

Chip Card to Enable Members' Global Payments

Security of microprocessor-based card plus PIN arrives in the United States via United Nations FCU

By Lisa Hochgraf

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“The guys” at [Cornerstone Advisors](#) often say that CUs are agile enough to move faster on new technology than the banks.

So it wasn't so surprising that Cornerstone's Michael Croal had just been saying there might be something to these new “EMV” chip cards when United Nations Federal Credit Union announced it was the first U.S. financial institution with plans to issue a globally compliant microprocessor payment card to its members.

The security offered by the chip cards, used in combination with a PIN, offers a real step up from traditional magnetic stripe cards, says Croal, senior director with Cornerstone, a CUES Supplier member and CUES' partner in *CUES Technology Edge*.

“As other countries outside of North America have moved to the EMV chip and PIN cards and seen their fraud rates drop, here in the good ole' US of A, we still rely on neural networks to identify behavior outside the cardholder's usual pattern,” Croal says.

Croal explains how the neural networks work: As the transaction hits the processor, it is scored for the likelihood of being fraudulent. Depending on the rules the CU has in place, the transaction may or may not score high enough for it to result in human intervention. Often three or four transactions make it through before the system blocks the card.

“We rely on the fraud analyst to try and contact the member to see if the transaction was really them,” Croal says. “In our efforts to not impact the member, we eat a lot of fraud.”

In contrast, cards leveraging the microprocessor chip and PIN technology—now the norm outside of the United States—provide much higher levels of security than magnetic stripe cards. The new technology authenticates the data being transmitted from the chip, making it much more difficult to counterfeit than the magnetic stripe, Croal explains.

“The crooks realize the easiest safe to crack is North America” since it’s the only area still using magnetic stripe technology, Croal says. “I think as issuers and merchants keep ringing up losses due to fraud initiated from other countries, then we will eventually move to EMV chip and PIN technology.”

Interestingly, \$3.1 billion United Nations FCU sees security as an important additional reason to offer the new type of card. But its primary reason for offering the new card technology was to solve problems its highly international members have faced trying to use traditional cards in areas of the world where chip cards are the norm.

“Too many times members would complain,” when they couldn’t use their traditional United Nations FCU payment card at a payment machine in a parking lot, train station or bike rental kiosk someplace outside the United States, says Merrill Halpern, card services manager at United Nations FCU. “We tried knocking on the doors of many companies,” looking for a partner in offering a card compatible with the world. “We were always told we were too small.”

Enter [Gemalto](#). With this new partner, United Nations FCU will provide a globally compliant Europay MasterCard Visa (that’s the “EMV” part) contact chip interface plus magstripe card that can be used anytime, anywhere the CU’s members travel.

When United Nations FCU issues the cards, its members will be able to leverage all the service and security benefits of the new chip and PIN technology when making one of their many trips abroad. Within the United States, the cards can be used as traditional magnetic stripe cards until chip and PIN readers become available, says Jack Jania, VP/general manager, Secure Transactions North America Gemalto.

United Nations FCU is taking advantage of Gemalto's recently announced [World Traveler program](#) through which Gemalto will provide the CU with complete issuance services, including full card design and production, personalization data preparation and personalization of the dual interface card. The program ensures current global acceptance and forward compatibility for both online and offline payment transactions. United Nations FCU anticipates introducing the program in the second half of 2010.

“We selected Gemalto based upon the company's expertise in payment process integration and their ability to provide all of the associated services, such as the SMS-based personal identification number reminder service if a cardholder forgets his or her PIN, and the global emergency card replacement service if the card is lost or stolen,” Halpern says. “This ensures the best possible experience for our cardholders.”

And of course, the much-touted security of EMV cards will also be a benefit of the new offering, he says.

“When fraud occurs on a payment card, members feel violated,” Halpern says. They think, “How could you let this happen?”

He notes that the chip stores data characteristics of the card, such as the PIN, as well as any limits on the card's use, such as how much of the card's credit line can be used in offline transactions.

In terms of changes on the back end to support the new program, United

Nations FCU had to work some details with its card processors, [The Members Group](#), Des Moines Iowa, and [First Data](#), Omaha, Neb., but that was about it, Halpern says.

How does the credit union justify its investment in the new cards? Halpern expects it will be paid back through the loyalty of its members.

“Consumers have a lot of choice” in financial institutions, he notes. “This is one more way we’re narrowing the perceived difference between a credit union and a bank. It weakens why a consumer would go to a bank.”

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