



# Euronet Payment Token Services

# Issuer Wallet

- Digitize card number
  - Create an alternate representation - token
  - Replace token not card
  - Reduce fraud
  - Potential for multiple tokens to one card
- Reduce need for/ use of physical card
  - Security
  - Reduce cost
  - Innovative



# Issuer Wallet

- Issuer Wallet Elements
  - Card management system
  - Token vault
  - Token Service Provider (TSP)
  - Mobile wallet, web services or SDK (iTSP)
  - Support on phone types – Apple, Samsung, Android
- Contactless POS terminal population



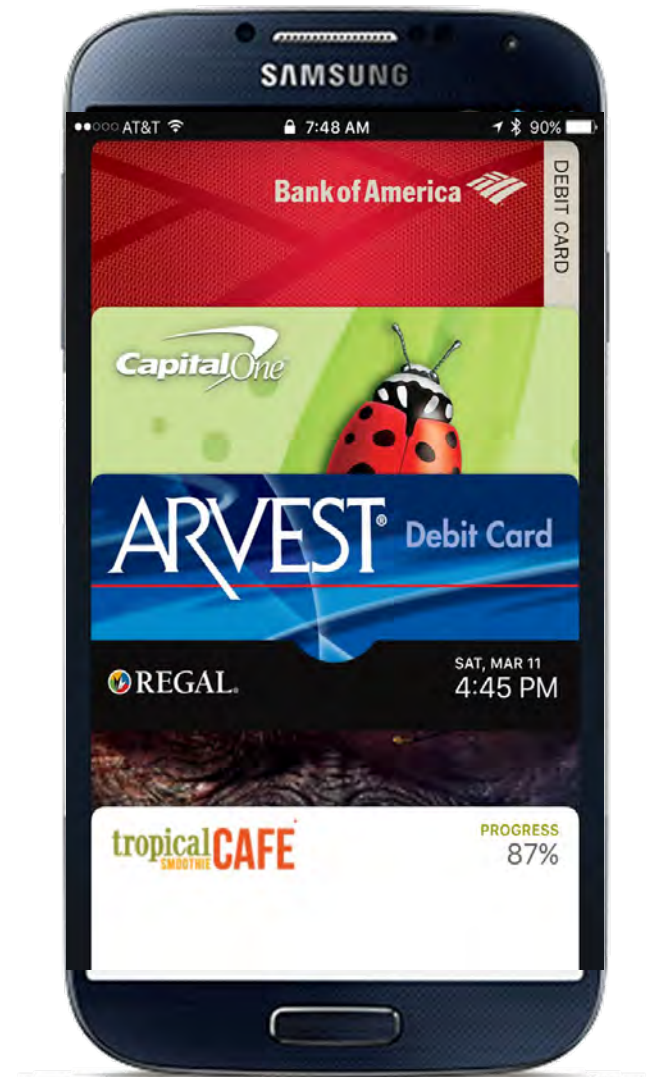
# Card Provisioning

- Cardholder receives physical plastic
- Digital First
- Downloads wallet application
- Requests card digitization
- ID&V message sent to member bank
- Member bank verifies cardholder
- Token sent to cardholder's phone
- Token stored in wallet on phone



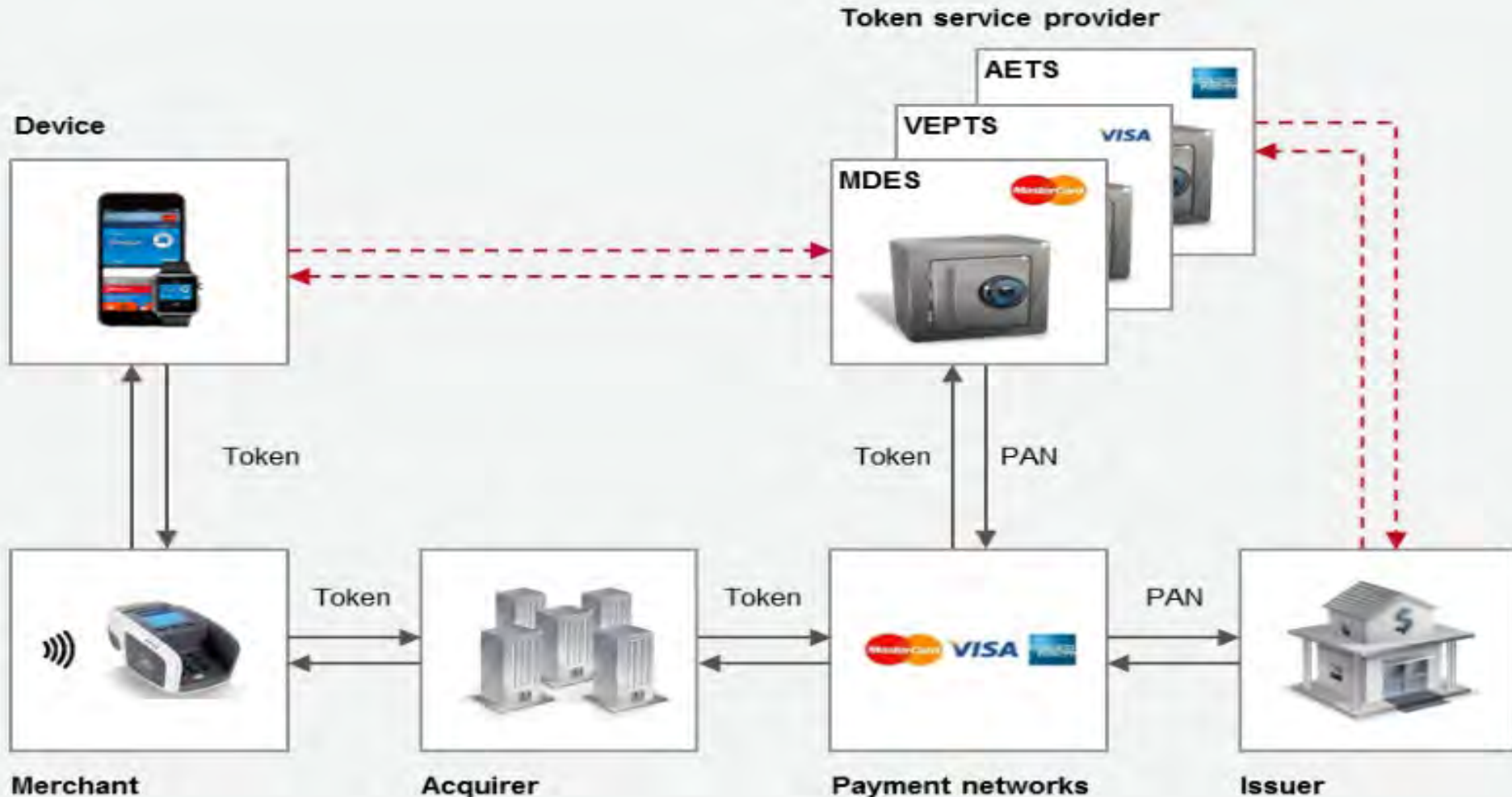
# Wallet Transaction

- Cardholder opens wallet at merchant
- The phone is 'tapped' at the contactless POS
- Contactless authorization request
- Transaction goes to Network & TSP
- Member bank receives authorization request
- Authorization or decline given by issuer
- Response sent back to terminal





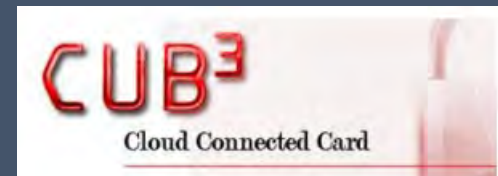
# Provisioning & Transaction



# Mobile Payment App (MPA)

- Mobile Payment APP (optional, SDK)
  - MPA hosting in the Mobile OS
  - Easy integration with any mobile banking
  - Secure token storage
  - Single or limited use cryptographic keys (SUK)
  - Optional SDK to integrate with existing mobile banking application
  - Usually Android native

# MPA Providers





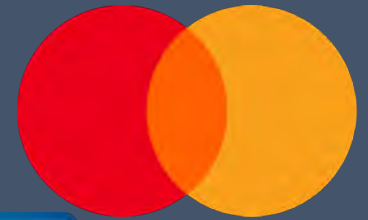
# Networks vs Wallet Giants

- Wallet Giants
  - Banks need to be approved by the wallet giants
  - Wallet giants approve banks on a country-by-country basis
  - Wallet Giants, Apple specifically, treat their wallet as proprietary.
  - Have their own battle – who is doing more transactions



# Networks vs Wallet Giants

- The networks
  - Want the benefits of a tap transaction
    - Speed
    - Convenience
    - Frictionless
    - Card stays with cardholder
  - Have their own battle – who issues the most cards
  - Can't wait for the wallet giants to come to town



# Development Impact

- Support changes to 1XX, 2XX and 3XX and 6XX messages
- Support token request from external source (cardholder)
- Network clearing support
- Send token request (TSP)
- Token request validation – cardholder/logic (card status)
- Token Activation Code support
- Store token to PAN relationship in ITM
- Support multiple tokens per PAN
- Token view and lookup in EUI for all card products
- Life cycle message from EUI to TSP
- Special card events
- Token life cycle history
- Token lookup in network warehouse

# Affected ISO messages

- Support changes to 1XX, 2XX and 3XX and 6XX messages
  - Token Eligibility Request
  - Token Authorization Request
  - Activation Code Notification
  - Token Complete Notification
  - Token Event Notification
- Changes to DE 61,48 and 124.

# Availability

- MDES available at 4.6 and above
- VTS available at 4.6 and above
- EUI integration only available at 4.6
- 4.3, 4.4 and 4.5 version available on request
- Other networks will be done as required

# WHY

- Integral to digitization vision
- Security
  - Protects card number
  - Less use of actual physical plastic
- Operational benefits
  - Cost of card distribution
  - Eventual replacement of plastic
- Promotes issuer as innovative









# Wallet Types

<b>Device-Centric</b>	 Apple Pay	 Android pay	 Microsoft Pay
<b>Bank-Centric</b>	 Wells Fargo	 Bank of America Pay	 Capital One
<b>Merchant-Centric</b>	 Starbucks Coffee	 Level Up	
<b>Network</b>	 VISA Checkout	 MasterPass	 express pay
<b>Mobile Operator</b>	 Softcard	 M-PESA	
<b>In-App</b>	 UBER		
<b>Alternative</b>	 DWOLLA		
<b>P2P</b>	 venmo	 facebook	 Square Cash



**Euronet.**<sup>®</sup>