

# NFC行動支付應用的發展

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# Agenda

- NFC的行動支付應用
- NFC行動應用國際案例

# NFC的行動支付應用

What is a virtual wallet ?





NFC創造新興產業與改變了生活方式

# 智慧型手機升級為支付工具



**授信服務管理**  
(透過手機資料網路  
做空中下載 OTA)

How to manage Secure Elements?  
How to grant and control SE access to Service Providers?  
➔ The role of TSM for SE Issuer

**智慧型手機**

NFC phones with embedded NFC module and antenna; or regular mobile phones with NFC adaptors

**安全元件**

NFC SIM card, embedded Secure Element, NFC adaptor

**感應式應用程式**

Secure application hosted in Secure Element

**手機 APP**

End-user interface in mobile phone

**POS 終端**

Contactless Reader + push info to handset (payment, transport, access control, etc.)

# 手機搭載安全元件終端類型



Type	Embedded NFC phones	SIM NFC Phones	SWP microSD Special NFC Phones	NFC microSD non-NFC Phones
Phones supported	+	++	+	+++
Distribution model/Cost	+	+++	+	+++
Flexibility for end user	++	++	+	+++
Who has more control?	Internet - IT Companies Handset Makers	Telecom Operators	Banks and Service Providers	Banks and Service Providers



# NFC SWP SIM 卡 with SIM Based 手機

Visa & MasterCard® Certified



- ISO 14443A Compliant
- Mifare/VISA/Master Card complaint
- Java Card OS enabled
- GP Compliant
- CC EAL 5+
- Over the air access



天線



# NFC SD(天線)卡 with 非NFC 手機

Visa &  
MasterCard®  
Certified



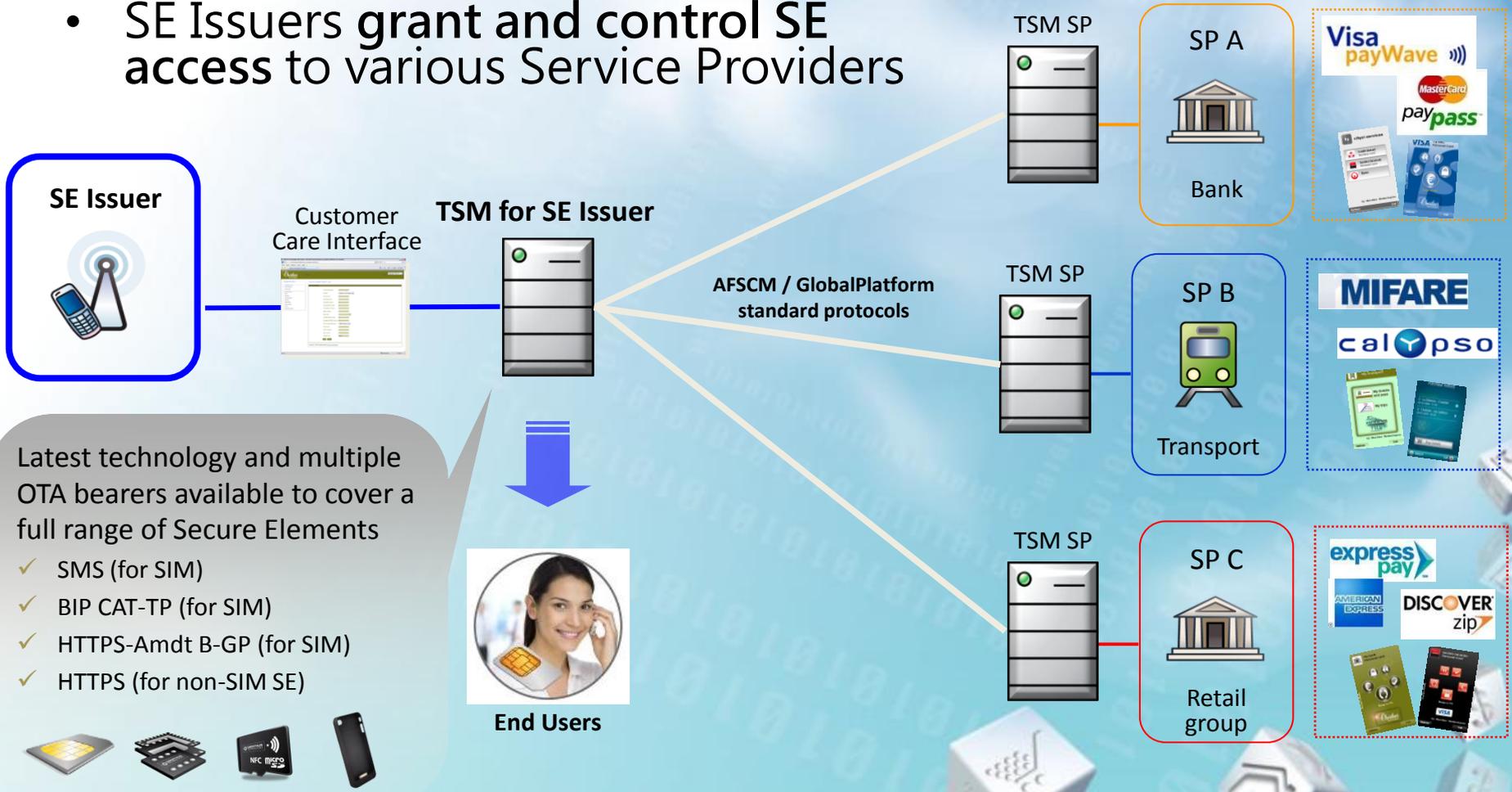
(SD 卡內建天線)



- ISO 14443A Compliant
- Mifare/VISA/Master Card compliant
- Java Card OS enabled
- GP Compliant
- CC EAL 5+
- Over the air access

# TSM提供各個安全元件發行者提供各式服務

- SE Issuers grant and control SE access to various Service Providers



Latest technology and multiple OTA bearers available to cover a full range of Secure Elements

- ✓ SMS (for SIM)
- ✓ BIP CAT-TP (for SIM)
- ✓ HTTPS-Amdt B-GP (for SIM)
- ✓ HTTPS (for non-SIM SE)



# NFC電子錢包

電子錢包使用情境:

顯示並管理使用者已安裝在安全元件中之服務



提供特定服務業者推廣  
NFC services 強有力行銷平台



便利使用者線上搜尋可  
適用於使用者手機的  
NFC服務

# NFC行動應用國際案例

# 行動支付業務成功案例 – Nice Cityzi

## 法國尼斯

### ● 個案背景

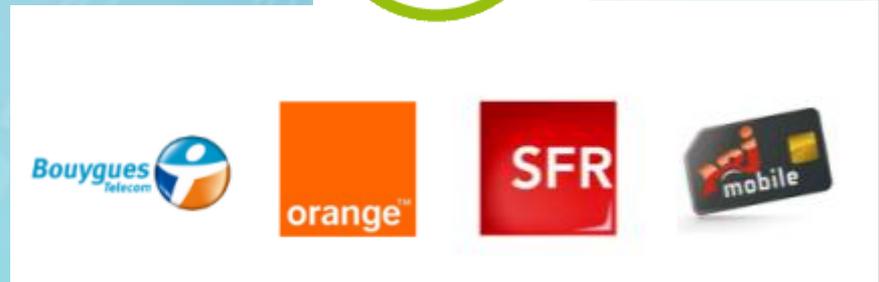
- 推出日期: 2010/5/21
- 地點: 法國尼斯(位於法國濱海阿爾卑斯省-該省總人數為489萬人)
- 合作夥伴:
  - 授信服務管理(TSM): 歐貝特(Oberthur)提供BNP Paribas、Bouygues及SFR TSM服務
  - 電信業者: Orange, Bouygues Télécom, SFR and NRJ Mobile
  - 銀行: Société Générale, BNP Paribas, and Crédit Mutuel CIC
  - 交通業者: Veolie
- 安全元件(Security Element): Sim card base

### ● 商業模式(Business Model)

- 由尼斯市政府主導, 銀行、交通票證、電信業者共同參與此計畫

### ● 現況與後續開展進度

- Cityzi 應用手機銷售量: 於2013年3月達到300萬
- 其他示範營運城市: 巴黎, 史特拉斯堡(Strasbourg)、卡昂(Caen)、波爾多(Bordeaux)、馬賽(Marseille)
- 目前法國共有17個城市獲得政府NFC計畫支援



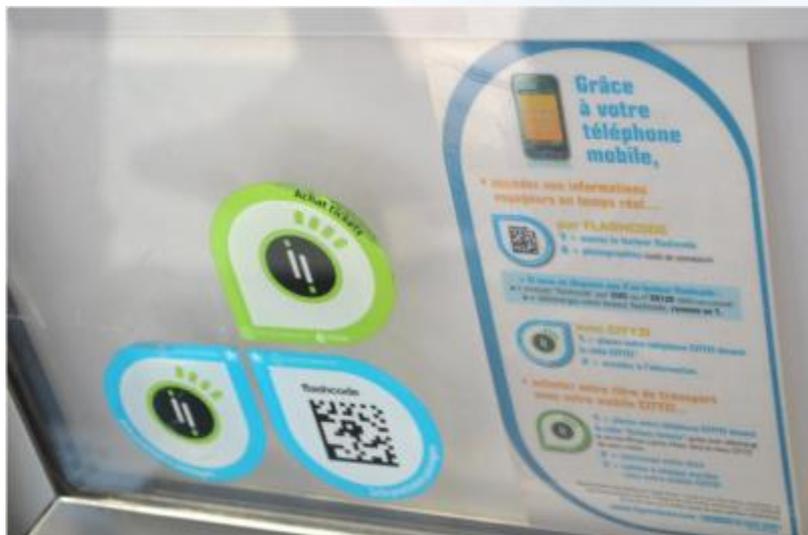
# 尼斯實例-輕軌交通



# 尼斯實例-商店



# 尼斯實例-在地導覽



# 尼斯實例-觀光導覽



**À Nice, le futur vous appelle**

**NICE VILLE SANS CONTACT / MOBILE**  
Nice mobile/contact-less city

EXPERIMENTATION D'UN OUTIL D'AIDE A LA VISITE DANS LA COLLECTION PERMANENTE DU MUSÉE  
Test of a guide tool for the permanent collection of the museum.

Le Musée vous propose un parcours de visite avec les vitrines C3Dart. En un geste, obtenez sur votre mobile un contenu multimédia : des informations sur l'œuvre, sur le mouvement artistique de référence et sur l'artiste elle-même... sans former de connaissances préalables. Ce service est accessible en mode QR avec le soutien de la Ville de Nice et de tous sites d'Arte Povera. Il est relayé sur le site Internet de la Ville de Nice.

The MAMAC museum offers you a visit with the C3Dart targets. In one stroke, you can get a multimedia content on your mobile phone: information on the artist, the art work and the artistic movement in the form of recorded comments. This service is implemented by QR with the support of the City of Nice and of Arte Povera sites. It will be relayed on the City of Nice website.

Vous pouvez soit emprunter un téléphone mobile C3Dart à l'entrée, soit utiliser votre téléphone, et si celui-ci n'est pas C3Dart, utiliser le système du Barcode.

You can either borrow a C3Dart mobile phone at the reception desk, or use your own mobile phone. If your mobile phone is not C3Dart, use our QR Barcode system.

**FR** **UK**

**Utilisez le mobile C3Dart :**  
Appuyez sur l'écran de votre téléphone d'une des vitrines pour accéder à la fonction que vous souhaitez utiliser le Barcode.

**Use a C3Dart mobile:**  
Bring your mobile phone to a target in order to access the desired function via a QR barcode.

**1- Téléchargez votre Barcode reader by scanning "Barcode" in the 3D101, or 3D102 or 3D103 (QR Code).**

**2- Ouvrez le Barcode Reader.**

**3- Pointez l'appareil photo de votre mobile vers le Barcode et accédez au service.**

**3- Open your Barcode reader.**

**3- Point your mobile phone camera toward the QR barcode to access the service.**

**COMMENCER VOTRE VISITE - TO START YOUR VISIT**

**Remember that at 21st stage the mobile phone is placed in the vitrine after you have used the QR code.**

**The starting point is on the second floor of the museum for the beginning of the visit. Please make sure you have the necessary QR code.**

nice.fr **NICE 3DART**

**ARTE POVERA**




**MAMAC NICE**

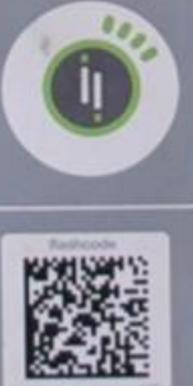
Placez votre mobile sur cette cible  
**Arte Povera**

Place your phone at this mark  
**Arte Povera**

**MAMAC NICE**

Prenez ce code en photo  
**Arte Povera**

Take a photo of this code  
**Arte Povera**



- 在法國建立一個新的NFC服務的品牌 – Cityzi
- 使用智慧型手機消費者可以輕鬆的享受快速的各式消費服務

## Payment



## Transport



## Loyalty



## Information



All the Services are available with 4 largest national MNO



- 參與此計劃的包括銀行、交通票證、電信業者與零售業者共同參與
- 3000位NFC使用者的經驗,表達高度滿意:



- 90% satisfied
- 96% interested
- 95% would recommend it to relatives

- 75% ready to switch from card to mobile
- 64% ready to pay around 2€ per month for the NFC services