

# NFC Payment & Services on Mobile Devices

Understanding the implementation of contactless services on mobile devices

## Presentation

This educational seminar enables attendees to acquire a global and comprehensive overview of new contactless services on mobiles and to understand the roles, processes and actors that are part of this ecosystem

## Key points

- Global overview based on a functional description of implemented technical mechanisms
- Rolling updates of the content to take into account technological evolutions and works in progress

## Target

Targeted audience includes any staff member (decision maker, service manager, project manager) involved in payment project and NFC services and willing to understand the consequences of this new "form factor"

## Duration

- 1 day

## Pre-requisite

The seminar requires participants to have basic knowledge of card systems and contactless technology

## Customization upon request

The content of this seminar can be modified and enhanced to meet customer-specific requirements. Please contact us for customization requests and availability of trainers

## Trainers

Experts in payment systems and mobile technologies

## Language

This seminar is given in English or French

## Price

Contact us

## Documentation

Slide deck  
Card & Payment Acronyms

## About Galitt

**Over 20 years of chip card and EMV related payment experience**

Galitt is recognized for delivering innovative projects using advanced smart card technology & defining flexible payment architectural solutions

## Program

### Morning

#### 1. NFC (Near Field Communication) Services

- **Concepts**  
Origins, business rationale
- **Operating Modes**  
"Reader", "Card", "Peer to Peer"
- **Technology and Standards**  
Technological principles, standards (ISO 14443, FeliCa), NFC Forum
- **NFC Market**  
Expectations, worldwide status
- **NFC Services on Mobiles**  
Added-value, domains of usage (payment, ticketing, marketing...)
- **Roll-out**  
Status overview

#### 2. Mobile Stations & Mobile Networks

- **Hardware Architecture**  
User interfaces and networks
- **Software Architecture**  
Operating systems, Java...
- **Mobile Networks**  
Standardization, features, Over-The-Air (OTA)
- **SIM Card Main Functionalities**  
Secure access to networks, user ID, roaming, interfaces management...
- **Secure Elements**  
UICC, "Secure Memory Card", "Embedded Element"
- **From Voice to Data**  
Network generations (GSM, GPRS, EDGE, UMTS...), OTA services (SMS, BIP...)

### Afternoon

#### 3. Mobile Applications Management

- **Life Cycle**  
Service eligibility, logical and physical data preparations, application provisioning, installation, porting, renewal, end-of-life...
- **GlobalPlatform Standardization**  
Concept, architecture, security domains...
- **A fast growing ecosystem**  
Conflicts between actors, scenarios for key and services management
- **A new actor, the Trusted Service Manager (TSM)**  
Concepts, functions, exchanges between systems (GP messaging, AFSCM interfaces)
- **The user experience**  
From subscription to cancellation

#### 4. Project perspectives

- **Success factors, lessons learnt**  
Japan and Korea examples
- **Project examples**  
Google Wallet™ (United States), Ulysse (transit), Ergosum (retail), Apple Pay
- **Services in the Cloud**  
HCE (Host Card Emulation) and tokenization

*Due to the continuous changes, the content of the seminar is updated regularly*