

**Meeting Between Federal Reserve Board Staff and Representatives of Visa
January 8, 2014**

Participants: Louise Roseman, Stephanie Martin, Jeffrey Marquardt, David Mills, Mark Manuszak, Geoff Gerdes, Krzysztof Wozniak, Joshua Chadwick, Clinton Chen, Tyler Standage, Aaron Rosenbaum, and Linda Healey (Federal Reserve Board)

William Sheedy, Alex Miller, Kimberly Lawrence, Ky Tran-Trong (Visa); Oliver Ireland (Morrison & Foerster, LLP)

Summary: Representatives of Visa met with Federal Reserve Board staff to discuss their observations of market developments related to the deployment of EMV (i.e., chip-based) debit cards in the United States. Topics discussed included an overview of their current EMV roadmap and Visa's proposed common application for enabling multiple networks on an EMV card while preserving merchant routing and choice.

A copy of the presentation Visa representatives provided to facilitate the discussion is attached.

A decorative graphic on the left side of the slide, composed of two overlapping, curved shapes. The top shape is orange and the bottom shape is blue, both pointing towards the right.

U.S. Debit EMV

Discussion with the Federal Reserve

January 8, 2014

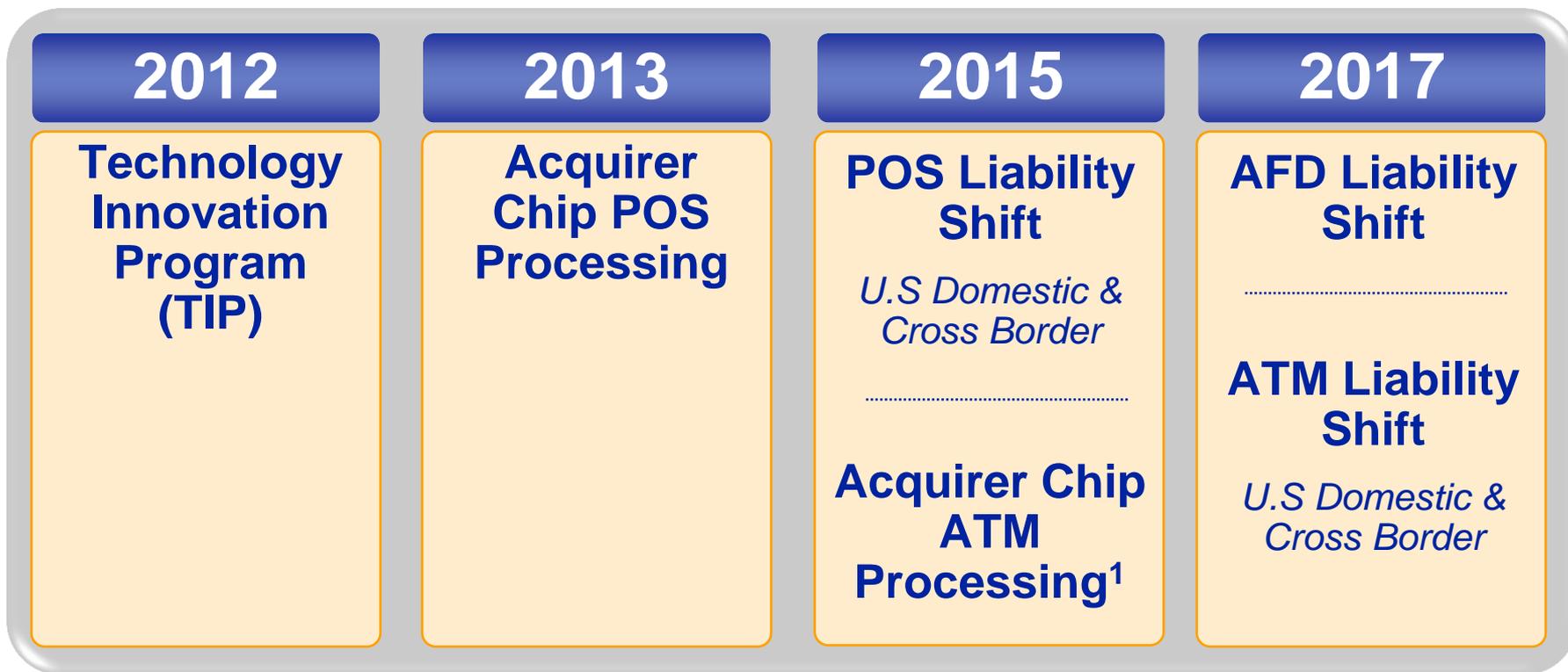
Timeline



EMV is the first major innovation requiring agreement among networks to facilitate Durbin compliance. In August 2011, Visa announced a U.S. EMV roadmap, leading to the following milestones:

- Network Roadmaps: Networks with EMV capabilities separately announced U.S. roadmaps by mid-2012; to date PIN debit networks have not publicly announced roadmaps.
- EMF Commences: The EMV Migration Forum is developed in the summer of 2012 with cross industry participation, including a Debit Working Committee to solve for Durbin compliance.
- Visa and MA Announcements: Visa and MasterCard separately announced common solutions using their own proprietary technologies, in January-February 2013.
- SRPc Announcement: The Secure Remote Payments Council, representing 14 PIN debit networks, announces a common solution using Discover's technology in March 2013.
- Visa and MA Solution Adjustments: Based on PIN debit network feedback in April-May 2013, Visa and MasterCard each separately adjusted their common solution offerings.
- Visa/MA Solution Adoption: In July 2013, Visa and MasterCard agree to adopt each other's common solutions.
- DNA Forms: In December 2013, the SRPc formalizes as the Debit Network Alliance (DNA) to facilitate governance over the SRPc solution.

Current U.S. Visa EMV Roadmap



¹Requirement for third-party processors only; AFD – automated fuel dispenser

EMV Migration and Debit



Set Up

Configuration

Routing

Current Offerings

Multi-Access



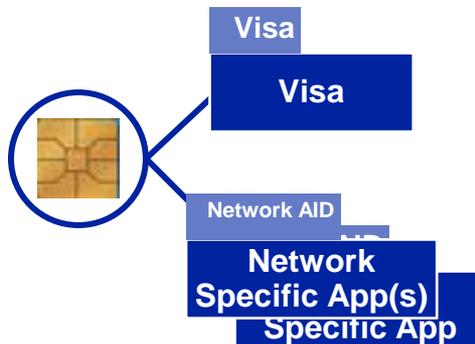
BIN table
Uses existing infrastructure

Type	EndPoint	BIN Range(s)	Limits
			Floor Stand-IN
AMEX	AMEX	370000000000 .. 379999999999	0.00 0.00
DISC	FDR	601100000000 .. 601199999999	0.00 0.00
ELAN	ELAN	601200000000 .. 699999999999	0.00 0.00
		600000000000 .. 601099999999	
MC	FDR	500000000000 .. 599999999999	0.00 0.00
SVS	SVS	700000000000 .. 799999999999	0.00 0.00
VISA	FDR	400000000000 .. 499999999999	0.00 0.00
			Add new

Visa & MasterCard
uses existing technology & infrastructure; governance facilitated through license agreements

DNA (recent proposal)
requires new governance, new technical development & network contribution of IP to DNA

Multi-Application



Terminal
Requires new/modified infrastructure



DNA
requires new governance, new technical development, network participation in DNA & adoption of DNA technology

Multi Access Transaction Origination



- Issuer configures network participation by enabling BINs in appropriate networks' BIN routing infrastructure

- Terminal reads the card
- Selects merchant's preferred AID
- Prompts cardholder for CVM, unless No CVM is selected

- Acquirer routes to network based on merchant preference using current BIN routing infrastructure

Network Solution Objectives



Visa Position

- Minimize cost and streamline deployment
- Utilize proven technology that has been tested, certified and deployed
- Preserve investment, IP and institutional knowledge
- Manage and protect the brand

DNA Position

- Industry level governance
- Access to “signature” as CVM
- Access to international transactions
- License in perpetuity
- Promise of any new developments or technologies that Visa develops