

# EMV Card Personalization Specification (CPS)

Banking & Payment Services

ADVANCED COURSES

Course Reference: B1007S







Card personalization is one of the major components in the production of the EMV cards. Numerous methods of personalization with proprietary commands exist for each card or application. EMVCo developed a new standard for EMV personalization aimed to reduce the cost of issuing and to facilitate the migration to chip.

## Objectives

At the end of the training, you will:

- | Be familiar with the scope of the standardization: standard security, standard command, standard record format
- | Be able to understand the data preparation interface and the personalization device interface
- | Have a clear view of the implementation: secure channel protocol
- | Be able to understand the advantages and the drawbacks of the standardization for each actors of the EMV migration: card vendor, issuer, perso bureau, perso solution provider

## Key topics

- | Data Grouping
- | INITIALIZE, UPDATE & EXTERNAL AUTHENTICATE
- | STORE DATA
- | Cryptographic scheme and impacts (SCP 02)

## Who should attend

Technical people who are involved in the EMV migration such as:

- | Security managers
- | Personalization project managers (logical & physical)
- | Operations & IT managers
- | Banking Product managers

## Each session consists of

- | A complete course manual

## Pre-requisites

- | Knowledge of EMV. It is recommended to have followed the "Mastering EMV Implementation" seminar or equivalent.
- | Technical knowledge on smart cards and on smart card personalization process
- | This course is held in English. On customer request a session in French can be organized.

## Duration:

- | 1/2 day

## Location:

- | On-site at customer premises, or at one of the Thales training centers. Please contact us for more details.

## Course fee:

- | € 499 per attendee, Price does not include taxes nor travel expenses

# Course schedule

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When performed at customer premises, the agenda is tailored to customer attendance profile.  
The standard agenda is provided below:

## AGENDA

### Welcome and training overview

#### Introduction

- | EMV Personalization Situation
- | CPS Objectives
- | CPS Scope
- | Standardization
- | Specification Evolution

#### Data Preparation Interface

- | Process
- | DGI
- | Processing Steps and instructions
- | Log Data

#### Personalization Device Interface

- | Processing Flow message
- | INITIALIZE UPDATE
- | Key Management
- | Cryptographic Scheme and Impacts

#### Implementation

- | Belief – Remarks
- | Implementation of EMV CPS
- | Focus on SCP 01 & 02
- | SCP 02 implementation : 2 examples
- | Pseudo Random

### Impacts of CPS on Issuer, Service Bureau and Card Manufacturer

## Related courses

**EMV Business Impacts (B1001I)**

**Mastering EMV Implementation (B1002I)**

**EMV Migration for Issuers (B1003S)**

**EMV Migration for Personalization Bureau (B1005S)**

**EMV Card Personalization Specification (B1007S)**

For further information about registration, course schedule: please contact us via email to: [bps\\_training@thalesgroup.com](mailto:bps_training@thalesgroup.com) or visit our web site: <https://www.thalesgroup.com/en/markets/digital-identity-and-security/banking-payment/consulting>