# Mobile Working Group

RFT Review – January 14, 2015

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# Agenda

- Why Mobile Payment was started
- Goals and Objectives
- Benefits
- Deliverables
- Next steps

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# Why Mobile Work Was Started

- Lack of comprehensive mobile payment spec utilizing existing site and fueling systems for convenience retail and fueling channel
- Need to include all payments accepted at dispenser such as bank, fleet, proprietary cards, alternative payments (ACH) and mobile wallets with site and above site authorization

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# Why Mobile Work Was Started

- The working group also defined business requirements and use cases with IFSF to achieve a goal of one common standard
  - IFSF prefers to route all transactions through EPS
  - Use cases for IFSF prefer outside transactions

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# Working Group
# Goal and Objectives

Develop comprehensive specification

- Mobile payment solution should work regardless of site systems and equipment
- Maintaining security of sensitive cardholder data
- Make recommendations to reduce risk of fraud
- Assisting the industry to minimize PCI DSS requirements
- Allow flexible payment initiation from payment app residing at site level or from cloud based app

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# Working Group
# Goal and Objectives

- Support ANSI X9 with international standard for mobile payments (ISO 12812 Parts 1-5)

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# Benefits to Implementing

- Standard interfaces between mobile devices, mobile payment apps, and site equipment/networks fosters innovation and promotes interoperability for site system vendors and manufacturers, mobile device manufacturers and developers, mobile transaction acquirers, mobile financial services providers and financial institutions

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# Mobile Processing Entities

- Mobile Payment Application (MPA): This entity is a software application embedded in a Mobile Device or downloaded by a consumer onto a Mobile Device, such as a smart phone or tablet, which enables mobile payments for in-store and forecourt transactions.
- Mobile Payment Processing Application (MPPA): This entity is an application provided by the Mobile Payment Processor (MPP) responsible for interfacing between the Token Vault or Token/Trusted Service Provider, the MPA, the Site System and the Payment Front End Processor (PFEP) in order to authorize transactions.
- Payment Front End Processor (PFEP): This entity is a host that facilitates the authorization of credit and debit card transactions between the MPPA or the Site systems and the Issuer networks. It is sometimes referred to as the Front End Processor (FEP).
- Site Systems: This entity encompasses the site equipment and components (hardware and software) and may perform the function of local card processing business rules such as customer prompting, local velocity checking and receipt formatting & printing. Examples of site systems include Point of Sale (POS), Outside Sales Processor (OSP), Electronic Payment Server (EPS) and Forecourt Device Controller (FDC).

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# Architecture

- Above-Site
- Site-Level

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# Above-Site Authorizations

- For Above-Site Authorizations, the MPPA has the responsibility of communicating with the PFEP. All authorization, preauthorization, and transaction completion processes are done at the MPPA level and outside of the scope of the Site System. The MPPA sends authorization information to the Site System, thereby eliminating the need for the Site System to communicate with the PFEP for mobile payment transactions. Transactions completed using Above-Site Authorization will be tracked in the Site System as Above-Site. Settlement and reconciliation could be separate from the traditional non-mobile payment settlement process.

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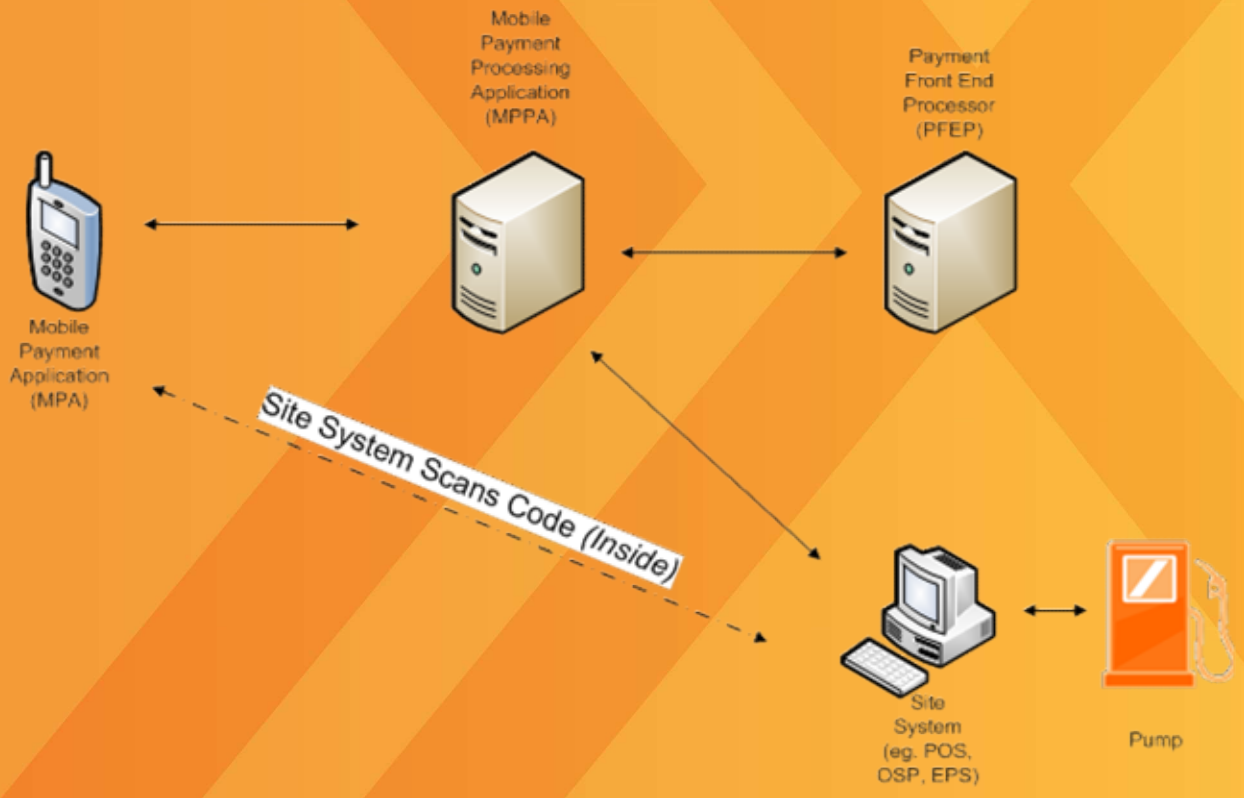
# Above-Site Authorizations

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# Site-Level Authorizations

- For Site-Level Authorizations, the Site System has the responsibility of communicating with the PFEP. The customer's payment information is provided to the Site System as a payment data payload. This payment data payload is used by the Site System to obtain authorizations and perform completions with the PFEP using the traditional payment processing. Transactions completed using Site-Level Authorization will be tracked in the Site System in the same manner as other card payments. Settlement and reconciliation will be included in the traditional non-mobile payment settlement process.
- The MPPA will need to provide to the Site System enough data in the payment data payload so that the PFEP can properly route/direct the transaction for processing. The payment data payload could include a single transaction authorization code (STAC), identification number, token, or a primary account number.

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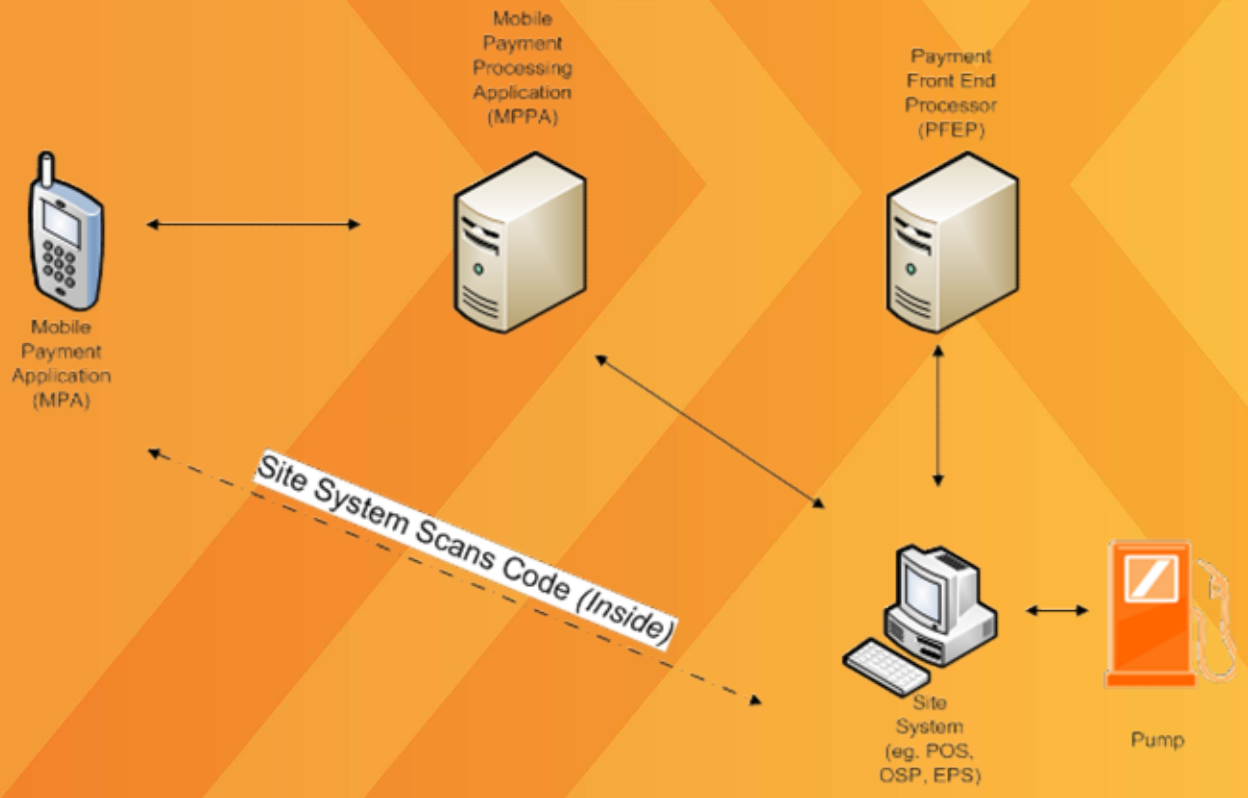
# Site-Level Authorizations

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# What Mobile working group has accomplished

- Business Requirements Document
- Sequence Diagram Document
- Use Cases
- Implementation Guide
- Schema Definitions

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# Sequence Diagrams

- Pay at the Pump Above-Site, Verify Code at Site
- Pay at the Pump Above-Site, Verify Code at MPPA
- Pay at the Pump Site Level Auth
- Pay at the Pump Cancel Request
- Outside Car Wash
- Initial Inside – MPA Provides STAC (Single Transaction Auth Code)
- Initial Inside – Site Requests STAC
- Initial Inside – Site Creates STAC
- Inside Transaction – Above-Site Auth
- Inside Transaction – Site Level Auth

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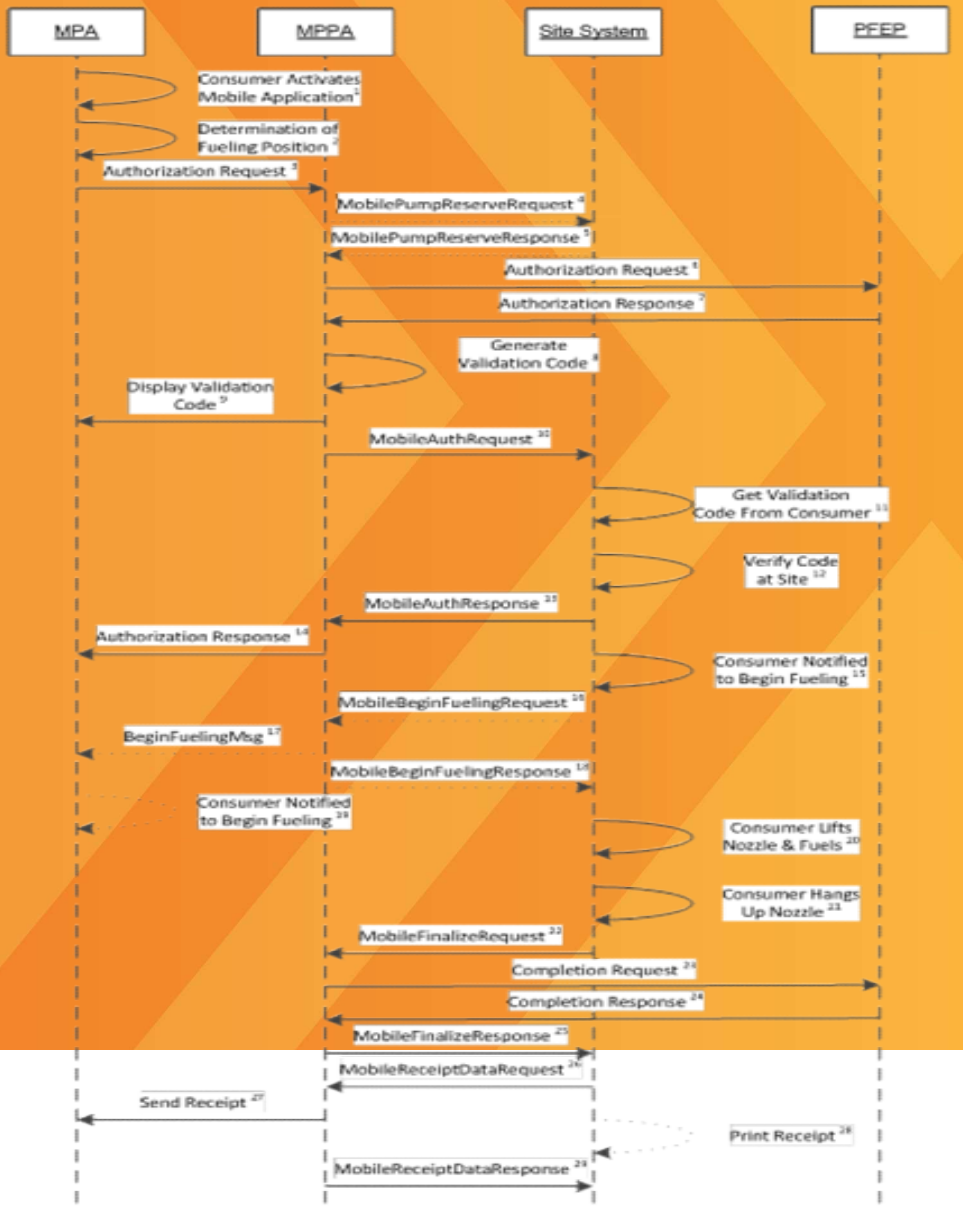
# Pay at Pump Above-Site, Verify Code at Site

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# Use Cases

- Pay at the Pump, Above-Site
- Pay at the Pump, Site-Level
- Car Wash Above-Site
- Car Wash Site-Level
- Inside Pre-Pay MPA Initiated Above-Site
- Inside Pre-Pay MPA Initiated Site-Level
- Inside Purchase MPA Initiated Above-Site
- Inside Purchase MPA Initiated Site-Level
- Inside Pre-Pay Site Initiated Above-Site
- Inside Purchase Site Initiated Above-Site

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# Implementation Details

- Architecture
- Protocol
- Data Specification/Messages
- Implementation Details
- Special Considerations

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