



Smart Card
Alliance

Smart Card Talk

A quarterly newsletter for members and friends of the Smart Card Alliance

November 2016



A Message From the Executive Director

Contactless payment cards and NFC-enabled mobile payments have not had much of an impact on the U.S. consumer payments market over the last year, lost in the long shadow of the EMV fraud liability shift for both card issuers and merchants. That may be about to change in the next year as those same issuers and merchants start to look at their plans beyond EMV and envision what the next generation of consumer payments might bring. I write more about this in my letter. This last issue of Smart Card Talk for 2016 also features an update on Alliance Councils, our member profile focuses on Leadership Council member Infineon, and we

also note our new CSCIP and CSEIP recipients. Next month, look for the 2016 Annual Review publication in this space. Until then, enjoy the newsletter.

Sincerely,
Randy Vanderhoof
Executive Director, Smart Card Alliance

[Click to Read Letter ...](#)



Member Profile: Infineon

In this final issue of 2016 (look for the Annual Review publication next month), Smart Card Talk spoke with Arnaud Moser, Director of Marketing and Business Development for Chip Card and Security ICs for the Americas at Infineon Technologies. His main focus is to build and maintain Infineon's leadership in the Payment, Government ID and Transportation business. A physicist and engineer, Arnaud has over 25 years of experience within the semiconductor industry.

[Click to Read More ...](#)



Feature Article: Members Recognized for Outstanding Participation and Contributions

The [Smart Card Alliance](#) is celebrating the many achievements of its industry councils – Access Control, Health and Human Services, Identity, Internet of Things Security, Mobile, Payments, and Transportation – and member companies through awarding [2016 Honor Roll](#) and [Center of Excellence](#) designations. You can learn more by visiting <http://www.smartcardalliance.org/smart-card-alliance-recognizes-members-for-outstanding-participation-and-contributions-in-2016/>.

[Click to Read More ...](#)

In This Issue:

- ② Executive Director Letter >>
- ③ Latin America Letter >>
- ④ Member Profile >>
- ⑥ Feature Article >>
- ⑦ Council Reports >>

On the Web:

[Alliance in the News >>](#)

[Members in the News >>](#)

Upcoming Events:



2017 Payments Summit / ICMA Expo 2017
March 28 – 30, 2017
Renaissance Orlando at Sea World, Orlando, Fla
<http://www.scapayments.com>



Securing Federal Identity 2017
June 6, 2017
Hamilton Crowne Plaza, Washington, D.C.
<http://www.securingsfederalid.com>

A Future For Contactless Payments Beyond EMV?



Contactless payment cards and NFC-enabled mobile payments have not had much of an impact on the U.S. consumer payments market over the last year, lost in the long shadow of the EMV fraud liability shift for both card issuers and merchants. That may be about to change in the next year as those same issuers and merchants start to look

at their plans beyond EMV and envision what the next generation of consumer payments might bring.

Issuers will have a decision to make at that point. Do they stick with the first generation EMV contact-only card for another three to four-year lifecycle or do they take another step forward and add contactless features to their EMV cards in the interest of advancing consumer convenience, speed, and desire to replace cash for more low value transactions?

That next generation of consumer payments is going to be largely influenced by the EMV transition just completed for most bank card issuers, and one that is almost reaching the mid-way point with most merchants. By most estimates, more than half of the 1.2 billion credit and debit cards have been replaced with EMV chip cards in the last 12 to 18 months. These cards were issued as contact-only cards and preferred chip and signature to chip and PIN. With so many magnetic stripe cards vulnerable to counterfeiting and so many card accounts available to criminals from repeated data breaches, the most common course of action for most large and mid-sized banks and credit unions was a mass re-issuance of EMV cards rather than waiting for those cards to expire and replacing them over several years. This means that an equally large number of these new EMV cards will be due to expire and be reissued in three or four years, putting that timeframe from mid-2017 to the end of 2019.

There are a lot of good reasons for issuers to consider dual-interface cards for the second generation of EMV. Consumers and merchants have expressed their frustration with the contact EMV check-out experience. Issuers have gotten over the shock of the cost of chip cards, and prices for dual-interface cards are now competitive with contact-only cards in high volumes. Also, the added use of the dual-interface payment card as a replacement for cash that was experienced in other markets increases the annual cardholder spend for these accounts.

Although issuers need to factor in these usage and cost projections into their business plans, perhaps the bigger factor in this decision will be on the card acceptance side. Merchants have POS systems capable of NFC-enabled mobile and contactless payments, but most of them have not turned that feature on. The lingering problems with EMV testing and certification for getting contact chip card acceptance is further complicated by another level of certification required for contactless EMV for both cards and mobile devices. Merchants are not eager to jump back into that development and testing cycle so soon after completing their initial EMV certification. However, there is some time to allow merchants to recover before opening up their POS devices again. If the card replacement cycle begins in earnest in 2018, that gives the merchants two more years before they are likely to see the demand for contactless card acceptance coming from consumers. Merchants at the leading edge, however, can take advantage of fast NFC-enabled mobile payments with consumers already using Apple Pay, Samsung Pay or Android Pay.

My hopes are that by 2018, card issuers will have had nearly three years to get acclimated to the benefits of EMV with lower fraud rates and fewer replacement cards, and will be adjusted to the higher cost of chip cards, so that dual-interface cards will not be viewed as the premium product that they were in the past. Consumers will have come to appreciate the security benefits of chip cards but will also apply pressure to their banks to acknowledge the importance of speed and convenience too. Merchants will be beyond merely getting to EMV compliance, and will have started to further invest in improving the consumer shopping experience and offering faster check-out and new mobile services – like tying coupons and offers into mobile wallet applications that NFC-enabled mobile contactless devices brings. If all three of these can come together at the same time, the U.S. consumer retail, mobile, and banking industries will be aligned for the first time.

Thank you for your support of the Smart Card Alliance.

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

Join Us to Help Spread our Mission



Dear Members, Friends, and Colleagues,

November is a month to give thanks and to show our gratitude for all that we have received, the opportunities we have, and our accomplishments in this world. I wanted to share the things we are grateful for as we have the privilege of

representing our industry.

We are grateful to those of you who have been involved in any of our activities –sponsored our events, contributed to our councils, white papers, industry reports, case studies, recommendations of best practices, and initiatives, or are part of our membership. I would like you to know that we appreciate your support of our organization and the Alliance mission.

As important as that participation and contribution is to us and the community, your involvement is part of a bigger picture, because they help the Alliance fulfill our mission and develop the resources needed to accomplish that mission. This is something I keep in mind each day as I arrive at work; I am here, and you are helping *“to promote the use, understanding, interoperability, convergence, evolution and innovative adoption of the applications of smart card technology in the United States, Latin America and the Caribbean.”*

It is important to note that 20 percent of our membership accounts for approximately 80 percent of our industry contributions, which have yielded important accomplishments in sectors influenced by our technology such as payments, mobile, transportation, identity, and e-passports.

If you're one of the organizations that represents the 20 percent of work we have accomplished for the industry, I do not have adequate words to express how grateful we are for your support, resources, and the dedication you have shown to SCALA towards its mission. You are among the pillars of an industry that hopes to influence a changing world.

Indeed, our work is challenging. There are some sectors that, due to lack of unity, leadership or values, have not yet fully embraced industry best practices. We continue to work, as an organization, to accomplish our goals in those sectors and advance the mission of the Alliance.

Now that I've given you some insight and revealed some of the challenges we face, I pose this question to you: How will you contribute to help us influence the industry sectors in developing efficiencies, best practices, and uses of the technology in ways that improve everyday life?

Just imagine what we could accomplish if, instead of 20 percent, we could count on contributions from 80 percent of the industry getting involved to help SCALA accomplish its goals. Then, as Mahatma Gandhi said, *“We could be the change you wish to see in the world.”*

If this message resonates with you, and you want to get involved, make a difference, and be part of our industry movement, participate in SCALA.

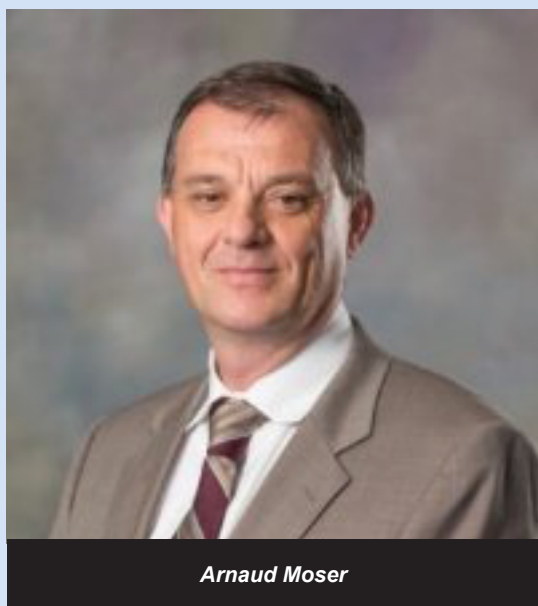
Many thanks.

Edgar Betts

Director, Smart Card Alliance Latin America (SCALA)

ebetts@smartcardalliance.org

www.sca-la.org



Arnaud Moser

In this final issue of 2016 (look for the Annual Review publication next month), Smart Card Talk spoke with Arnaud Moser, Director of Marketing and Business Development for Chip Card and Security ICs for the Americas at Infineon Technologies. His main focus is to build and maintain Infineon's leadership in the Payment, Government ID and Transportation business. A physicist and engineer, Arnaud has over 25 years of experience within the semiconductor industry. He is known for having built a solid track record of turning around enterprises, profitably growing new business, and leading functionally, geographically and culturally dispersed teams to excellence.

1. What are your main business profile and offerings?

Infineon Technologies AG is a world leader in semiconductor solutions that make life easier, safer and greener. Operating across four segments – automotive, industrial power control, power management and multimarket, and chip card and security – the company reported sales of about 5.8 billion euros (\$7.5 billion) in the 2015 fiscal year (ending September 30). In the chip card and security segment, Infineon is the second largest supplier worldwide of microcontroller-based chip card ICs used to provide hardware security for a wide variety of system applications.

2. What role does smart card technology play in supporting your business?

The classic applications for smart card technology – including payment cards, secure government-issued ID documents, mobile communications and transport ticketing – remain a growth driver for the market segment and an important part of Infineon's overall business. At the same time, applications of the underlying technology are growing in the fields of device authentication and machine-to-machine (M2M) communication. In fact, smart card technology and the related expertise in implementing hardware-based security for electronic systems is critical in all of the markets defined by the term "Internet of Things." Infineon's long history and market leadership in the smart card business position the company for equivalent leadership in these emerging market segments.

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

In an increasingly connected and automated world, data has to be protected from manipulation or theft and M2M communications security is critical. In this context, hardware-based security is recognized as a key component for securing systems. This is true both in mature applications such as chip cards for payment and ID, and emerging segments like mobile payments, machine authentication and security for IoT devices and autonomous vehicles, where both vehicle-to-vehicle communications and in-car networks need to be protected. This is also true for automation technologies in factories, logistics, traffic guidance, commercial buildings and homes.

4. What obstacles to growth must you overcome to capitalize on these opportunities?

Many companies and individuals now recognize the value of security but there still is a widespread belief that devices and systems can be protected using software alone. This leaves exploitable weaknesses that may result in breaches that damage the companies and people affected and might slow growth of new markets. Smart card technology suppliers need to help companies recognize the importance of hardware security as an integral part of product and system design. Connectivity opens up many different types of systems to security breaches, so we need to show how any device that connects to a network is a potential entry point and should be secured. Then we have to make the knowledge of a relatively small group of experts in building secure systems available to this broader audience. As an industry, smart card suppliers have to scale our capabilities to work with different types of customers and value chains.

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

Government and commercial organizations are concerned with improving authentication of service users both to reduce fraudulent transactions and to better protect consumer/citizen identity. This is why in government the continued discussion around a health care ID at the national level and adoption of eDriver license programs at the state-level represent potentially large and important programs. Both state and federal offices see smart cards as a means to arrest Medicare fraud. States also see a secure driver license as a potential tool to access government services online. Transition of public transit systems to contactless payment systems is also going to keep smart card technology in the spotlight. And of course we still need to complete the EMV transition for payment cards. Added to this is the integration of secure smart card technology in the Internet of Things, including automotive M2M and smart home applications and wearable devices. It's expected that many of the consumer-facing devices in IoT also will have some form of integrated payment technology that will need to have security matching today's card-based systems.

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

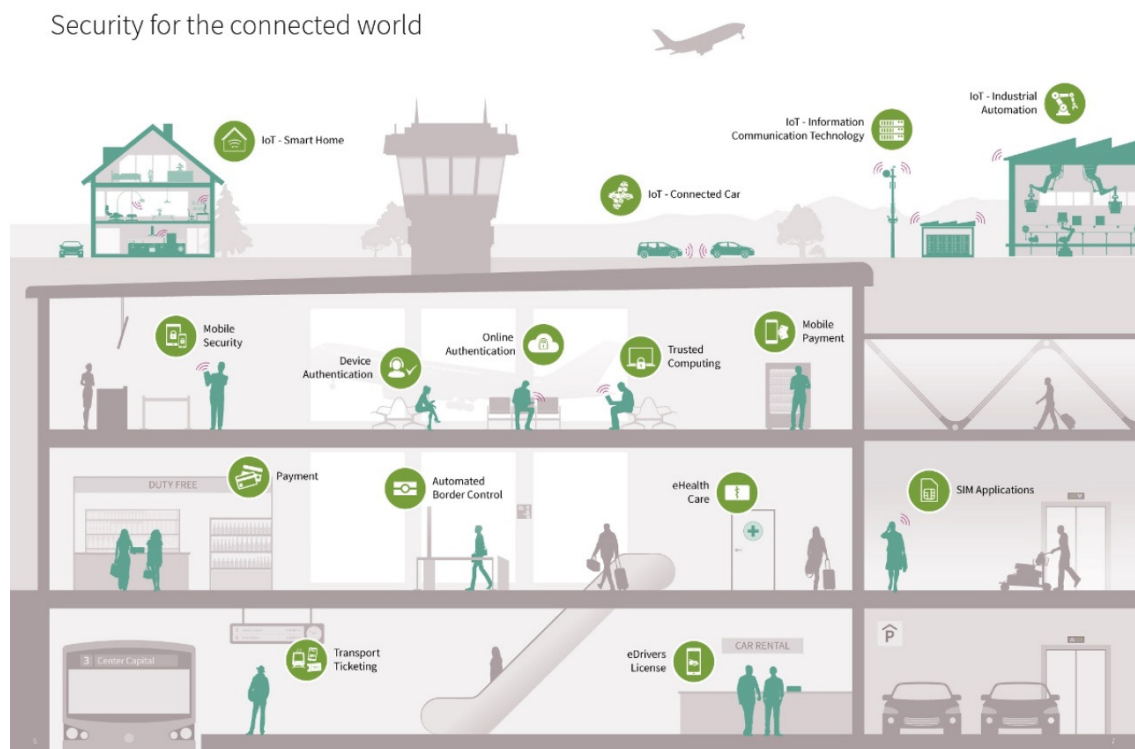
Infineon's participation in the Smart Card Alliance reflects our commitment to growing the industry and making the technology both more secure and more affordable. The broad education and outreach efforts of the Alliance help every participant in the

industry ecosystem by providing a source of useful and balanced information. The promotion of common practices and standards makes adoption of smart card technology easier for end-user organizations and individuals. And the industry councils provide an environment where participating organizations can collaborate to advance the common goals.

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

There is a dual challenge around the belief that software-only solutions provide adequate security and that hardware security is costly. Both of these perceptions are best addressed through the kinds of education efforts driven by the Alliance. There also is increasing awareness that security and privacy concerns may slow adoption of the IoT, particularly in consumer categories, so it is very important to address with efforts to accelerate adoption of proven-effective solutions. The Alliance's role as a source of information related to best practices and standards also helps to build the knowledge base needed to implement smart card technologies across the many industries and applications that need cost-effective security solutions. That knowledge base is also beneficial to organizations trying to understand the dynamics of changes in technology and the changes affect hardware-based security. In payments, for example, there is potential for confusion between the role of EMV systems and technologies such as Near Field Communication (NFC) in mobile payments.

Visit <http://www.infineon.com/> for more information.



Members Recognized for Outstanding Participation and Contributions

Industry Council Recognition

The Smart Card Alliance's 2016 Honor Roll recognizes individual members and top contributors in each of the [industry councils](#) whose contributions in the past year greatly assisted the Alliance in fulfilling its mission.

The 2016 Honor Roll was compiled based on council leadership, project leadership, project participation and meeting participation from July 2015 through June 2016. Top contributors recognized were:

- [Access Control Council](#). Chair David Helbock, XTec, Inc., and top contributors Mark Dale, XTec, Inc.; Lolie Kull, Hewlett Packard Enterprise; Steve Rogers, IQ Devices; and Adam Shane, AMAG Technology
- [Health and Human Services Council](#). Chair Morgan Richard, XTec, Inc., and top contributors David Batchelor, LifeMed ID, Inc.; John Ekers, ABnote; and Bryan Russell, XTec Inc.
- [Identity Council](#). Chair Frazier Evans, Booz Allen Hamilton, and top contributors Philip Andreae, Oberthur Technologies; Peter Cattaneo, Identiv; Sal D'Agostino, IDmachines; and Michael Poitner, NXP Semiconductors
- [Internet of Things Security Council](#). Chair Willy Dommen, Accenture, and top contributors Gonda Lamberink, Underwriters Laboratories (UL); Sami Nassar, NXP Semiconductors; and Christopher Williams, Exponent
- [Mobile Council](#). Chair Sadiq Mohammed, Mastercard, and top contributors Deborah Baxley, Paygility; Steve Rogers, IQ Devices; Tony Sabetti, CPI Card Group; and Sridher Swaminathan, First Data
- [Payments Council](#). Chair Jack Jania, Gemalto, and top contributors Deborah Baxley, Paygility; Sarah Hartman, TSYS; Oliver Manahan, Infineon Technologies; and Sridher Swaminathan, First Data
- [Transportation Council](#). Chair Jerry Kane, Southeastern Pennsylvania Transportation Authority (SEPTA), and top contributors Carol Kuester, Metropolitan Transportation Commission (MTC); Tina Morch-Pierre, Dallas Area Rapid Transit (DART); and Brian Stein, CH2M

For more information on Smart Card Alliance Industry Councils, and the complete listing of the names and member organizations who qualified for the Council Honor Roll for 2016, visit <http://www.smartcardalliance.org/alliance-industry-councils/>.



Center of Excellence Organizations

The Smart Card Alliance also announced the organizations receiving the 2016 Smart Card Alliance Center of Excellence designation. The COE program recognizes an elite mix of member organizations who, each year, reach the highest level of active participation in the Alliance by having made outstanding contributions in the form of organization-wide leadership of time, talent and resources across a wide mix of Alliance activities.

This year, Center of Excellence recipients are: Advanced Card Systems; American Express; Chase Card Services; CPI Card Group; Discover Financial Services; First Data; Gemalto; Giesecke & Devrient; Heartland Payment Systems; Hewlett-Packard Enterprise; Infineon Technologies; Ingenico Group, North America; Intercede Limited; Mastercard Worldwide; NXP Semiconductors; Oberthur Technologies; TSYS; UL; Valid USA; Visa Inc.; Wells Fargo; Xerox; and XTec, Inc.

For more information about the Smart Card Alliance Center of Excellence, visit <http://www.smartcardalliance.org/activities-center-of-excellence/>.

Updates from the Alliance Industry Councils

Access Control Council

- The [Access Control Council](#) published a position paper, [Smart Card Alliance Commentary: OMB Circular A-130 - Management of Federal Information Resource](#). The position paper highlights the impact of the OMB Circular A-130 2016 update on the access control industry and on government agencies procuring and implementing access control systems. Members contributing to the position paper included: [Defense Manpower Data Center \(DMDC\)](#); [General Services Administration \(GSA\)](#); [ID Technology Partners](#); [IQ Devices](#); [Parsons/Secure Missions Solutions](#); [SigNet Technologies, Inc.](#); [XTec, Incorporated](#).
- The Council is currently working on one project, the development of a PACS deployment playbook for the GSA CIO.

Health and Human Services Council

- The [Health and Human Services Council](#) featured two guest speakers in October Michael Magrath, VASCO Data Security, to discuss the HIMSS Identity Management Council activities, and Kelli Emerick, Secure ID Coalition, to provide an update on the Medicare Common Access Card legislation.

Internet of Things Security Council

- The [Internet of Things \(IoT\) Security Council](#) held a well-attended Council meeting at the Security of Things conference and will be discussing next projects on upcoming calls.
- The Council is working on a white paper on embedded hardware security for IoT applications. The white paper will provide an overview of the security threats to the IoT ecosystem and describe the value of embedded hardware security in end devices used in IoT applications.

Mobile Council

- The [Mobile Council](#) held a well-attended webinar on [EMV Tokenization](#) on November 3rd. Speakers included: Sadiq Mohammad, MasterCard; John Sheets, Visa Inc.; Sree Swaminathan, First Data; Randy Vanderhoof, Smart Card Alliance.
- The Council is currently working on three white papers on: mobile identity authentication; mobile profiles and provisioning; Trusted Execution Environment (TEE) 101.

Payments Council

- The [Payments Council](#) held a well-attended webinar, [Contactless EMV Payments: Merchant Opportunities](#), on October 6th. Speakers included: Jose Correa, NXP Semiconductors; Allen Friedman, Infineon; Oliver Manahan, Infineon Technologies; Michele Quinn, First Data; Randy Vanderhoof, Smart Card Alliance. The second webinar in the series, [Contactless EMV Payments: Issuer Opportunities](#), is scheduled for November 9th.
- The Council is working on four other projects – merchant and issuer contactless payments infographics; contactless payments security Q&A update; EMVCo Payment Account Reference (PAR) use cases white paper; blockchain and smart card technology white paper.

Transportation Council

- The [Transportation Council](#) is working on a white paper on multimodal payments convergence, is developing an update to white paper, [Reference Enterprise Architecture for Transit Open Payment System](#), and is developing a new webinar on mobile ticketing and Near Field Communications (NFC).

Other Council Information

- All councils will be electing their 2017-2018 steering committees and officers by the end of this year. Nominations are open until November 14th; if you're interested in taking a leadership position in the councils, please contact [Cathy Medich](#).
- 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](#).

Alliance In The News

- [“Record-Breaking DDoS Attacks Highlights Lack of Security in IoT Industry,”](#) Hospitality Technology, November 3, 2016. Hospitality Technology reports on the Smart Card Alliance’s recommendation for the addition of embedded security in IoT devices following a string of distributed denial of service attacks using IoT devices.
- [“Can Tenacious D In The IoT Age Possibly Thwart Fraud?”](#) PYMNTS.com, October 28, 2016. Executive Director Randy Vanderhoof talks to PYMNTS about how companies are looking to protect customer data at a time when IoT tech devices are connected to seemingly everything.
- [“IoT Device and Data Security Challenges and Solutions Headline Smart Card Alliance 2016,”](#) Mass Transit Magazine, October 27, 2016. This article provides a summary of key themes from the 2016 Security of Things conference, such as building security into the IoT, learning from other industries, and next steps to move the industry forward.

New Certification Recipients

CSCIP/Payments

- Nic Pavel, Interac
- Lawrence Sutton, CH2M



CSCIP/Government

- Megan Bledsoe, XTec, Inc.
- Diana Farris, XTec, Inc.
- Morgan Richard, XTec, Inc.



CSEIP Recipients

- Brent Arnold, XTec, Inc.
- James Burke, SynchroCyber Corporation
- Richard Childree, Department of Homeland Security/FEMA
- David Fogle, Star Asset Security, LLC
- Deon Ford, Prism International, LLC
- Michael Hamilton, KBRwyle
- David Harjo, Bureau of ATF
- Philip Hosack, LVW Electronics
- Norman Kadnar, NIH
- Nnamdi Martyn, U.S. Environmental Protection Agency
- Michael McKinnon, The Coleman Group
- Stephen Mergens XTec, Inc.
- Jaime Santiago, Bureau of ATF
- David Smith, Signet Technologies, Inc.,
- Paul Wojdyski, Controlled Key Systems, Inc.
- Brian Young, Integrated Security Solutions, Inc.



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



**Smart Card
Alliance**

191 Clarksville Road
Princeton Junction, New Jersey 08550
1.800.556.6828
Fax: 1.609.799.7032
info@smartcardalliance.org
www.smartcardalliance.org

About Smart Card Talk

Smart Card Talk is the monthly e-newsletter published by the Smart Card Alliance to report on industry news, information and events and to provide highlights of Alliance activities and membership.

About the Smart Card Alliance

The Smart Card Alliance is a not-for-profit, multi-industry association working to stimulate the understanding, adoption, use and widespread application of smart card technology.