Winter Ushers in New and Refreshed Opportunities

The month of February for the Smart Card Alliance is usually when our members and supporters think about snowcapped mountains and skiing, because in previous years, we would all meet in Salt Lake City, Utah, for our Annual Payments Summit. In this quarter’s Smart Card Talk newsletter, the first of 2016, I write about a new date, look and feel for our Annual Payments Summit, and I encourage you to be part of this renewed event as well as our new facility outside of Washington, DC – the National Center for Advanced Payments and Identity Security. This issue also features updates on Alliance Councils, our Leadership Profile focuses on CH2M, the feature article spotlights EMV and NFC, and we also note our new CSCIP and CSEIP recipients.

Sincerely,
Randy Vanderhoof
Executive Director, Smart Card Alliance

Feature Article:
EMV and NFC: Complementary Technologies Enabling Secure Contactless Payments

NFC and EMV are companion technologies. NFC applies to how devices communicate; EMV applies to payments made with contact and contactless chip cards or with a mobile NFC device emulating a contactless chip card. This month’s article clarifies how the technologies work together to enable secure payments.

Member Profile:
CH2M

In this first issue of 2016, Smart Card Talk spoke with Brian Stein, a Senior Project Manager with CH2M HILL’s Transportation Business Group in North America. He brings more than 18 years of transit automated fare collection and parking systems experience from positions with Accenture, Scheidt & Bachman USA, Inc., and Giesecke & Devrient America.
Winter Ushers in New and Refreshed Opportunities

Dear Members and Friends of the Alliance,

The month of February for the Smart Card Alliance is usually when our members and supporters think about snowcapped mountains and skiing, because in previous years, we would all meet in Salt Lake City, Utah, for our Annual Payments Summit. The Payments Summit is an event that brings together the entire payments industry for a look at the convergence of EMV chip card payments, mobile payments, and contactless transportation payments.

This year, though, things are going to be different. The 2016 edition of the Payments Summit is taking on a new look, feel, date, and location. We’re trading in our winter coats and snow boots for the April sun and palm trees at the Loews Royal Pacific Resort at Universal Orlando in Florida. Over the last six years, the February payments conference outgrew every hotel in Salt Lake City until the biggest and “grandest” one, the Grand America Hotel, was the only option left. When that wasn’t available to us, we decided to change venues, and felt that a warm, winter-free city would be the next best thing. We also chose to take advantage of the bigger hotels in Orlando and partner with the ICMA Card Manufacturing and Personalization Expo by holding a co-located event.

This year, one registration pass gets you into two multi-track conference events and a joint exhibition hall, showcasing the best of the card manufacturing industry by the ICMA Expo and the best of EMV payments, mobile payments and transportation payments offered by the Payments Summit.

The 2016 Payments Summit will be April 4 – 7, 2016 and will focus on the future of payments and payments security regardless of payment form factor or consumer shopping channel used. For those seeking even a deeper understanding of how payments are evolving, we have a full day pre-conference workshop on April 4th called “The Changing Payments Landscape in the U.S.: Strategic Considerations for Issuers and Merchants.”

Updates on EMV migration will be included, but more of the conference will spent highlighting what happens next, after the EMV migration is mostly complete. Topics such as digital payments, tokenization, biometrics, and digital currencies will be discussed. As an example, the conference will have a full day of track sessions dedicated to FinTech, the Future of Payments, and New Technology Innovation. Also, the Transportation Track has the largest and best transit operators from the U.S. and around the world discussing how their requirements for contactless payments and mobile applications are driving more innovation in transit than ever before.

However, even though there isn’t a conference to enjoy this month, February is not without another milestone. This month marked the official opening of the Smart Card Alliance’s new facility – the National Center for Advanced Payments and Identity Security. This is a permanent training and education center to house our education programs, including our Certified Smart Card Industry Professional (CSCIP) training, certification, and testing program and the Certified System Engineer ICAM PACS (CSEIP); these programs have trained hundreds of smart card industry professionals and physical access control system engineers in the last six years. The Center is located in Crystal City, (Arlington) VA – just outside of downtown Washington, DC. The 2,800 square foot facility is conveniently located in a modern 10 story office building only minutes from Reagan National Airport and a few minutes from DC on the metro.

Educational programs will be available to both Smart Card Alliance members and non-members. For those unable to attend in-person events, certain activities will be live streamed and/or recorded, and archived as part of an online resource library hosted by the Smart Card Alliance. A security systems laboratory is planned to host multiple solutions for hands-on testing and training purposes. With this new facility, the Smart Card Alliance will be able to greatly expand education and collaboration programs aimed at improving security across multiple markets and subject areas, including payment security, identity security and privacy protection and provide both face-to-face and online events and assets.

The new National Center for Advanced Payments and Identity Security and the refreshed Payments Summit, with a new look, location and expanded format, are just two examples of how the Smart Card Alliance is constantly renewing itself and recommitting its resources to the needs of the smart card technology industry, whether it is about government access and identity security or advanced payments and mobile services. As the markets for smart card technology and related services continue to evolve, so does the educational services and conferences that are organized by the Smart Card Alliance to keep our members and informed and prepared for where industry is heading in the future.

I hope everyone has an opportunity to visit us at the Center in Crystal City and at the 2016 Payments Summit Conference in Orlando in April.

Thank you for your continued support.

Sincerely,

Randy Vanderhoof
Executive Director, Smart Card Alliance
rvanderhoof@smartcardalliance.org

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Executive Director, Smart Card Alliance
rvanderhoof@smartcardalliance.org
Busy Beginnings in New Year

Dear Members and Friends of the Smart Card Alliance Latin America (SCALA),

The beginning of the year fills us with great motivation to continue the SCALA activities we've worked on with great effort last year. It also allows us to assess our past performance and highlight how integrated circuit card technology is transforming to meet the needs of individuals and new vertical markets. This month I'll review some of the key projects that SCALA is overseeing.

Market Analysis

We've started to prepare a market analysis document assessing market trends, movements, and opportunities in the vertical markets influenced by our technology. The purpose of the document is to provide our members with a general vision of the markets, as well as SCALA's perspective on strategic areas of growth, in order to help their organizations be better positioned in the region. Once complete, the market analysis document will available to members only on SCALA's website.

Digital Tour – Americas 2016

The Banking Association of Panama and SCALA have joined together to conduct an event on June 15-17 focused on methods of emerging payments, digital convergence, and the impact on current and potential bank clients. The event, which will be held at the Megapolis Convention Center at the Hard Rock Hotel in Panama City, Republic of Panama, will include participation from other market segments, an exhibition area, and a unique experience to interact with emerging technologies.

All event participants will be provided with a credential in the form of a card, wearable, or mobile device that incorporates SCALA's interoperability specification, GENUeID, and can be used by different simulated applications in the exhibitor area. Space is limited, so reserve your spot today. For more information, visit www.digital-tour.com or contact us at info@digital-tour.com

Digital Center of Excellence

SCALA has been working closely with the National Bureau of Science, Technology, and Innovation of Panama – SENACYT – to develop the industry's Digital Center of Excellence. The Center will serve as a meeting point for the region to advance professionals of industries influenced by related technologies to embedded integrated circuits. The Center has been forming alliances with strategic influential universities of the region to drive new professionals towards our related industries, develop white papers, and be trained on our member equipment.

Interoperable Specification: GENUeID

SCALA has been working with different government agencies and international organizations to develop and promote the interoperable specification, GENUeID, for multi-application/multipurpose identity documents.

GENUeID is an important tool for the interoperability of infrastructure components for the issuance of documents, as well as advancement in the discussion of reciprocal recognition of national identity documents among countries.

Many of our members have been part of this initiative; if you have not yet done so, we invite you to get involved and help the industry build solutions to solve the key challenges faced by the region on identity.

Lastly, it is my pleasure to let everyone know that SCALA and the Latin American Security Association – ALAS - have signed a collaboration agreement. We are certain that the agreement will benefit both memberships and create new synergies among the industries we represent.

We hope this information, our initiatives, and activities continue to generate your interest and drive you to join our organization.

Sincerely,

Edgar Betts
Director
Smart Card Alliance Latin America (SCALA)
ebetts@smartcardalliance.org
www.sca-la.org
1. What are your main business profile and offerings?

CH2M is a global, employee-owned company with deep experience in high-speed rail, program management, public-private partnerships, and design. We bring forward-thinking technology solutions to meet our client’s transportation needs around the globe, whether it’s building highways and bridges throughout North America, managing the Panama Canal expansion, improving air travel in India, or overseeing complex high-speed rail projects in the United Kingdom.

CH2M is an industry leader in assisting transit and rail clients with the design, procurement, and implementation of electronic fare payment systems. CH2M’s electronic payments group has performed a wide variety of fare system assignments for large, medium, and small transit and rail operators. Our staff has developed innovative fare solutions for transit and rail operators that optimize their objectives and meet passenger needs. Our professionals are experts in the analysis and development of fare systems, including project management, fare policy, pricing, structure and fare system design, testing, installation and procurement management.

“In this first issue of 2016, Smart Card Talk spoke with Brian Stein, a Senior Project Manager with CH2M HILL’s Transportation Business Group in North America. He brings more than 18 years of transit automated fare collection and parking systems experience from positions with Accenture, Scheidt & Bachman USA, Inc., and Giesecke & Devrient America, coupled with hardware and software engineering, project management, business development, sales and marketing knowledge. Currently Treasurer of the Executive Committee of the Smart Card Alliance Board of Directors, Brian is also vice chair for parking of the Alliance’s Transportation Council. Over the years he has served in numerous capacities for APTA’s UTFS Contactless Fare Media Standard Working Group and the Massachusetts Association of Regional Transit Authorities. Brian’s professional background includes working in industries including aerospace, communications and lottery and gaming. He’s also written firmware and device drivers for various embedded systems. Brian has a B.S. in electrical engineering and an MBA, the former from Northeastern and the latter from Northeastern’s High Tech MBA Program.

“...Our professionals are experts in the analysis and development of fare systems, including project management, fare policy, pricing, structure and fare system design, testing, installation and procurement management...."
2. What role does smart card technology play in supporting your business?

CH2M works with transit and rail clients to help them determine which technologies will facilitate their business requirements. Smart card technology, in particular, plays a vital role in such systems as access control, identity management, and automatic payment and fare control. Further, since Near Field Communication is becoming more prevalent within mobile solutions, our clients look to CH2M to guide them through the plethora of available solutions to focus on those that meet their unique business and customer needs.

3. What trends do you see developing in the market that you hope to capitalize on?

Near Field Communication is one technology that will remain prevalent as it continues to grow with the mobile wave. More robust, reliable, and stringent security and identity management are increasingly necessary components of technical solutions, especially those involving payment. Another area that is trending within our transit and rail market involves solutions that promote and accommodate a convergence of modes, from not only commuter rail, bus and subway, but also tolling, parking, bike-share and other newer modes of commuting. These will be the focal points for our business over the next few years.

4. What obstacles to growth do you see that must be overcome to capitalize on these opportunities?

Technology obsolescence—with the rapid growth of these technologies, it is extremely difficult to keep up with and stay abreast of the information that is circulated. A strong part of our service offerings is the ability to educate and inform our clients about the different technologies and the pluses and minuses each has as it relates to the needs of our transit and rail clients. CH2M is well known as a reliable and trusted third-party advisor, who puts the clients’ interests first.

5. What do you see are the key factors driving smart card technology in government and commercial markets in the U.S.?

One key factor is the need for more robust, reliable, and stringent identity management and controls. Others factors are easier and more flexible ways to make purchases, use transit, and access venues.

6. How do you see your involvement in the Alliance and the industry councils helping your company?

Our involvement is another way to identify CH2M with our clients as a thought leader in technology.

7. What are some of the challenges you see confronting the smart card technology industry?

Technical obsolescence is a continual challenge as is the cost, or perceived cost, to implement smart card solutions.

Member point of contact:

Brian Stein
Senior Project Manager, CH2M
Brian.Stein@ch2m.com
www.ch2m.com | LinkedIn | Twitter | Facebook
EMV and NFC: Complementary Technologies Enabling Secure Contactless Payments

EMV is a global standard for secure debit or credit payments made using chip cards at a merchant who has an EMV chip-acceptance infrastructure. EMV-compliant chip card payments protect against the use of counterfeit, lost, or stolen cards and skimming. Merchants, issuers, and processors in the United States are in the final stages of upgrading their infrastructures for EMV issuance and acceptance.

Simultaneously with the U.S. move to EMV chip card payments, Near Field Communication (NFC) technology is emerging as a useful accessory for consumer transactions. NFC is not a payment technology; it is a set of standards that enables proximity-based communication between consumer electronic devices such as mobile phones, tablets, and personal computers. NFC technology is compatible with the current contactless payment acceptance infrastructure—an NFC-compliant mobile device can communicate with a point-of-sale (POS) system that currently accepts contactless payment cards.

NFC and EMV are companion technologies. NFC applies to how devices communicate; EMV applies to payments made with contact and contactless chip cards or with a mobile NFC device emulating a contactless chip card. Contactless payment transactions made using mobile NFC devices use the same infrastructure as contact and contactless EMV chip card transactions.

EMV Chip Migration

To encourage adoption of EMV chip technology in the U.S., throughout 2011 and 2012 the global payment networks announced that beginning in October 2015, liability for counterfeit and, for some payment networks, lost or stolen card transactions at most POS locations would shift to the party that was not chip-enabled. [1]

Initial card issuance efforts focused primarily on consumer and commercial credit cards, with debit cards now following quickly. Although the early adopters were mainly large issuers, many of the 10,000-plus financial institutions in the U.S. have either begun issuing chip cards or have active issuance projects underway.

The merchant community has been somewhat slow to adopt EMV, due primarily to two factors: early uncertainty regarding the U.S. debit solution and the number and variety of merchant terminals and fragmentation of the merchant community. However, progress has been made, with Visa reporting that over 750,000 merchant locations accept EMV chip cards at the end of 2015. [2]
A consideration for both issuers and merchants in making the transition to EMV is what payment interfaces to support: both contactless and contact EMV payments, or contact payments only.

**Contactless Payments in the U.S.**

Contactless chip cards were first issued in the U.S. in 2004. However, a combination of factors, including the convenience of magnetic stripe transactions with no signature required, minimal incremental spend, and modest merchant uptake, led to sluggish adoption rates in comparison with the rates in countries implementing contactless payment after EMV chip migration.

Contactless payments using mobile NFC devices started with Google Wallet in 2011, followed by Softcard in 2012. Again, adoption was slow due to limited merchant acceptance and mobile NFC device availability. The U.S. launch of Apple Pay in October 2014 gave mobile NFC an exciting new face, added a “coolness” factor, and reignited interest in contactless payments. Although adoption numbers still remain relatively low, momentum is building for payment using contactless chip cards and mobile NFC devices.

While focused on contact chip card issuance in the initial EMV chip card roll-out, issuers are now considering both rolling out dual interface cards and implementing new mobile strategies. Terminals that support both contactless and contact payments are readily available, with many supporting both interfaces as standard features. Many in the industry believe that as merchants and acquirers replace terminals to support contact EMV chip cards, they may also choose to support contactless payments.

Rolling out contactless payment using mobile NFC devices in the U.S. has some advantages. Since EMV chip card payments and contactless payments made using mobile NFC devices use the same transaction data, implementing them simultaneously rather than separately minimizes implementation time and complexity, including the time to test, certify, and deploy. Both issuers and merchants therefore have a perfect opportunity to position themselves to support EMV contact chip card, EMV contactless chip card, and mobile NFC device contactless payments.

**The Intersection of EMV Chip, Contactless, and NFC**

The intersection of EMV chip, contactless and NFC for contactless payments requires an understanding of the process for provisioning and using EMV chip cards and mobile NFC devices for payment.

Figure 1 illustrates the process by which EMV contact and contactless chip cards are provisioned and used for payment transactions. The following describes the process; the numbered paragraphs describe the numbered box in the flow diagram.

1) The process starts with the card issuer. The issuer or issuer’s card personalization (perso) bureau provisions the chip card with one
or more application identifiers (AIDs), based on what product type the EMV cards support, and configures the card for specific transaction rules. The issuer also encodes the magnetic stripe on the back of the EMV chip card.

2) Card perso bureaus send personalization commands to the card, conveying customer-specific data received from the issuer. The information includes both customer card information and additional security information that can be used while processing a payment transaction through an EMV chip-enabled terminal. Only entities that have the appropriate security keys are able to write data to the EMV chip.

3) The card is sent to the consumer. The customer activates the EMV chip card using the method provided by the issuer, and the card is ready for use.

4) The consumer uses the chip card at an EMV chip-enabled terminal. EMV terminals are similar to magnetic stripe POS terminals but also accept EMV chip cards through insertion of a contact chip card or tap of a contactless chip card. If an EMV chip card is swiped at an EMV POS terminal, the terminal will prompt the cardholder to insert the card.

During a chip transaction, the chip must communicate with a chip reader in the terminal. The terminal helps enforce any rules set by the issuer on the chip. These rules can include enforcing services, such as offline data authentication, cardholder identity verification with a PIN or signature, and online authorization.

5) As part of the transaction, the EMV chip generates an authorization request cryptogram (ARQC), which is sent to the issuer host in an online authorization request. The ARQC can be verified by the issuer host, thus confirming that the chip card is not counterfeit.

6) The acquirer sends the authorization request through the payment network to the issuer or issuer processor. The issuer/issuer processor validates the transaction data and the ARQC and sends a response approving or declining the transaction. Authorization and clearing and settlement messages resulting from chip card transactions at the POS carry the chip information through the transaction process.

Figure 2 illustrates the process by which EMV chip cards and mobile NFC devices are provisioned and used for transactions.

Similar to the process described for provisioning and using EMV chip cards, the process to provision and use a mobile NFC device is also shown with six steps. Process steps 1, 2 and 3 are the same since these are provisioning the EMV chip card and delivering it to the consumer. The following describes the process from step 3a on; the numbered paragraphs describe the numbered box in the flow diagram.

3a) To use the card for payment with a mobile NFC device, cardholders must first enter the card information into a mobile wallet application on the device. The issuer then verifies the cardholder’s identity before provisioning the actual payment credentials to the mobile device.

3b) For contactless payment using mobile NFC devices, the trend is to tokenize payment credentials for added security. [3] The digital provisioning platform provisions the payment information to the mobile device as digital credentials, which may involve a token service provider (TSP) to create a token from the payment card information. The token is what is provisioned to the device. The trusted service manager (TSM) provisions the credentials to the mobile device. The mobile device can then be used for contactless payment transactions using NFC technology.

4) EMV-enabled POS terminals can, if so configured, process both contact and contactless payment transactions initiated using chip cards and contactless payment transactions using mobile NFC devices.

5) The contactless payment transaction flow looks the same to a merchant regardless of whether a chip card or a mobile NFC device is being used. However, during an EMV transaction initiated from a mobile NFC device, a payment token may replace the card number and expiration date with numeric codes of the same length. The TSP maintains the mapping between card numbers (coupled with their expiration dates) and payment tokens (coupled with their expiration dates). As in the previous flow, the EMV chip or the mobile NFC device payment application generates an ARQC, which is sent in an online authorization request to the issuer host for verification. For a mobile NFC device, the authorization request sends the token from the consumer’s device to the merchant’s terminal, acquirer, payment network and issuer.

6) The payment network sends a detokenization request to the TSP, who can translate token data to card data (and back) on request. The TSP returns the card data, which the payment network adds to the authorization request before forwarding the request to the issuer. The response from the issuer includes an authorization response cryptogram (ARPC) and card data but no token data. The response goes first to the payment network, which replaces the card data with token data obtained from the TSP before resending the response to the acquirer, the merchant, and the consumer’s device.

These process flows illustrate several important points. First, the consumer can use a contactless EMV chip card or a mobile NFC device with a contactless payment application in the same way at a contactless-enabled merchant POS terminal. Second, to the merchant, the contactless payment transaction flow looks the same, whether a chip card or a mobile NFC device is being used.
And, third, the same transaction security mechanism is used to ensure that counterfeit credentials can’t be used.

**Conclusion**

The U.S. EMV migration is well on its way. Millions of EMV chip cards have been issued to consumers and both large and small merchants are upgrading their POS infrastructure to accept EMV chip transactions. In parallel with this mass migration, new mobile NFC devices have been introduced in the U.S. market that support contactless payment and that can be used at the same POS systems that accept contactless payment cards.

NFC and EMV are companion technologies. NFC applies to how devices communicate; EMV applies to payments made with contact and contactless chip cards or with a mobile NFC device emulating a contactless chip card. The launch of multiple, prominent mobile NFC devices supporting payments has fueled interest in contactless payments using not only mobile NFC devices, but also cards and other form factors.

While EMV chip migration is driven by the need to reduce payment card fraud, the use of mobile NFC devices is motivated by their ability to support value-added services beyond payment. A mobile NFC device can be used to conveniently pay with a tap, but can also deliver promotions, offers and/or loyalty programs to the consumer. These services can provide significant value and can be the business driver for contactless acceptance.

**References**

[3] Additional information on tokenization can be found in the Smart Card Alliance white paper, "Technologies for Payment Fraud Prevention: EMV, Encryption and Tokenization."

**About this Article**

This article is an extract from the white paper, "EMV and NFC: Complementary Technologies Enabling Secure Contactless Payments," published by the Smart Card Alliance Mobile and NFC Council and Payments Council in November 2015.

Members involved in the development of this white paper included: ABnote; Advanced Card Systems; American Express; Booz Allen Hamilton; Capgemini; CH2M; Consult Hyperion; CPI Card Group; Cubic; Discover Financial Services; Exponent, Inc.; First Data Corporation; FIS; Fiserv; Gemalto; Giesecke & Devrient; Heartland Payment Systems; Hewlett Packard Enterprise; Infineon Technologies; Initiative for Open Authentication (OATH); Ingenico; IQ Devices; JPMorgan Chase; MasterCard; Metropolitan Transportation Authority (MTA); Mozido CorFire; NBS Technologies; NXP Semiconductors; Oberthur Technologies; Quadagno & Associates; SHAZAM; STMicroelectronics; Thales e-Security; TSYS; Valid USA; Vantiv; Verifone; Visa Inc.; Wells Fargo; Xerox.
Updates from the Alliance Industry Councils

Access Control Council
- The Access Control Council is currently discussing the NIST SP 800-116 Rev. 1 “Draft A Recommendation for the Use of PIV Credentials in Physical Access Control Systems (PACS)” and will be submitting industry comments.

Health and Human Services Council
- The Health and Human Services Council had its session proposal for the HIMSS 2016 Conference accepted. The session, “Patient Identity and Digital Matching: A New Approach,” will be on March 1, 2016 and feature Tess Coody, CEO, and Roderick Bell, CIO, of Tenet Health.
- The Council is currently working on two projects – a new vision white paper on payment/health ID convergence and a “Healthcare 2.0” infographic – with both targeted to being complete by the HIMSS Conference.

Identity Council
- The Identity Council Steering Committee elected a new chair, Frazier Evans, Booz Allen Hamilton.
- The Identity Council is working on a white paper on the FIDO protocol and smart card technology. The white paper will describe the role that smart card technology plays in FIDO implementations.
- The Council is currently developing statements of work for new projects for 2016.

Mobile and NFC Council
- The Mobile and NFC Council published the new white paper, NFC Non-Payments Use Cases, to provide an educational resource on NFC non-payments implementations that must secure a user credential. Members contributing to the white paper included: Abnote; Advanced Card Systems; AT&T Mobility; Bell ID; Booz Allen Hamilton; Capgemini; CH2M; Consult Hyperion; CPI Card Group; Cubic; Discover Financial Services; First Data Corporation; Gemalto; Hewlett Packard Enterprise; IDT; Identification Technology Partners; Initiative for Open Authentication (OATH); Ingenico; IQ Devices; JP Morgan Chase; MasterCard; Metropolitan Transportation Authority (MTA); Mozido CorFire; NBS Technologies; NXP Semiconductors; Oberthur Technologies; Quadango & Associates; SHAZAM; STMicroelectronics; Thales e-Security; TSYS; Valid USA; Vantiv; Verifone; Visa Inc.; Wells Fargo; Xerox.
- The Council is currently developing the statements of work for two new projects: a white paper on blockchain and smart card technology and projects on contactless payments.

Payments Council
- The Payments Council published the new white paper, EMV and NFC: Complementary Technologies Enabling Secure Contactless Payments, in collaboration with the Mobile and NFC Council. The white paper explains how EMV and NFC are companion technologies and clarify how they work together to enable secure payments.
- Members contributing to the white paper included: Abnote; Advanced Card Systems; American Express; Booz Allen Hamilton; Capgemini; CH2M; Consult Hyperion; CPI Card Group; Cubic; Discover Financial Services; Exponent, Inc.; First Data Corporation; FIS; Fiserv; Gemalto; Giesecke & Devrient; Heartland Payment Systems; Hewlett Packard Enterprise; Infineon Technologies; Initiative for Open Authentication (OATH); Ingenico; IQ Devices; JPMorgan Chase; MasterCard; Metropolitan Transportation Authority (MTA); Mozido CorFire; NBS Technologies; NXP Semiconductors; Oberthur Technologies; Quadango & Associates; SHAZAM; STMicroelectronics; Thales e-Security; TSYS; Valid USA; Vantiv; Verifone; Visa Inc.; Wells Fargo; Xerox.
- The Payments Council is currently developing the statements of work for new projects: a white paper on blockchain and smart card technology and projects on contactless payments.

Transportation Council
- The Transportation Council has elected a new parking vice chair, Brian Stein, CH2M.
- The Transportation Council is currently working on two white papers on: multimodal payments convergence; reference enterprise architecture for transit open payments system.

Other Council Information
- The Mobile and NFC Council, Payments Council and Transportation Council will be holding in-person meetings at the 2016 Payments Summit, April 5-7, at the Loews Royal Pacific in Orlando, FL.
- If you are interested in forming or participating in an Alliance council, contact Cathy Medich.

Alliance Members: Participation in all current councils is open to any Smart Card Alliance member who wishes to contribute to the council projects. If you are interested in forming or participating in an Alliance council, contact Cathy Medich.
Welcome New Member

- Malaysian Electronic Payment System (MEPS), General member

New Certification Recipients

**CSCIP/Government**
- Safia Hack, Booz Allen Hamilton

**CSCIP/Payments**
- Jose Arroyo Castejon, ICC Solutions Limited
- Shivaansh Gupta, Clear2Pay
- Devesh Pandit, E4 Security Consulting, LLC
- Margaret Rajski, Discover Financial Services
- Brandie Matsuda, CPI Card Group*
- Randi Muniz, CPI Card Group*
- Katie Potter, CPI Card Group*
- McKaila Wakalee, CPI Card Group*
- Mathias Gothberg, Gemalto*
- Vincent Mak, Gemalto*
- Janusz Orłowski, Gemalto*
- Gary Wood, Gemalto*
- Rial Zuly, Gemalto*
- Robert Ward, MasterCard Worldwide*
- Amy Andrijevic, TSYS*
- Shannon Baker, TSYS*
- Kim Clepper, TSYS*
- Lisa Forsythe, TSYS*
- Ashley McPhail, TSYS*
- Michael Murray, TSYS*
- Melissa Patterson, TSYS*
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- Sundar Palanisamy, TSYS*
- Heather Spence, TSYS*
- Michael Terrell, TSYS*
- Venkanna Yarlagadda, TSYS*

**CSEIP Recipients**
- Guirguis Baher, Signet Technologies, Inc
- John Bodolay, Acme Technical Group LLC
- Flavio Breyer, Open Options
- Michael Friedel, FBI
- Benjamin Globus, Security Hunter
- Corey Hewitt, Signet Technologies, Inc.
- Bodolay John, Acme Technical Group, LOLC
- Dennis Nalli, IMS Government Solutions
- Jeffrey Ogborn, Aventura Technologies
- Barrow Sherinda, Open Options

Register for the next CSCIP Training and Exam Prep Course scheduled for March 8-9, 2016. Download the CSCIP order form - Fillable Word Form, PDF

Register for the next CSEIP Training and Certification exam scheduled for March 29-31, 2016. Download the CSEIP application – Fillable Word Form, PDF

*Denotes corporate exam recipient

For more information, visit our website at www.smartcardalliance.org. Members can also access white papers, educational resources and other content.