

EMV Workshop: Site Evaluation and Migration Plan Definition



This 7-day seminar allows for the technical management to understand the impacts of the EMV migration on each system of the Bank IT infrastructure, from both issuing and acquiring perspectives.

With this background knowledge and the assistance of the consultant, the bank's management will be able to define the EMV migration strategy. At the end of the workshop, the consultant will deliver a report summarizing key decisions.

Objectives

At the end of the training, you will:

- > Understand the EMV transaction (interaction between card & terminal)
- > Master and take advantage of the mechanisms proposed by EMV to secure your transactions and develop new services
- > Understand EMV migration impacts on your systems
- > Have made the adequate decisions and built a migration project plan

Key topics

- > Introduction to EMV
- > EMV Migration Impacts: Card Issuance, Acquiring System, Authorization and Clearing System
- > EMV Security Mechanisms
- > Migration strategy definition

Who should attend

Managers and decision-makers working in the banking and payment domain involved in the migration process, such as:

- > Product Managers
- > Security Managers
- > Operations Managers
- > Project Managers

Each session consists of

- > Complete training manual
- > Report summarizing the information and decision taken during the workshop, delivered by the consultant 2 weeks after the end of the workshop

Pre-requisites

- > Basic knowledge about Payment Systems
- > This course is held in English. On customer request a session in French can be organized.

Duration: 7 days split in 2 separate sessions:

- > 1st session: Knowledge Transfer, 5 days
- > 2nd session: Migration Strategy definition, 2 days

Location: customer premises

Course fee: € 19999¹

¹ Price does not include any taxes nor travel & expenses for the consultant on site

Course schedule

Day 1: Introduction to EMV

Introduction by the bank

The objective of this introduction is to communicate to the Consultant information related to the current Bank IT Infrastructure and information related to their National Payment System environment.

- > Card Issuance System:
 - > Types of card issued (Visa, MasterCard, Domestic, ..)
 - > Type of card product issued (Business, Gold, ...)
 - > Card Activation Procedure selected (if used)
 - > PIN policy defined by Issuer (Change PIN support)
 - > Current Personalization process ...
 - > General overview of the Acquiring System (POS and ATM)
 - > General overview of the Authorization Process

Note: A questionnaire is communicated to the Bank some days before the meeting, in order to gather information prior to the working session

Introduction to EMV

Introduction aimed at providing to all participants a common background for understanding the impacts of EMV on the full Payment Process.

- > EMV General Overview
- > Difference between EMV Specifications and Visa/MasterCard Implementation Specifications
- > Visa/MasterCard certification requirements
- > EMV Benefits to prevent frauds (card lost/stolen, skimming, Card not Received, Credit Risk)
- > General overview of the transaction flow in a POS
- > General Overview of the impacts on Issuer IT Infrastructure

Day 2: Card Issuance System

General overview of the chip data elements

- > General overview of the data elements present in a chip card
- > General overview of the recommendation defined by Payment System to assist their Members in the definition of their Card Contents

EMV Impacts on Card Issuance Process

- > General overview of the different types of Card Platform used for EMV Card (native card, Global Platform cards)
- > New functions required in Card Data Preparation System
- > New functions required in Card Personalization System
- > Possible scenarios for Issuer Card Issuance Policy

Day 3: Financial Transaction Security

Card Authentication Methods

- > Methods available at terminal level (SDA/DDA/CDA)
- > Methods available online (Online CAM)
- > Public Key Infrastructure and Certification Authority

Cardholder Authentication

- > General Overview of the methods and algorithm defined in EMV (CVM algorithm) for checking the Identity of the cardholder during a payment transaction

Key Management Systems

- > Key Management Systems involved in a financial process (Card Issuance System & Transaction processing)

Risk Management Algorithms (Offline Transactions Management)

- > General Overview of the algorithms used during a payment transaction for the management of the offline transactions. The objective of this part of the training is not to analyze in details these algorithms but only to show the possible impact on Bank Product Policy

Day 4: Acquiring System (POS, ATM, acquiring network)

Transaction Processing Analysis

- > Transaction Flow in a terminal
- > Review of the optional EMV functions
- > Analysis of the Visa/MasterCard requirements related to the optional functions (including optional security functions)
- > Data exchange between card and terminal

Security Requirements defined by EMV and Payment System

- > Payment System Public Key Management
- > PIN management

Certification Procedure

- > EMVCo Certification
- > Additional checks mandated by Payment Systems to their Members

Impacts on Acquiring Network

- > Information exchanged during the authorization process (new data elements – new values in existing data elements – volume of information to exchange)
- > Impact on the current method used for clearing
- > Impact on the interface with MasterCard network
- > Impact on the interface with Visa network

Impacts on Terminal Management System

- > General Overview of the new EMV terminal parameters

Day 5: Authorization/Clearing System

General Overview of the EMV chip card impacts on the Authorization/Clearing System

- > General overview of the information communicated by the Payment System Network
- > General overview of the Authorization Request process
 - Analysis of the possible implementation scenarios
 - Minimum impact of chip transaction on Authorization System (magstripe grade/early option)
 - Review of possible implementation scenarios for "full chip/full option" implementation
 - General overview of the cryptographic function to support (Visa/MasterCard)
- > Analysis of the possible impacts on Clearing System

Day 6 / 7 (Second session): Assistance in the migration strategy definition

Based on the information communicated during the first part of the workshop, the Gemalto consultant will assist the Bank in the definition of their EMV migration strategy (number of steps in the migration and definition of each step).

As the workshop is organized in two separate sessions, this part may be also the opportunity to clarify some information communicated during the first part. These two days are intended to be completely interactive, and the content may be adapted according to the Bank's needs.

At the end of the workshop, the Consultant will provide the Bank with a report summarizing the information and decision taken during the workshop.

Related courses

EMV Business
Impacts
(B1001I)

Mastering EMV
Implementation
(B1002I)

Site Evaluation
and Migration
Plan Definition
(B1011W)

Pre-Authorized
Debit
(B1006S)

Contactless
Payment
Technology
(B1021S)

International
Payment Scheme
Contactless
Payment Seminar
(B1008S)

For further information about registration, course schedule:
please contact us via email to: banking.training@gemalto.com
or visit our web site: <http://www.gemalto.com/>