

# Discover Teaming With Motorola on NFC, Mobile-Banking Trial

Participants can use phones with Motorola's new M-Wallet platform to check Discover account balances, make RFID-based payments and more.

By Mary Catherine O'Connor

Feb. 14, 2007—[Discover Financial Services](#), the fourth-largest credit-card organization in the United States, has launched a technology trial to test a new mobile banking and RFID-enabled payment platform in collaboration with handset maker [Motorola](#).

Discover announced, late last year, plans to launch an RFID-based (contactless) payment platform. At the time, the company said the technology would be available in the form of ISO-14443-compliant payment cards and key fobs, as well as in electronic mobile devices using near-field communications (NFC) technology, based on the ISO 18092 air-interface standard (see [Discover Rolling Out RFID Payment Platform](#)).

According to Joby Orlowsky, vice president of marketing for the Discover Network, the credit-card organization has already completed some internal tests involving RFID-enabled payment cards. The trial with Motorola, he says, will represent the firm's first test of NFC technology for RFID-based payments. The ability to make payments, however, is just part of the scope of the trial, which is also an initial trial of Motorola's M-Wallet technology.

M-Wallet is a service Motorola has been developing for a number of years to enable such mobile banking applications as making payments via NFC technology. Other applications include using a mobile phone to check account balances, redeem electronic discount coupons and make person-to-person money transfers. These applications happen through data communications via the cellular phone network, whereas the payments occur through RF transmissions with RFID-enabled payment terminals at stores and restaurants.

All 1,000 participants in the Discover-Motorola trial are Discover employees with Discover credit-card accounts, located in and around Chicago and Salt Lake City. For the trial, which started in January, the participants have been provided with Motorola's SLVR L7 mobile phone loaded with the M-Wallet software. Only 100 of these phones carry an NFC module (provided by [NXP Semiconductors](#)), which is needed to make RFID payment transactions. The other 900 phones will be used to test only M-Wallet applications unrelated to NFC.

According to Orlowsky, the 100 participants given the NFC-enabled phones can use them pay for purchases at any of thousands of in Chicago and Salt Lake City merchants that are equipped with NFC payment terminals able to process payments using Discover contactless devices. However, nondisclosure agreements preclude him from revealing the names of the participating merchants.

Discover hopes the feedback it will gather from the trial participants will help it quantify the benefits M-Wallet would provide to both its cardholders and the merchants accepting contactless payments.

"Primarily, we want to validate the value proposition for the constituents," explains Orłowski. This will involve measuring the speed of the payments made with the Motorola phones, as compared with those made with traditional plastic cards, and polling the participants on their feelings of convenience and security around transactions and the other M-Wallet applications.

Sarab Sokhey, director of business development for network services at Motorola, says his company spent the past few years developing the M-Wallet platform and integrating an NFC module into a handset. Customers won't likely see the first NFC-enabled Motorola handset hit the market, however, until the first half of 2008. This, he says, is because demand has been soft among wireless carriers for phones able to support NFC transactions.

Sokhey says the M-Wallet platform will make it easier for wireless carriers to begin offering and supporting NFC-enabled phones. Rather than having to support the Visa, MasterCard, Discover or other contactless payment technology platforms separately, the carriers can just offer Motorola phones with M-Wallet, which can support all of the unique payment specifications (including data security protocols) under one umbrella.

"M-Wallet is credit-card-agnostic," Sokhey explains, "and can support up to 50 different [types of] cards." He says Motorola and Discover are working with Ztar, a Dallas-based mobile virtual network operator, to provide the cellular service for the phones used in the trial. To pull their Discover account information onto the NFC module inside the phone (where it is stored as encrypted data), trial participants employ an over-the-air NFC initialization function that is part of the M-Wallet platform.

RELATED\_ARTICLES The Discover-Motorola technology trial will last at least until March, though Discover indicates it may be extended. Orłowski says it's too soon to predict what the credit-card organization's next step might be. "It's going to be based on the feedback we get from this trial," he maintains. "We're not in the position to say whether the next [contactless payment] test will be internal [involving just Discover employees], or if it will be extended [to other consumers]."

Discover also announced, this week, that it has certified the Inside Contactless MicroPass L4, a high-frequency ISO-14443-compliant RFID tag chip, as being compliant with Discover's air-interface and security specifications for RFID-enabled (contactless) payments. Thus, manufacturers of payment cards and fobs can begin embedding tags using the L4 chip into those devices once Discover starts issuing RFID-enabled cards and fobs to its cardholders.

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