

# NACS Perspective on the Web Payments

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## Overview

NACS represents over 300,000 Convenience and Petroleum stores worldwide. NACS members in the US comprise over 10% of the electronic payments volume, and 4% of the US GDP. While oil companies didn't invent the concept of the credit card, they were early adopters of the concept – first as “knuckle-buster” technology and later as electronic interchange. Early pioneering efforts with self-service terminals lead to later implementations of RFID, all in the pursuit of innovation to satisfy consumer demand.

A key aspect of payments innovation in petroleum has been the importance of customer loyalty – an early form of socialization between the merchant and the customer. For fuel merchants, flexible and innovative payment is important both from an economic and a social perspective. While this loyalty and social aspect of payment has begun to use other channels, NACS and its members understand that social presence and payment innovation go hand-in-hand, and will continue to do so: consumer behavior dictates the correlation.

The embedded consumer now dictates the pace of payments innovation going forward. Migrating relatively constrained web presence to mobile commerce has presented opportunities for innovation. Utility, not elegance is the prime directive. Consumers demand simplicity, convenience, and reliability.

Ultimately, the success of payment technology of any kind depends on a combination of trust, utility, convenience, and cost-effectiveness. NACS has worked since 1995 to represent and advocate on behalf of merchants and their customers regarding payment technology.

When Teri Richman of NACS spoke at the W3C@10 in Boston, she illustrated the penetration of web technologies into the Convenience and Petroleum industry. At that time, key benefits of web technology were remote hosting of reporting and management services, and also the role of XML in making Electronic Data Interchange standards affordable to small merchants. She spoke of how the W3C truly does make technology available to everyone.

As an organization, NACS knows a lot about its members, their needs, and their customers' needs. We very much want to share those perspectives in this exciting activity, repeating the success that Teri spoke about in making technologies available on an unrestricted basis. The results can be incredible.

We believe that Web Payments, properly scoped, has the potential to drive payment technology to an unprecedented level of benefit, efficiency, adoption, and profitability for all concerned. We also believe that NACS can play a fundamental role in helping to set that scope, and to evangelize the concept of Web Payments in important financial and retail circles.

Following are a few examples of what we've been doing.

## NACS Standards Work in Payments

In November 1995, the National Association of Convenience Stores (NACS) convened an overall Technology Standards Project. NACS subsequently created PCATS (Petroleum Convenience Alliance for Technology Standards). PCATS, as a part of NACS, continues the work of creating standards to benefit retailers with special focus on retailers in the Petroleum Convenience segment.

As part of the original NACS project the Payment Systems Committee was formed. The Retail Financial Transactions committee (RFT) is continuing the work at PCATS.

NACS has also supported work at X9 to help make international payment standards simpler and therefore more useful to its membership.

## PCATS Standards (Retail Financial Transactions Committee)

The work of the RFT committee currently falls into the following areas. This list also gives an indication of the diversity of our membership.

1. **Electronic Payment Server (EPS)**: working to develop and adopt a U.S. domestic standard for managing credit/debit/fleet card transaction processing from the POS through the use of an electronic payment server. The Chair of the Electronic Payment Server (EPS) Working Group is Bradford Loewy from Wayne and the Vice Chair is Sharon Scace from Wright Express.
2. **Loyalty**: working to develop and adopt a U.S. domestic standard for the exchange of loyalty transaction information and facilitate integration of POS interfaces for use by different loyalty programs and mobile marketing, thereby affording retailers the opportunity to participate in various loyalty programs leveraging one standardized interface to their POS and back office systems. The Chair of the Loyalty Working Group is Loyalty Pat Lewis of Oasis Stop 'N Go and the Vice Chair is Michael Fitzsimmons of Altria.
3. **Point to Point Encryption (P2P)**: This working group is currently working on the development of a standard to support the efforts of X9 (X9.119 Part 1) in developing a global point-to-point encryption standard for use within the fueling and convenience retailing environment. PCATS is also participating in F6 on 119 Part 2 (Tokenization). The Chair of the P2P Working Group is Sharon Scace with Wright Express and the Vice Chair is Sue Chan with W. Capra.
4. **Mobile**: working to develop and adopt a U.S. domestic standard for mobile payments within the fueling and convenience retailing environment. Various mobile payments concepts are in use in the industry today, with billions of gallons of fuel sold each year via mobile devices. The objective of this work group is to standardize and support all viable methods of connecting mobile commerce to the site system for seamless consumer benefit. The Chair of the Mobile Working Group is Wesley Bures from ExxonMobil and the Vice Chair is Don Frieden from P97.

In its NACS/PCATS role, the Committee developed and is maintaining a set of standard Payment Systems Product Codes. These codes are used to identify the products sold in a credit card transaction and are primarily for the use of the acquiring host as contrasted with category management uses. These codes are getting world wide adoption and have been endorsed by the US General Services Administration for its alternate fuels programs.

Previously, Committee members participated as members of X9A12 - a subcommittee of the ANSI accredited financial services standards committee, X9, Inc. As X9A12, the group developed TG-23, a technical guide for the use of an international standard, ISO 8583, for the transmission of credit card data in a standard message format from the store terminal to the acquiring host. Most recently, the group revised the technical guide to become a US standard, X9.104, based on the latest version of ISO 8583.

In more recent work:

- Alan J. Thiemann of PCATS is Co-Chair of X9AB (retail), as well as the chair of US Mirror for SC7/WG10 which is working on ISO 12812 – Mobile Payments.
- Alan and Linda Toth, also of PCATS, are participating in the US Mirror WG9 on payments – 8583 review and extensions, along with ISO 20022.

The Committee and Working Groups solicit the active participation of retailers and suppliers. Retailers are especially needed to ensure that retail financial standards are moving in the direction that will best satisfy retailers' needs both now and in the foreseeable future. Additional supplier participation will ensure that the standards accurately reflect the capabilities of present and future systems. The industry will greatly benefit as the developed standards gain greater traction in the marketplace.

## **X9 Standards**

X9.104-2:2004 (R2011)

The following paragraph is quoted from the X9 Standard:

Although there was strong sentiment for a possible standard for messages flowing from the card acceptor to the ensuing host processing system, the NACS Committee determined that existing standards did not serve this purpose. Therefore, NACS convened a working group within X9A to develop a set of guidelines based on the international acquirer to issuer standard, ISO 8583:1993, specifically designed for the convenience store and petroleum marketing industry. That guidance document was adopted by X9 in 1999. ASC X9-TG23-1999 Implementation guide for ISO 8583-based card acceptor to host.

Subsequently, his standard has been adopted widely in the Convenience Petroleum industry.

## **Future Prospects**

NACS represents an industry where transportation, brick and mortar retail, online retail and mobile commerce converge. Alternative payment strategies, improved consumer financial services, integration of automotive and retail technologies, and the ability of devices to “pair” to provide trust are a few of the areas where NACS is already active. We continue to try to find areas where industry standards will provide benefit for our members and their customers, and to create the best standards that we can in

these areas; leading a highly fragmented retail market to efficient adoption. A secure and fair Web Payments standard would have be a tremendous benefit to all of these efforts, and NACS and PCATS are in full support of this initiative.