



Card Check/3-D Secure

Card-based fraud prevention

In contrast to stationary trade, merchants cannot look their customers in the eye in long-distance selling, so they cannot use the usual methods to secure a payment transaction. Retailers therefore need to rely on other identification and authentication systems and plausibility checks of a transaction. Card Check and 3-D Secure can help to successfully prevent fraud and efficiently minimise the payment defaults. Card Check provides a plausibility check of the card number and can verify the existence of the card, whereas 3-D Secure determines whether the card is used by the rightful cardholder, similar to the PIN entry in stationary business.

Background/market development

In stationary business – also called “card-present” (CP) business, as the card is physically present – the customer is in the merchant’s shop and the payment transaction takes place immediately. Merchants can get a general impression of their customers and secure payment. They can check whether the card is genuine and use a number of methods to make sure that it is used rightfully:

- compare the signatures on the card and the transaction slip.
- compare a photo, which may be affixed to the card, with the customer.
- have the customer authenticate the payment by a PIN (this is relatively unusual for credit card payments in Germany).

In distance selling (also called “card-not-present” (CNP)), however, customers are anonymous and the checks listed above are impossible to conduct. Other methods need to be used to successfully prevent fraud and efficiently minimise payment defaults. Additional security is also welcomed by numerous customers who feel it is a security risk to enter card data on the internet and make payments without additional authentication (such as signing a slip or entering a PIN in stationary business).

Merchants regularly ask customers to enter the CVV2 or CVC2 codes in long-distance selling. However, the situation is different for 3-D Secure, which is also known as “Verified by Visa” or “MasterCard SecureCode”. Largely because support by the card-issuing banks is lacking, the procedure is relatively unfamiliar in numerous countries, including Germany. As a result, merchants use 3-D Secure to a different degree in each country, even though the system offers clear advantages. Merchants are protected against most payment defaults that stem from chargebacks conducted on the grounds that a transaction was not initiated by the rightful cardholder. This protection applied independently of whether the cardholder was indeed identified during the procedure or whether the merchant wanted to have the cardholder identified but was unable to do so because the card issuer or the cardholder did not support the procedure.

Description of the product

Card-based fraud prevention measures use certain card features or card data to determine whether the card data are valid or whether the customer has the right to use the card. Card Check and 3-D Secure are measures directly offered by the card organisations.

Card Check

Card Check examines the card data entered by the customer for plausibility and prevents entry mistakes and the fraudulent use of incomplete or wrong card data. Moreover, using Card Check may extend the merchant’s right to raise objections against chargebacks. The regular checks done in e-commerce and traditional long-distance selling include:

- an algorithmic check of the structure of the card number (“Luhn check”).
- a check of the Card Verification Value (CVV2; Visa) or Card Verification Code (CVC2; MasterCard).

3 D-Secure

3-D Secure is an authentication procedure developed for e-commerce and is similar to the PIN procedure used in stationary business or at ATMs. The name stands for the three parties involved in the procedure (cardholder, card issuer, merchant) and covers the “Verified by Visa” and “MasterCard SecureCode” procedures. The cardholder does not use a PIN, but a secret password deposited with the card issuer. After a successful or attempted identification the payment transaction will be marked as a 3-D Secure transaction. The clear identification of the cardholder helps to prevent objections to the effect that it was not the cardholder who initiated the transaction. If an identification is impossible because 3-D Secure is not supported, merchants will nevertheless benefit from the procedure’s



advantages. Merchants only need to install a special software (a so-called Merchant Plugin (MPI)) provided by Deutsche Card Services to use 3-D Secure. 3-D Secure also works smoothly for customers. If the card issuer does not support the procedure, the customer will not be faced with it; the customer will simply go through the regular payment procedure. If the customer's bank supports the procedure but the card is not yet registered for it, most issuers support a registration during the order procedure.

3-D Secure – How it works

1. Customers order a good or service and select "credit card" as payment method.
2. The card data are transferred to Deutsche Card Services and, via the card organisation, to the issuer.
3. The system checks whether 3-D Secure is supported by the card issuer and the card used.
 - If 3-D Secure is supported, customers are connected with the authentication system.
 - Customers use their 3-D Secure password to authenticate themselves in a new entry template directly versus the card issuer.
 - If 3-D Secure is not supported, a direct authorisation takes place and the transaction is marked as "attempted 3-D Secure transaction".
4. The issuer informs Deutsche Card Services of the result of the password check via the customers' computer.
 - If the check is successful, the procedure will move on to the authorization and the transaction will be marked as a successful 3-D Secure transaction.
 - If the check is not successful, the transaction will be rejected.
5. If 3-D Secure is not supported or if the 3-D Secure authentication is successful, Deutsche Card Services starts the authorization procedure for the transaction.

Supplementary products

3-D Secure supplements Card Acceptance (CNP) in long-distance selling. As a full-service provider, Deutsche Card Services offers other fraud prevention services which are particularly interesting in the card payment process:

- Card-based fraud prevention
 - Address Verification Service can help to minimise logistics risks for card payments by checking addresses against the database of the card issuers.
 - Fraud Screening helps to prevent fraud by numerous up-to-date checks.

- Consumer-based fraud prevention Independent of the payment method, Address Check and Name Check minimise logistics risks and Consumer Check and Consumer Score reduce payment defaults by checking negative indicators.

Target groups

Card-based fraud prevention addresses all European merchants who do business in long-distance selling, in particular merchants who

- sell expensive goods and services.
- make deliveries abroad.
- address mainly "one-time customers".

Reasons to choose Card Check/3-D Secure for card-based fraud prevention

- Merchants can underline that they are careful about customer data which customers regard as very sensitive and increase customers' trust in cards as a payment method in long-distance selling.
- Merchants can prove that a card was used rightfully and reduce non-payments and work due to chargebacks.
- Reliable protection for risky sectors and merchants with foreign or "one-time" customers.

Reasons to choose Deutsche Card Services

- Deutsche Card Services provides a proprietary Merchant Plugin (MPI) for the use of 3-D Secure.
- The Deutsche Card Services platform was the first in Germany to introduce 3-D Secure.
- Deutsche Card Services offers all leading online payment methods and supplementary services from one provider.
- The card-based fraud prevention mechanisms of Deutsche Card Services are easy to integrate for merchants via proven procedures and Multi Pay GUI, Smart Pay GUI or XML interfaces.
- The Deutsche Card Services payment platform was the first in Europe to receive a PCI security certificate.

For more information please contact the Sales Solutions Office of Deutsche Card Services:

Tel. +49 221 99577-760
sales.deucs@db.com

003 85443 11 10 09