# Accredited Standards Committee X9 Inc.
# NEWSLETTER

August 31, 2016

**Developing ANSI & ISO Standards for the Financial Services Industry for Over 30 years**

## X9's All Committees Meeting:

In a little less than two months (Oct. 17-21, 2016) X9 will be meeting at the Federal Reserve Bank of Atlanta. You can still register for the meetings at the URL below, but hotels are getting difficult to find as there is at least one very large convention in Atlanta that week.

In mid August, the Regency Suites hotel gave us a code for our members to use and we passed it along to the membership. Last week, the hotel informed us that they had made a mistake and that the reservations our members made with this code were being cancelled. They further stated that they had no more rooms available for that week. Staff had a number of calls with the hotel and the Atlanta Fed, but we were unable to stop the cancellations. If you were affected and have not found a room, please contact staff as we regularly check the area hotels for vacancies. I urge you to make your reservations now if you have not already. If you cannot find rooms around the Bank, check the area north and north-east of the Bank for hotels. This would be the Buckhead area.

The Federal Reserve Bank of

**FRB Atlanta - Monetary Museum**
(Site of X9's Reception)

Atlanta is hosting our All Committees meeting the week of October 17, 2016. We have created a group and file folder on our member's web site for information about the meetings. All members of X9 can access this group. The name of the group is "All Committees Meeting October 2016". The current agenda has been posted to the group and we are keeping it up to date. A list of people registered for the meetings is also in the folder so you can confirm you are registered. Staff is currently working with the Fed to finalize the room assignments

for the meetings.

If you plan to attend the meetings, please register at the URL below. X9 is required to provide the Bank with information on each person that will be attending the meetings so the Bank can perform security checks. If you have any questions, please contact a staff member.

**ASC X9 Staff**
Steve Stevens - Executive Director, steve.stevens@x9.org
Janet Busch - Program Manager - janet.busch@x9.org
Ambria Frazier - Administrative Assistant - ambria.frazier@x9.org
Bob Blair - ISO 20022 Consultant - bob.blair@x9.org

**Office**
275 West Street, Suite 107
Annapolis, MD 21401
Phone: 410-267-7707

**Social Media**
Home Page: www.x9.org
Facebook: See last page
Twitter: https://twitter.com/ascx9inc

# ASC X9 Inc. Newsletter

## X9 All Committees Meetings Registration Page:

http://x9.org/2016-committees-meetings-registration/

### Atlanta Hotel and Rate Information:

http://x9.org/wp-content/uploads/2016/05/ATL-Hotels-060916.pdf

### X9 2016 All Committees Group Folder:

https://members.x9.org/apps/org/workgroup/x9ac2016/index.php

## X9 Social Media Account

X9 now has a Twitter and Facebook account. The URLs for our accounts are listed below. Ambria is our social media manager and you should contact her if you have information to post or have suggestions for what information we should be posting to these sites. We will be using our Twitter account to send out meeting information during the All Committees Meeting so please follow us Twitter.

### ASC X9 Twitter Account

https://twitter.com/ASCX9Inc

### ASC X9 Facebook Account

https://www.facebook.com/Accredited-Standards-Committee-X9-Inc-Financial-Industry-Standards-110761672914

## X9's Public Web Site - New X9 Project Status Page

We have a section on our public web site that provides the status of X9's major projects. This section was recently overhauled and expanded and is now organized by the different X9 Subcommittees. This will help potential new members determine which committees are responsible for major projects plus it provides the status of the projects. I ask the subcommittee and work group chairs to keep Ambria updated on the progress of the projects so she can keep this information up to date.

http://x9.org/standards/x9-project-status
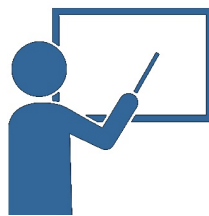
## X9 Seminars

I am working on our next seminar but it will be after the All Committees Meeting. If you have suggestions for a seminar, please contact me.

If you missed any of our seminars or want to hear them again, you can download presentation material and listen to the seminars at the following URL:

http://x9.org/download-x9-seminars/

## Card Not Present (CNP) Fraud - Work Group - X9AB23

X9 recently approved the creation of a new work group under the X9AB committee. The name of the group is "Card Not Present Fraud" and its purpose is to create a technical report documenting best practices to prevent this type of fraud. The group has held a number of calls and has scheduled calls every two weeks. It is not too late to join the group if you are interested.

If you would like more information or would like to join the work group, please contact Janet Busch or myself. Guy Berg from the Minneapolis Fed is chairing the group and can also be contacted for more information.

## A New Study Group on Distributed Ledger Technology has been Formed

X9 has created a study group to determine what direction X9 should take with regard to work on digital currency, block chain technology and distributed

ledger technology. Claudia Swendseid and Guy Berg are initially chairing the group. The group will report their findings and recommendations to the X9 Board next year. A call for subject matter experts has been issued. The first meeting was on August 30. Please contact staff if you would like more information on the group or would like to participate on the group.

## Teaching X9 Standards

Did you know that one of our member companies teaches classes based on several of X9's standards? One of the classes even certifies individuals to perform audits to one of our standards. For over a year, Darlene Kargel, with Delap LLC, has been teaching these classes at the X9 office in Annapolis. As a result of having the classes in our office, a student's company has joined X9, one upgraded their membership and we have been able to market X9 to companies not normally involved with X9. What better place to teach X9 standards than at the X9 office. I asked Darlene to write about what some students have said about X9 and to describe the classes. The following is Darlene's input. Thanks Darlene.

### Class Experiences by Darlene Kargel

"I didn't know that X9 was a real place; that it was a tangible entity." That was a student's comment from one of my recent classes hosted at the ASC X9 headquarters in Annapolis. Teaching some of my cryptographic key management classes at X9 headquarters provided a different face for the ASC X9 organization to members and non-members alike that had not been previously experienced. Introducing students to two of the most highly sold standards of the X9 suite (X9.24-parts 1 and 2, X9.8-part 1 and TR-39), resulted in recruitment of a new member and renewal of a former member into X9. It has been a delight to participate in accomplishing mutual goals – working with Janet and Ambria as they described to the students the benefits of X9 membership, work group participation and opportunities to interface with some of the retail banking industry's subject matter experts.

One of the current class offerings focuses on introduction to PIN security and cryptographic key management for auditors; leading to sitting for and successfully passing the CTGA examination required by some payment networks for completing a TR-39 compliance review. To maintain the achieved CTGA certification, additional continued education requirements can be accomplished by attending more advance classes such as introduction to: asymmetric cryptographic key management and remote symmetric key distribution, EMV, payment tokenization and other current relevant topics, thus also ensuring X9's presence as an information resource leader.

## Standards Recently Approved by X9

Ambria has compiled a list of all standards and documents that have recently been approved by X9. This will be recurring feature in our newsletter so members can follow the work of X9. The list below includes the closing date of the X9 ballot and short description of the document. After approval by X9, the documents are sent to ANSI for review and approval which can take 6 to 8 weeks. After ANSI completes their review, the documents are made available to the public.

### X9.100-187 Electronic Exchange of Check and Image Data - Ballot Closed: 7/18/16

This standard provides the financial industry with a format necessary to perform electronic check exchange (ECE), with or without images. It supports forward presentment, posting, return notification, and returns, as well as existing customer information reporting products. The standard also supports multiple check clearing

alternatives, e.g., bank-to-bank, bank-to-switch.

This standard is a revision to X9.100-187-2013. The major changes with this revision is the removal of the Annex B which detailed return reason codes and descriptions which have now been moved to a new standard, ANSI X9.100-188, along with the code lists for Image Exchange of return items. We see a benefit to having one source for return codes. All other changes to this standard are not substantive.



### X9.100-140 Image Replacement Document IRD - Ballot Closed: 7/18/16

This standard provides the financial industry with a specification for an Image Replacement Document (IRD) that provides for a machine readable substitute document created from the image that is made from the front and back of the original check. This standard is a revision to X9.100-140–2013. The major revision with the revision is the removal of the Annex A which detailed return reason codes and descriptions which have now been moved to a new standard, ANSI X9.100-188, along with the code lists for Image Exchange of return items. We see a benefit to having one source for return codes. All other changes to this standard are not substantive,

but a minor addition of one term is included.



### X9.129 Legal Orders Exchange - Ballot Closed: 6/22/16

This standard establishes the file sequences, record types, and field formats to be used for the electronic bilateral exchange of legal orders, specific to levies and asset based orders.

The standard file format will enable an automated transport of standard formats for legal order presentment request types. This will include electronic legal services, presentment, ingestion of the document into a Financial Institution and its outbound response.



### X9.100-10 Paper for MICR Documents - Ballot Closed: 4/15/16

The document is presented with updates to standards references and formatting has been improved slightly. Annex A, "Considerations for Multiple Part Sets" has been revised to eliminate discussion of carbon form sets and carbon

interleaved forms which have been effectively eliminated for use on checks due to interference with the ability to other standards, as well and concerns about carbon transfer and impacts to capture equipment and other unintended consequences of their use. It is recognized that some users may continue to use them for internal usage, but carbon-less types are preferred.

### X9.119-1 Requirements for Protection of Sensitive Payment Data Part 1: Using Encryption Methods - Ballot Closed: 4/11/16

An errata has been made to X9.119-1 to add clarity to the encryption of the middle digits of the PAN. This clarification is based on card brand guidance for the encryption of the middle digits. This supports the auto-mated fuel dispenser industry.

### TR-8 Check Security - Ballot Closed: 4/6/16

Technical Report (TR) 8, Check Security, is presented for approval following updates and revisions as a result of changes in the check environment and the resulting need to provide guidance in preventing and detecting check fraud for check producers and printers, processors and users.

The revised Technical Report and the ballot are the result of the normal review cycle of Technical Reports. Terms and definitions have been updated to accommodate commensurate changes in the industry.

## News from the World Wide Web Consortium (W3C)

X9 and W3C both have groups that are working in the payment's area and we have decided the two organizations need to work together to solve some of the issues. X9 has a number of members that are also members of W3C and some of these members have volunteered to be liaisons between the two organizations. One key person that participates in both organizations is David Ezell. David is a Verifone representative to X9 and is also chair of W3C's Web Payments Interest Group. David was also recently approved by X9 to be a US expert to SC7/TG1 at the Madrid meeting in September. David has agreed to author a regular section in our newsletter that will provide insight into the work of W3C and how the two organizations can work together. For the first installment, I asked David to give some background information on W3C. If you have any questions for David, please contact me. I would like to thank David for providing X9 with information about payment-related projects at W3C. The following is David's first installment.

### W3C Update by David Ezell

The payment's world is evolving quickly, with new technologies and new business requirements emerging at an ever faster pace. Traditional payments standards bodies, like X9, are being joined by other groups anxious to improve the payments experience on the Web.

One such organization is the World Wide Web Consortium (W3C). Founded in October 1994, W3C has the mission to "lead the Web to its fullest potential," under the direction of Sir Tim Berners-Lee, the inventor of the Web. When W3C was founded, the following statement was included in the press release:

W3's simplicity and power make it attractive to a growing number of uses, including group collaboration tools, electronic publishing, remote learning, electronic commerce, banking and the use of intelligent network agents. Underlying these applications is a developing infrastructure of access, security, payment, automatability, and knowledge and data representation and conversion.

—1994 MIT Press Release about creation of W3C

W3C has moved to address the payments requirement by creating new groups: the Web Payments Interest Group (IG) in 2014 and the Web Payments Working Group (WG) in 2015. These groups collaborate to determine opportunities for standardization for payments on the web, as well as to produce standards for browsers and Web communications.

X9 and ISO have members who are working to help smooth continuity of standards between stakeholders and reduce redundancy; Conexxus, Verifone, Bloomberg, UK Payments, and SWIFT are among the members who have a strong interest in harmonization.

In recent weeks, both W3C groups have had face to face meetings. The IG met at MIT (Massachusetts Institute of Technology) to discuss emerging opportunities for blockchains in payments, as well as the importance of integrating digital offers and loyalties into the payment's ecosystem. The WG met in London to work on its public draft of a Payment Initialization API, designed to ease integration of payment applications into a Web browser.

Please continue to follow our progress as we strive to bring interoperable payments to Web applications.

### X9 Membership Dues

X9's fiscal year runs from September 1 to August 31. Our 2017 fiscal year (FY17) starts on September 1, 2016. Our invoices for FY17 were emailed to members at the end of May. We have recently been experiencing some problems receiving dues payments by

credit card. The issue is with PayPal and we have been working with PayPal to resolve the issue. I apologize for the inconvenience. PayPal has stated that X9 should be able to receive credit card payments by August 29. If you experience a problem or have questions about dues, please contact a staff member.

**ISO 20022**
Universal financial
Industry message
scheme

## ISO 20022 Update by Bob Blair

### International Standards

Technology and regulation continue to be major forces driving change in financial services… and are giving rise to new needs for standards:

Technology - The rise and promise of Blockchain and digital currencies, evolution and revolution in payment (wholesale, retail, cards, mobile), securities, trade finance and FX are suggestive of the financial services industry's future.

Regulation – In the US for domestic, for cross-border and many other payments markets, regulators work to address safety and soundness, money laundering, terrorist financing, liquidity risks, market efficiencies and other objective. PSD2 in the Eurozone, FFIEC and OFAC in the US being but a few of a number of examples.

These forces introduce change, uncertainties, and requirements for new and existing standards. X9 is actively engaged in US domestic and international forums to increase the quality and relevance of international standards.

Standards now more than ever, are important in achieving industry objectives for automation, efficiencies, new market opportunities, and regulatory compliance. From a 2015 whitepaper on standards published by SWIFT, an inventory of the benefits of standards include:

Benefits of standards

— Improve data quality

— Increase data compatibility

— Lower costs

— Reduce operational risk

— Eliminate inefficiencies

— Facilitate data collection and data analysis

— Create new business opportunities

June 2015, SWIFT, Standards – A Value Proposition for Regulators

### ISO 20022 Adoption

ISO 20022 continues to see growth in use across domains and market segments, in the US and elsewhere. In US payments:

NACHA has published a guide to the use of ISO 20022 in corporate to bank communications of NACHA transaction instructions, March 2016.

In that same month, Fedwire and TCH have announced plans to convert wire payment operations to ISO 20022 commencing 2020. Efforts are now underway to realize that objective.

Many other markets have adopted, or have plans in progress to adopt ISO 20022. Interest by various communities to coordinate cross community use of these standards has given rise to multiple harmonization projects in the interest of interoperability:

*CGI-MP – Common Global Implementation-Market Practice was established in 2009 to harmonize use of ISO 20022 payment standards in corporate to bank communications, especially mixed payables, multi-country.*

*RTPG – The Real Time Payments Group was established in 2015 as a subgroup of the ISO 20022 RMG to harmonize use of the ISO 20022 standards for the new real time payment systems now in development in the US and elsewhere.*

*HVP+ Group – Most recently, announced July of 2016, the High Value Payments Group, hosted by SWIFT and composed of high value payment operators globally, seeks to harmonize use of the ISO 20022 standards. Harmonization is a major step in the road to interoperability. High value payments (HVP) have been harmonized through the use of SWIFT FIN and the SWIFT MT*

standards over many years. Given the increasing use and plans for use of ISO 20022 for HVP in various markets, harmonization offers the opportunity to "connect the dots" to ultimately establish interoperability within (e.g. TCH and the Fed) and across markets, e.g. Canada, China, Eurozone, Japan and other major US trading partners.

New areas of work include API's cards and mobile payment's standards which are receiving substantial interest and development by multiple parties, e.g.:

Cards and mobile - w3c and web payments/APIs, for example; and

The Eurozone's PSD2 and open access to payment systems and use of APIs.

A challenge for industry will be to organize to address the multiplicity of overlapping interests in a way that reduces the number of standards and rationalizes the point of interface between standards. Interestingly, a key motivation in the creation of ISO 20022 was to focus industry attentions on a single set of standards for certain core functions to avoid proliferation of standards in light of new technologies.

## X9 Communications on ISO 20022

Webinar on ISO 20022 – Held in July focusing on developments related to use of ISO 20022 in US payment systems.

Remittance Coalition's ISO 20022 Resources Guide - Since its publication in April, the Remittance Coalition's resources guide, Understanding ISO 20022:  A Resource Guide for Financial Institutions, Corporations, and the Public, has been downloaded over 400 times. X9 was a contributor to this useful document.  Further contributions and comments are encouraged.

## ISO 20022 and US Payment Systems - 2020

Earlier this year, the Federal Reserve's Wholesale Payments Office and The Clearing House announced plans to migrate the US high value payment systems (Fedwire and CHIPS) to ISO 20022 with a production start in 2020.

Much background work was previously laid in prior years to develop a business case to establish industry consensus. Plans are now announced and work is now in progress to realize that vision:  Schedule, rollout strategy, extent of use of ISO 20022, gaps and differences between legacy and new standards, and other issues will require attention. New schema and enhancements to existing schema may be required. Industry needs to start thinking about investment in support of ISO 20022 for wire operations commencing 2018 at the latest, with preparations commencing 2017.



## ISO LEI – Legal Entity Identifier

LEI is increasing used in the Securities domain, notably related derivatives, the focus of immediate attention for this new standard.  Over 330,000 LEI's have been issued since this standard was introduced to market.  While this new standard was created to address positive legal identification of counterparties in the securities space, recent industry attention suggests that the LEI may be in the cross border payments domain's near future.  The CPMI (a subgroup of the Bank for International Settlements) has published a whitepaper on challenges to correspondent banking (effectively cross border payments via SWIFT) with use of LEI as one recommendation.

Standards and Correspondent Banking – BIS CMPI (Committee on Payments and Market Infrastructures)  - Correspondent Banking whitepaper

Correspondent banking has been under fire in recent years due to increased regulation and compliance requirements.  As previously mentioned, the Bank for International Settlements (BIS) has issued a whitepaper on correspondent banking, with recommendations for improve-ments to address the decline in the number of correspondent

banking relations globally and negative implications for the costs and reach of cross border payment services. Based on extensive industry consultation, recommendations include:

KYC - Encouraging use of "know your customer" (KYC) utilities including measures to make them more effective and accepted. A recommendation is that ISO establish a standard for KYC related documentation.

LEI - Use of the Legal Entity Identifier (LEI) in correspondent banking: "…specifically promoting the use of the LEI for all banks involved in correspondent banking as a means of identification that should be provided in KYC utilities and information-sharing arrangements."

Information-sharing - Increased use of information-sharing initiatives. Recommended: Standard contractual terms between banks and their clients to facilitate information sharing where data privacy laws allow this.

Payment messages - The relevant stakeholders (i.e. the Wolfsberg Group and the Payments Market Practice Group (PMPG)) should review current use of payment messages and related documentation:

"The documents should include information about the data that should be contained in payment messages as well as the data fields that should be used to provide relevant information for conducting customer due diligence. "

"In addition, the AMLEG is

invited to consider further developing guidance on supervisors' roles in ensuring that banks meet FATF Recommendations and guidance on the quality of payment message content."

LEI - Use of the LEI as additional information in payment messages including:

Establish market practice as a guide to use of LEI with existing standards

Encouraging enhancement to standards (e.g. MT and ISO 20022) and use in the payments domain of this to date security centric standard.

More developments and increased application of standards, particularly in relation to ISO 20022 are likely.

## Other ISO 20022 News

Cards and Mobile Payment Standards – The US is continuing to work in the TG1 (a technical group of TC68, SC7) and the ISO 20022 Cards SEG to address extensive requirements not yet met by ISO 20022 in the Cards space. The objective: to define the ISO 20022 successor to ISO 8583 (the current cards related standard) inclusive of global interest in cards standards. Current ISO 20022 standards make only initial moves on this space and have a very narrow market focus to date.

ISO 20022 Maintenance Cycle - The period for submission change requests (CRs) to ISO 20022 schema closed as of the end of June. CRs received

through June are in review (or have been reviewed). Accepted CRs will result in enhancements to existing schema with an approximate publication date of late first quarter 2017. CRs submitted after June 2016 will be addressed in the next annual maintenance cycle.

eInvoice schema – The Trade Standards Evaluation Group, owner of the ISO 20022 eInvoice schema, is seeking interest and submitter ownership in the ISO 20022 eInvoice schema. Published in 2010, this schema appears to have no users or supporters. The schema may be retired if no interest or ownership is established. OASIS UBL is a standard that more fully addresses the space and has significant adoption. The challenge for any invoice standard and in fact ISO 20022 and all standards is to:

Define the boundaries of the domains they address and

Establish effective means for communications with other standards families across those border.

Should the ISO 20022 defer to the supply chain space for definition of invoice, the boundaries between supply chain and finance may shift slightly. The two issues above will be equally relevant however to the efficiency and effectiveness of both families of standards.