

Best Practices for Automated Fuel Dispenser Processing

Summary

This article provides best practices and recommended processing of Automated Fuel Dispenser transactions. These best practices are intended to help guide fuel merchants in the management of these transactions.

Background

Automated Fuel Dispenser (AFD) merchants authorize a fuel transaction from an unattended pump by submitting the authorization amount as either one unit of currency (1.00), or a maximum amount. The “1.00 AFD” method is used in countries that have established chargeback liability limits for AFD transactions (for example, USD 100 in the U.S. region). 1.00 AFD authorizations can create confusion for international issuing banks when their liability cannot be directly determined from the 1.00 amount. The maximum amount authorization method is either an amount set by the fuel merchant, or an amount entered or selected from a list by the cardholder at the pump. Currency conversion of a maximum amount provides international issuers a recognizable amount to hold funds against.

Guiding Principles

The following is provided as guidance for AFD processing. Unless otherwise specified, these are suggested best practices and are not mandatory.

- AFD transactions often settle for an amount that is different from the authorized amount. MasterCard recommends (required in the Europe region) that AFD transactions be submitted as “preauthorizations” – contact your acquirer for more details. MasterCard recommends (required in the Canada, Europe, and U.S. regions) that fuel merchants submit an AFD completion advice message to the issuer with the final transaction amount after fueling is completed, regardless of the method used (1.00 AFD or maximum amount)—even when the final purchase equals the authorized amount.

Best Practices for Automated Fuel Dispenser Processing

- AFD completion advice messages are required within 60 minutes after the original preauthorization in Canada and U.S. regions, and within 20 minutes in the Europe region.
- Issuers check for funds availability based on the maximum amount or the 1.00 AFD liability limit for the POS country. Funds are held (or adjusted) once the AFD completion advice is received and matched to the original preauthorization.
- MasterCard recommends that issuers release any hold of funds (no more than 60 minutes in Canada and the U.S. regions) as soon as possible after receipt of the completion advice message.
- Completion advice messages must contain mandatory matching data from the original, approved preauthorization in order for an issuing bank to release the appropriate funds, subject to the issuer's risk or fraud control policies. Contact your acquirer to determine what preauthorization data is critical for submission of completion advices with proper matching data.

Specific Scenarios

Specific AFD processing scenarios are described as follows.

- Merchants indicate support of partial approvals within authorization request messages (required today for merchants in the Europe and U.S. regions, in the Canada region by April 2015, and globally for all AFD merchants by 2020). If supported by the merchant, issuers may partially approve maximum amount preauthorizations based on available funds. They may also partially approve a 1.00 AFD status check for an amount that is less than the MCC 5542 liability limit established by the POS country.
- When an approved AFD transaction is cancelled for any reason, MasterCard recommends that merchants submit a full reversal (required within 24 hours in the U.S. region). An AFD completion advice with a zero amount may also be used as an alternative to submitting a full reversal. Issuers must release any hold of funds within 60 minutes of receiving the reversal or the zero amount advice. Additional detail on Reversals may be found in the "Best Practices for Authorization Reversal Processing" article.