholder self-enrollment “sleeve”, as currently used for the creation of the card’s reference fingerprint template.

This would mean a controlled introduction, with the ability to optimise the product as usage progresses. The financial benefits in terms of reduced fraud would be significant.

The device could also be used for non-biometric contactless cards, but the addition of a PIN pad and contact reader might well make the device awkward to use and too expensive.

Meanwhile there have been developments in other markets – Access Control and ID Cards. In both markets there is a major requirement to ensure that the person presenting the card is the legitimate cardholder. The fact that the identification verification is carried out “in-card” is a definite plus.

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