Contactless Payments

AMERICAN EXPRESS

GENERAL BACKGROUND

American Express contactless (also known as proximity) payment technology enables card members and merchants to complete payments with added speed and convenience. American Express contactless payments functionality is implemented primarily on American Express® cards but may also be made available in other devices such as fobs, stickers and mobile phones.

This document is structured to educate merchants and network participants[1] on the business benefits of upgrading point-of-sale terminals and systems to accept contactless payments.

GENERAL QUESTIONS

Q1. What is an American Express contactless transaction?

An American Express contactless transaction is a payment transaction initiated between a contactless card or device and a contactless-enabled terminal or reader. These devices enable American Express card members to touch or tap their contactless card or device to the contactless reader to pay and go.
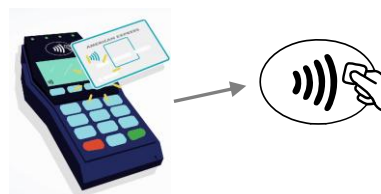
Q2: How are contactless cards and contactless-enabled terminals identified?

The EMVCo Contactless Symbol and Indicator* marks identifies contactless terminals and payment devices. These icons are now used world-wide to signal contactless payments capability and are easily recognized by consumers in regions where contactless payments have become commonplace.

THE CONTACTLESS INDICATOR*: The American Express contactless product has the EMVCo Contactless Indicator on the front and/or back an American Express ® contactless-enabled card.

THE CONTACTLESS SYMBOL*: Contactless-enabled readers and terminal devices bear the EMVCo Contactless Symbol:

*The Contactless Symbol and Indicator are owned by EMVCo., the standards body for contact and contactless specifications, is jointly owned by American Express, JCB, MasterCard, UnionPay and Visa. EMVCo manages, maintains and enhances the EMV Integrated Circuit Card (ICC) specifications to help facilitate global interoperability and compatibility of cards and acceptance devices.

[1] Definition: Network Participants can be defined as Issuers and/or Acquirers working within the American Express Network.

GENERAL QUESTIONS (CONTINUED)

Q3: What does American Express call its contactless payments specification?

The American Express contactless specification is called Expresspay, ensuring global interoperability of American Express contactless payment transactions regardless of where they are processed. Once Expresspay is enabled, contactless transactions can be initiated in both EMV and non-EMV markets.

Q4: Where does American Express plan to deploy contactless payments?

American Express contactless payments are accepted in a number countries globally, with Issuers and Acquirers considering opportunities to launch contactless in further key countries around the world.

Q5: What contactless cards are in the marketplace?

Each major payment network has a contactless product – American Express Contactless, Visa (PayWave), Mastercard (PayPass), JCB (QUICpay), and China Union Pay (QuickPass).

Q6: Are contactless card payments secure?

Yes. Contactless cards benefit from the same security features found on a contact EMV chip card. When a contactless transaction is run through a contactless-enabled reader and terminal, information is encrypted and securely sent to the host with the purchase details.

Q7: What is the difference between a contactless card and contact chip card?

Contactless transactions are initiated when a contactless-enabled device is touched or tapped in front of a contactless reader at the point-of-sale. Account and security information is then sent wirelessly, using radio frequency, from the contactless device to the reader. Both contactless cards and contactless readers contain small antennae that allow data communication to take place. The contactless payment device can be a card, key fob or smart phone. The device never leaves the possession of the customer, which enhances security and speeds up the electronic transaction process.

Contact EMV™ chip cards refer to either "Chip and PIN" or "Chip and Signature" cards. Both payment cards utilize microprocessor chips which securely store card data. The card is inserted into a terminal reader designed for smart cards. "Chip and PIN" cards requires the customer to enter a PIN for authorization at the point-of-sale similar to an ATM. For "Chip and Signature" cards, customers sign for the transaction as with magnetic stripe cards.

Q8: What are chip cards?

Chip cards, also known as smart cards or integrated circuit cards (ICCs), contain an embedded microchip processor that securely stores card data. For comparison, magnetic stripe cards store card information in the stripe's two tracks.

Chip card technology is considered more secure than magnetic stripe technology for card present transactions. Chip card technology was designed to reduce counterfeit, lost/stolen and card-not-received fraud. Chip cards can be either contact or contactless.

In accordance with EMVCo contactless specifications, additional security measures have been incorporated to mitigate possible risks resulting from contactless payments. Card members and merchants are also protected by specific programs developed by the card brands and banks to further minimize liabilities related to fraud and misuse.

MERCHANT QUESTIONS

Q9: What are some of the potential benefits of contactless payments for merchants?

The key benefits for merchants generally are:

- Help to improve efficiency at the point of sale to move customers through the line faster with fewer resources[1]
- New technology encourages customers to use contactless more often[1]
- Help to reduce cash handling and optimize operations
- Enhance payment security at the point of sale
- Use American Express data analytics to capture consumer spending patterns to increase transaction rewards and promote loyalty

Q10: What types of merchants are likely to be interested in contactless payments?

Contactless is particularly attractive to merchants focused on convenience at point of sale and speed of transaction. Examples can be quick-service restaurants, gas stations, supermarkets, convenience stores, drugstores, theatres, parking facilities, transit service, entertainment venues and unstaffed vending locations.

Q11: Are merchants required to get a customer's signature or pin number for contactless transactions?

Cardholder verification requirements for contactless transactions vary by market and the contactless terminal limits set by the acquirer. In markets where high value contactless transactions are the standard, then a form of cardholder verification will be required above a certain threshold. The method of cardholder verification may be PIN or Signature. In markets where the contactless transaction limit is set at a lower value, cardholder verification is typically not required, in accordance with the American Express No Signature Threshold.

Q12: Do merchants need to replace existing equipment in order to accept contactless payments?

Not necessarily. In fact, contactless readers are available from major manufacturers and have been certified for American Express contactless payments. American Express certified contactless readers are also compatible with a variety of terminals. Merchants should work with their terminal provider to determine what solutions are available. Merchants who own point-of-sale readers or integrated terminals may need to upgrade equipment to accept American Express contactless payments. These readers or terminals must complete required testing and certification. Electronic cash register (ECR) and point-of-sale system software may also need to be updated in order to process.

Q13: If a merchant has a contactless reader that accepts another network solution, will the merchant be able to accept American Express contactless payments?

The merchant can contact the terminal provider to ensure that the existing equipment is certified to meet American Express specifications. If not, the terminal provider may need to upgrade the device to accept American Express contactless payments.

Q17: What is the cost for implementing contactless payments?

The cost of implementing contactless payments depends on the merchant's current point-of-sale environment. If the merchant's processor supplies the point-of-sale device, implementation may involve changing or upgrading the point-of-sale device to accept American Express contactless payments. Other costs may come from internal communications and staff training.

If merchants own their point-of-sale device, the cost for moving to contactless can vary based on a number of factors, including:

- Purchasing or upgrading new readers and/or new terminals to support contactless acceptance
- Internal systems development – update internal systems to support contactless data and processing
- Internal communications and training

Please contact your American Express representative for information about your individual circumstances.

Q18: How long does it take to get the technology up and running?

It depends on the merchant's current point-of-sale environment. Specific information regarding adoption can be obtained by contacting your local American Express representative.

1) Smart Card Alliance, www.smartcardalliance.org , 2014.

ISSUER QUESTIONS

Q19: What are some of the potential benefits of contactless payments for issuers?

The key benefits for issuers generally are:

- Take advantage of opportunities to grow revenue
- Help drive top-of-wallet preference
- Create a better customer experience
- Help increase card usage by displacing cash for small purchases
- Help attract new segments and extend product appeal
- Ensure a secure and protected shopping experience to gain card member trust and confidence.[1]

Q20: How long will it generally take for an Issuer to launch a contactless product?

It depends on a number of factors that may include:

- Product development and certification card platforms
- Update card production and personalization process
- Updating host and downstream systems to process Expresspay transactions
- Product launch card member communication

Q21: Which is the latest American Express specification to support contactless payments?

American Express has published the latest Expresspay specifications that support both Mobile NFC initiated transactions and contactless card payments. Expresspay specifications can be accessed via your processor or your American Express representative.

Q22: What is the cost for implementing contactless payments?

The cost of implementing contactless payments depends on and the development work required to prepare internal systems to process contactless payments.

Q23: What are the American Express certification requirements for contactless?

American Express requires contactless card and mobile products to complete end to end certification, please contact your American Express representative for information about your individual circumstances.

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1) "Socio-economic benefits of SIM-based NFC," October 2011, available from Booz & Company.

CARD MEMBER QUESTIONS

Q24: What are some of the potential benefits of contactless payments for card members?

The key benefits for card members are:

- Enhance purchasing experience through quick and convenient transactions
- Ensure a secure and protected shopping experience to gain customer trust and confidence
- Enable consumer-preferred forms of payment
- Create a convenient and rewarding point of sale experience

Q25: Is there any risk of card members getting charged accidentally if they get too close to a contactless reader?

If the card member gets close to a contactless reader, the card member would not be charged accidentally. Before a contactless transaction can take place, the retailer must activate the contactless reader with the purchase details. The card member must then hold their card or device within 4 cm (2 inches) of the contactless reader for more than half a second.

Q26: If a card member has more than one contactless card in their wallet how can they ensure the payment is taken from the right card.

An American Express Card Member should always remove their card from their wallet when making a contactless payment and present that card to the terminal reader separately.

If more than one card is placed on the reader, a red light will be shown on the reader to tell the card member that- the payment has not completed and the terminal will ask the card member to 'please present one card only'. The card member will then need to select their chosen card and touch the card again for the payment to be complete.

Q27: Does a card member have to use the contactless feature?

No. Contactless technology is an additional feature on the card, however it is up to the card member whether they chose to pay via contactless or contact (i.e. Chip & PIN).

Q28: How does a card member know when the payment has been made?

The card reader will indicate that the payment has been made with a green light and beep to indicate successful payment.

Q29: Will a card member receive a receipt for their transaction?

Contactless payments are designed to let card members make transactions quickly and conveniently. If a card member would like a receipt to confirm the contactless transaction, the merchant may be able to provide one upon request. Please note that this may not be directly available in certain circumstances; for example, when paying for transit with a contactless card.