



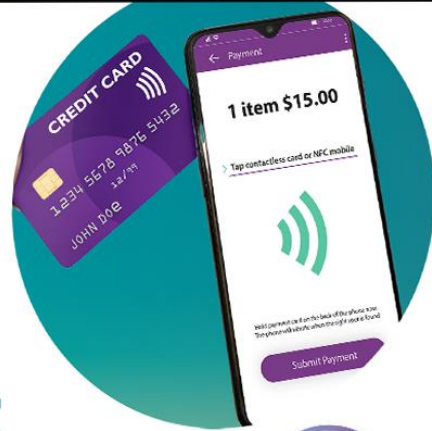
FIME®

One Action. A billion transactions.



SoftPOS

Fast-track
your SoftPOS
deployment.





FIME[®]

One Action. **A billion transactions.**

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Speakers panel



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Head of Center of Expertise
Vendors
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François Drouard
Terminal and Mobile
Service Lines Manager
FIME



Christian Damour
Pre-Sales Manager
Security
FIME



FIME is a global leader in payment consulting and secure transaction testing

Big enough to be global
small enough to be reactive

We speak
your
language



450+
Experts

9
Labs

18
Locations

2
Development
centers

40+
Industry
accreditations

3000+
Customers

180
Countries

We enable our customers to bring user friendly, reliable and secure solutions to the Payment and Transport markets.

We are a Trusted Adviser.



We do that by
combining our
global expertise
with disruptive
testing.

We go beyond testing.

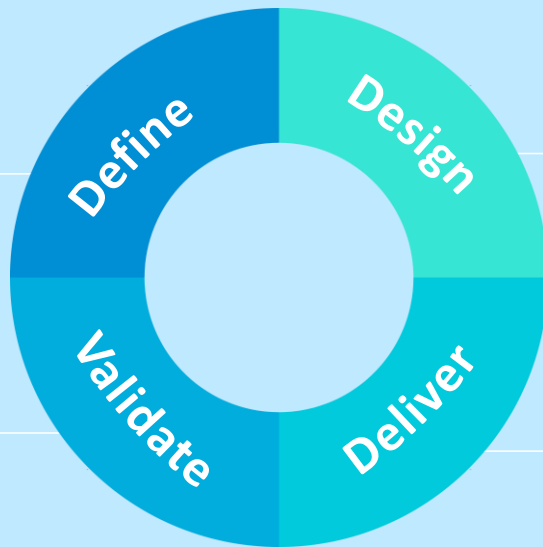




We define, design, deliver and validate pioneering products across payments, transport, biometrics, authentication and open banking.

We help our clients answer critical business questions formulate their strategy to grasp new business opportunities

We help our clients test their solutions for compliance and quality assurance purposes



End-to-end services 3DV

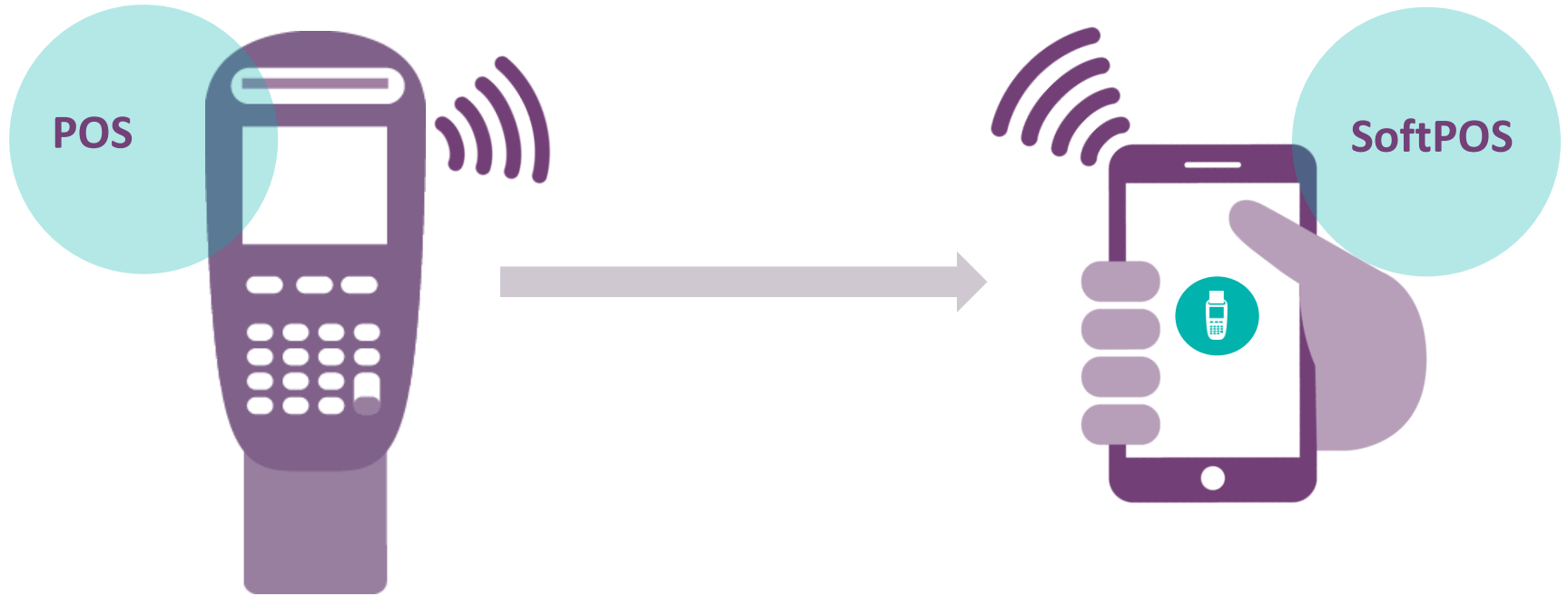
We help our customer choose the best technical and cost effective options and design an efficient test strategy (automation & digitalization)

We help our clients roll out the chosen solutions and develop the ad-hoc test plan and testing tools



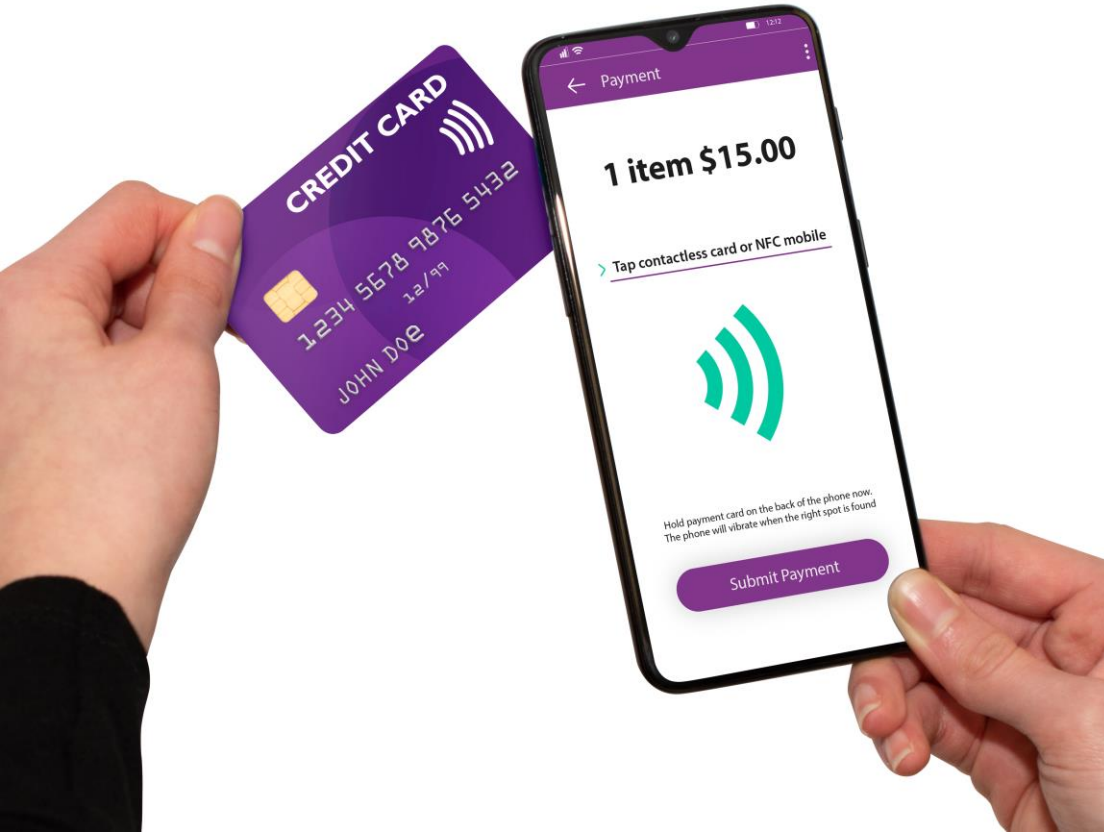


Payment acceptance on a mobile device



**POS: Point Of Sale*

Learning fundamentals



POS

Point of sale

COTS Device

Commercial Off-The-Shelf device

SoftPOS

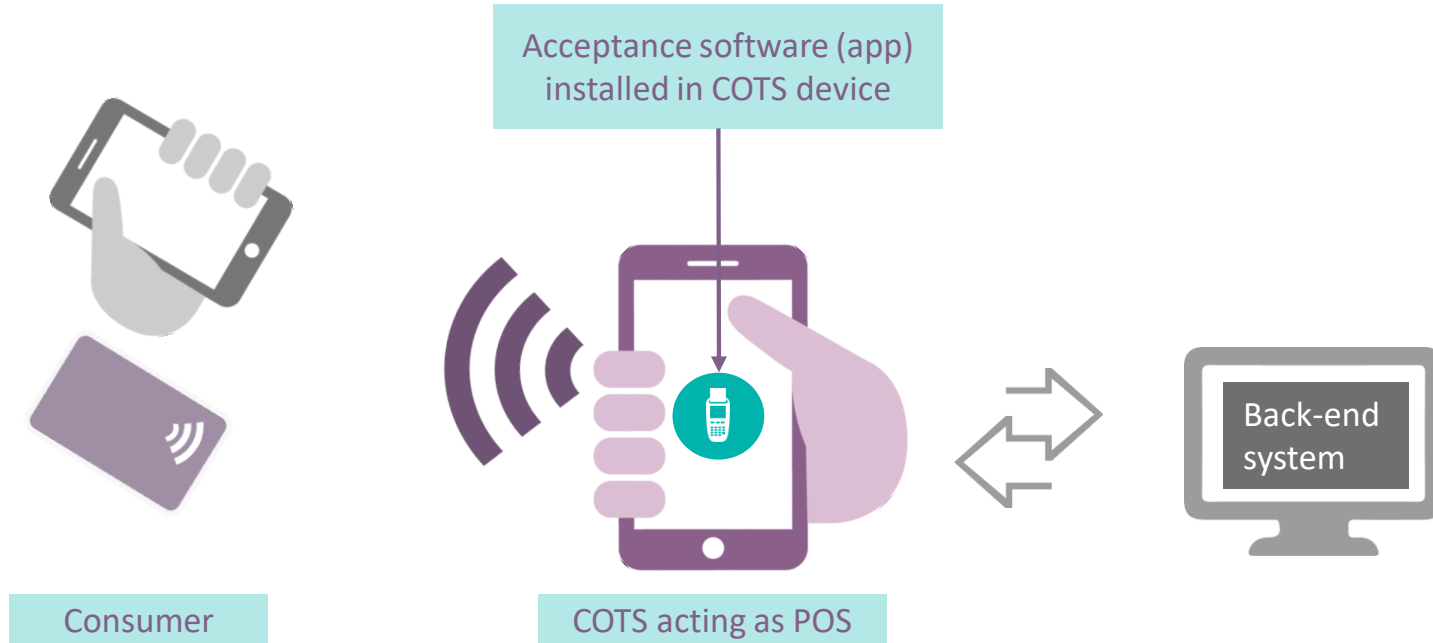
Software based contactless payment acceptance

CPoC

Contactless Payment on COTS



COTS device | Commercial Off The Shelf device





Features of softPOS solutions

Mobility

No dedicated hardware
Works on COTS* mobiles

Software only solution

Utilizes wireless network
for authorization and
reconciliation

Suits small merchants

Adapted payment
requirements

**COTS = Commercial Off-The-Shelf*



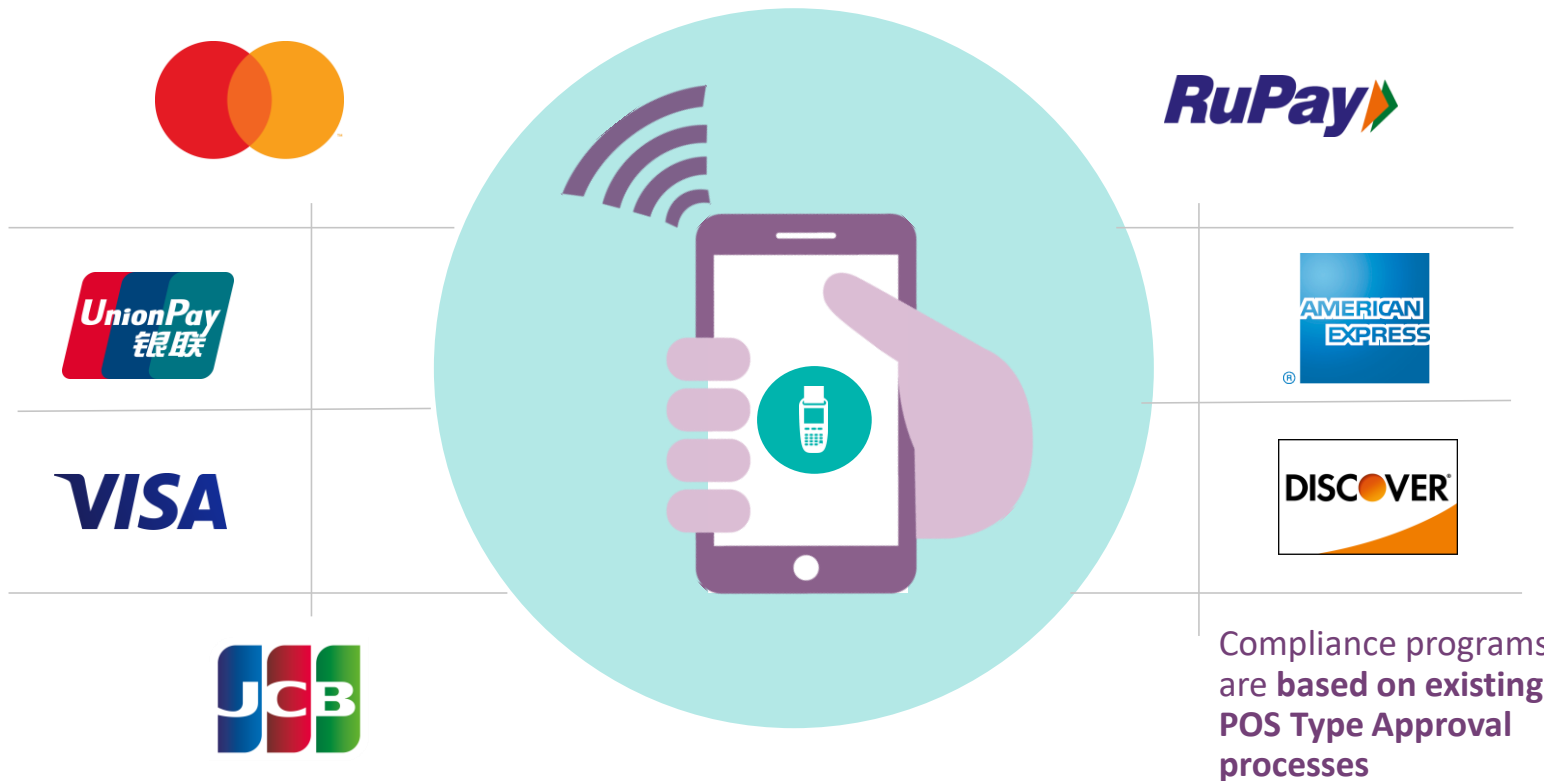
Consumer experience



- **Communication distance**
- **Contactless logo**
- **Amount display**
- **Card presentation**
- **Indicator**
- **No printed receipt**



Payment schemes view





From Security in ➡ POS to Security in ➡ SoftPOS



Security in SoftPOS

- Secured Application
- Attested and Monitored Application

Requirements defined by

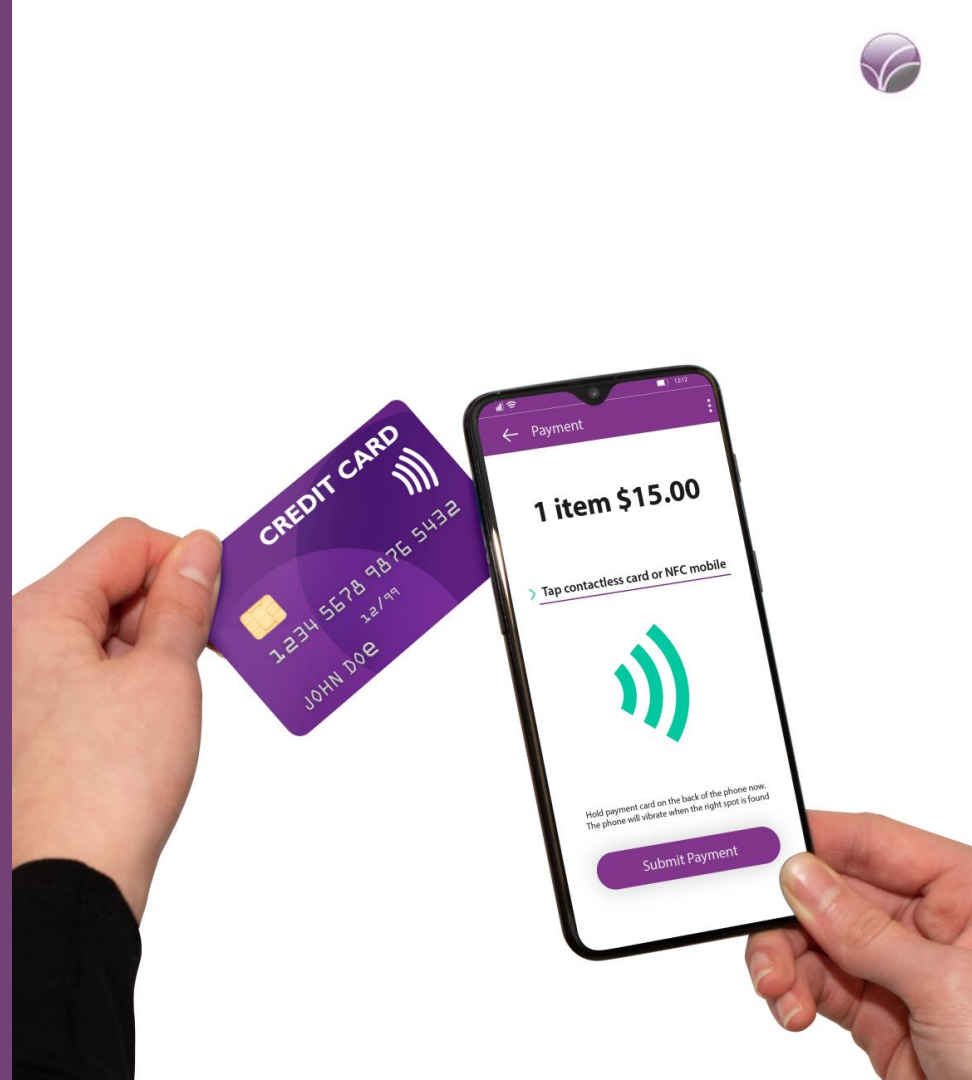
- PCI - Contactless Payments on COTS (CPoC™)
- Mastercard (Pilot Security program)
- Visa (Pilot Security program)



Development and integration



Evaluating a SoftPOS





SoftPOS and Level 1 compliance program

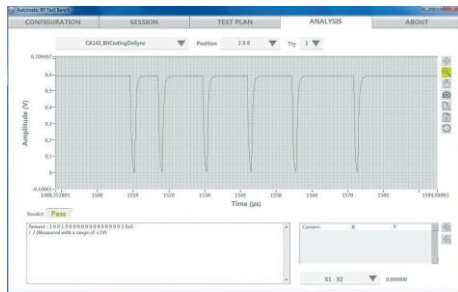


No dedicated
hardware
for COTS

Level 1 challenges

EMVCo
requirements

Testing

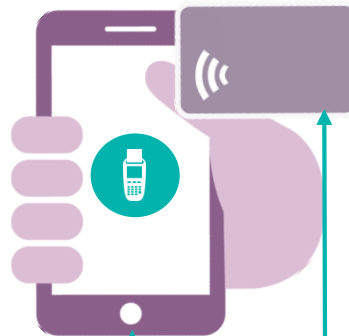




SoftPOS and Level 2 compliance program

Functional
testing

Mobile
device
compatibility



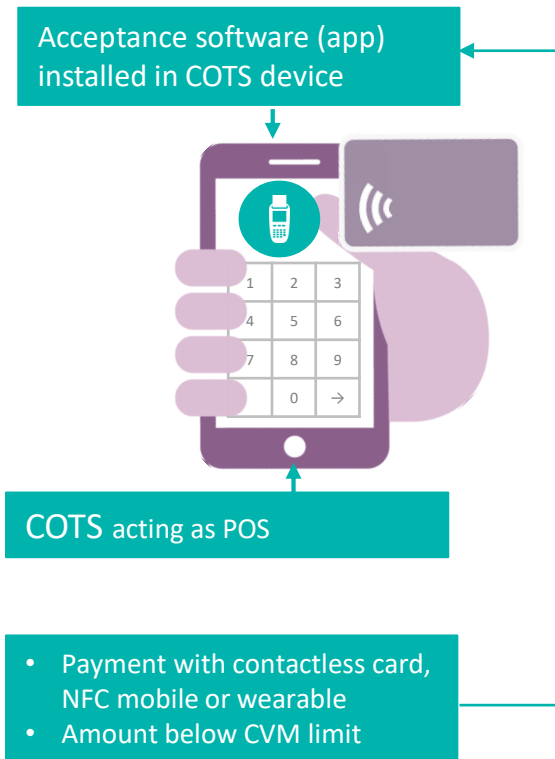
COTS acting as POS

Interoperability
and
performance

- Payment with contactless card, NFC mobile or wearable
- Amount below CVM limit



Security | SoftPOS without PIN entry



SECURITY



- Contactless Payments on COTS (CPoC)



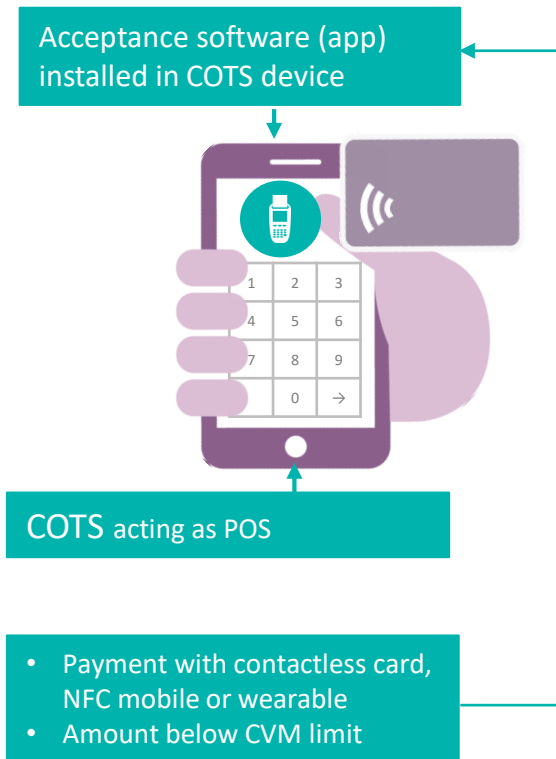
- Mastercard Pilot program until Feb 01, 2021
- PCI CPoC from Feb 01, 2021



- Visa pilot program until Jan 31, 2021
- PCI CPoC from Jan 31, 2021



Security | SoftPOS with PIN entry



SECURITY



- Mastercard Pilot program until Feb 01, 2021
- PCI CPoC + MC from Feb 01, 2021



- Visa pilot program until Jan 31, 2021
- PCI CPoC + Visa from Jan 31, 2021



Out of scope

Software-based PIN entry is not permitted in PCI CPoC



Recommended timeline





Why FIME?





What FIME can provide?



DEFINE

STRATEGIC STUDIES

- Benchmarking against global trends and best practises
- Buy v/s Build
- Vendor selection



DESIGN

TECHNICAL WORKSHOPS

SOLUTIONS & ARCHITECTURE DESIGN

- Smartphone / Card Benchmark



DELIVER

AGNOS FOR ANDROID PACKAGE

- Kernel development and provisioning

SECURITY

- White-box Cryptography
- Application Attestation and Monitoring services



VALIDATE

TESTING SERVICES

- Debug services according to payment schemes
- Type Approval service

SECURITY

- PCI CPoC / Mastercard / VISA

LAUNCH



Q&A

All these questions
have been addressed
during the webinar and
are available in the
record 🖱️ visit our
website fime.com



Q&A (1/5)

- **Q1:** Does Soft POS support only online transactions? You know that for the Public transit, the transactions must be done in offline mode
- **Q2:** How much time it takes for completing L2 certification and CPOC certification?
- **Q3:** It was mentioned that EMV is working on L1 evaluation for SoftPOS. Are there any timelines for completion or preliminary specifications available?
- **Q4:** Does the solution support local debit network? like BancNet in the philippines
- **Q5:** To develop L3 over FIME SDK, SDK would consist of L2, Remote attestation, security and Transaction manager?



Q&A (2/5)

- **Q6:** Does FIME cover SDK development, functional, security and L3 certifications ?
- **Q7:** How can SoftPOS be commercially viable?. An Android NFC phone costs much more than POS today. Indirectly it asks to have a dedicated device of Android NFC Phone
- **Q8:** Once again L3, any derivative product need to take TIP? for example. certified with flagship product. How about daughter product?
- **Q9:** How SoftPos could be a better solution for merchants ? Is it good for the eco-system to eliminate the need of dedicated hardware device as POS ?
- **Q10:** How FIME can support in development of SDKs ?



Q&A (3/5)

- **Q11:** Where can we find the standards for software based PIN for Visa/Mastercard and Rupay.
- **Q12:** And if everyone does EMV / 3DS (for online), you cannot skim the card ;) (edited)
- **Q13:** A merchant can always mimic even using standard modified payment device. The cardholder trusts the merchant
- **Q14:** Should old unsupported Android versions even be supported? Why not mandate 8.1 or Higher ?
- **Q15:** We understand only L1 certified devices can be used for building and certifying L2 on these devices? Is certification based on a family of devices?



Q&A (4/5)

- **Q16:** How would L3 certification work?
- **Q17:** For SoftPOS, do we have any available test suite to start with? Can we reuse our regular CTLS tests for this with amount < CVM limit?
- **Q18:** For softPOS with PIN on glass, do we need to undergo both CPOC and schele level security evaluation?
- **Q19:** The way EMV lists certified POS on there website, is there any provision to know approved devices for use in SoftPOS implementations (L1 and/or L2 certified)?
- **Q20:** How do you foresee the industry building trust for SOFTPos if it can easily be mimicked by a sideloaded app that looks the same but skims the card data and PIN?



Q&A (5/5)

- **Q21:** Is a hardware backed keystore not mandatory for Android Attestation? (From your presentation I understood all hardware security like TEE / SE is optional)
- **Q22:** For SoftPOS, Can we Do the Certification only for the L2 Kernel?

All these questions have been addressed during the webinar and are available in the record.



Thank you



Contact FIME

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