

Secure Application Deployment for Mobile Devices on a Global Scale

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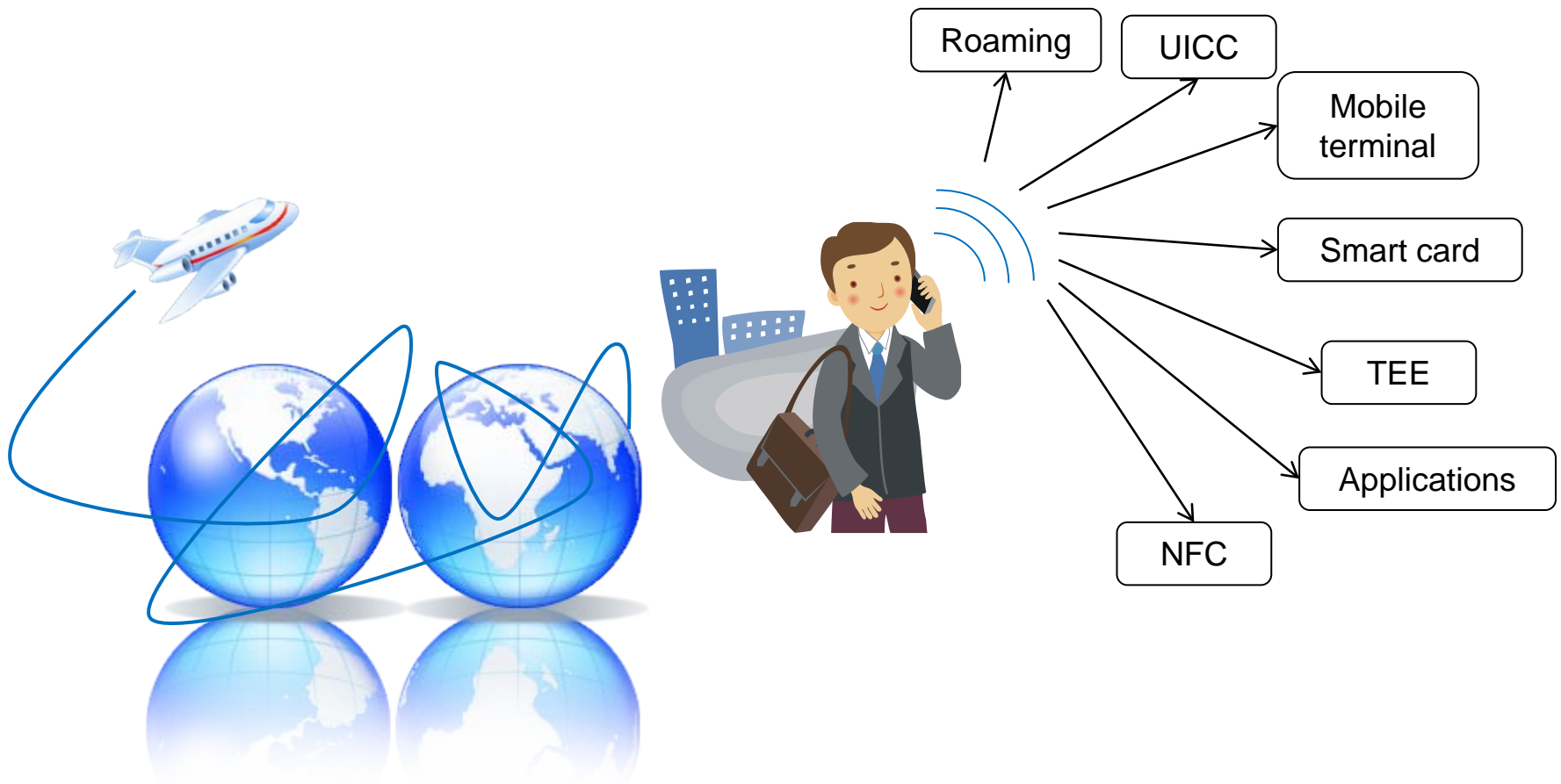
GlobalPlatform Card Security Workgroup focus:

- Applications deployment on mobile platforms
- Certification
 - Methodology for GlobalPlatform Composition
 - Maximizing the certificate reuse
- Validation authority and application roaming
- Product and applet Identification and certification



Yesterday's Process for Today's Needs?

- Consumer needs change with the high speed evolution of technology, which means that the processes involved for manufacturers and providers need to be adapted



- Today's deployment of value added services requires...
security certification
 - Payment, digital signature, health card, eID card, ..
 - Current certification schemes are focused on **one** application or **one** market sector
- Current certifications are incompatible with **business requirements** of new uses cases and not efficient when:
 - Card and application are not owned by the same actors
 - Different life cycles (i.e. deploying application in already deployed card)
 - Different certification approaches
 - Deploying one certified application into various certified platforms
 - We should facilitate the reuse of a certified application on a certified platform
 - We should align certification model with GlobalPlatform secure framework

- Today's business requirements will refer to a range of security certification schemes
 - Common Criteria Certificate for platforms or terminal
 - Common Criteria Certificate for applications
 - Specialized payment certificates:
 - EMVCo
 - Visa
 - MasterCard (CAST)
- GlobalPlatform is also working on Trusted Execution Environment (TEE) certification
 - More details shared Tuesday 10 September 2013 Track 2 : Certification of the Trusted Execution Environment – One Step Ahead for Secure Mobile Devices

- Initiated at the GlobalPlatform workshop « UICC certification initiative » in June 2009 GlobalPlatform proposal was to develop a common, **cross-industry composition model** for secure elements with post-issuance capabilities
- EMVCo, GlobalPlatform and GSMA are supporting this initiative



- The Association Française des Opérateurs Mobiles (AFOM), the European Payments Council (EPC), the European Telecommunications Standards Institute (ETSI), and SIMAlliance have confirmed their support in the initiative



- ISCI already demonstrated its support and is leading the CC part of the work
- Current discussions with the JIL for a wide adoption

What is the GlobalPlatform Card Security Working Group?

- GlobalPlatform is a cross-industry organization regrouping the main actors of the secure element (SE) ecosystems

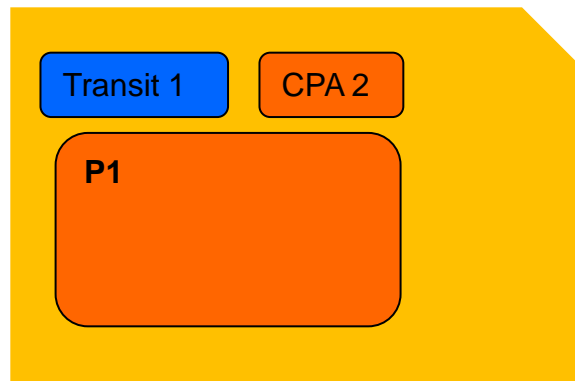


- GlobalPlatform is form factor agnostic and supports today:
 - UICC
 - Embedded SE
 - Micro SD
- GlobalPlatform Card Security Working Group
 - Provides technology to streamline the certification of the SE
 - Acts as the interface between actors and then facilitates the adoption of the composition model in the ecosystem
 - Card manufacturers, laboratories, IC Manufacturers, platform providers, mobile network operators, sponsors

Monolithic Certification Approach



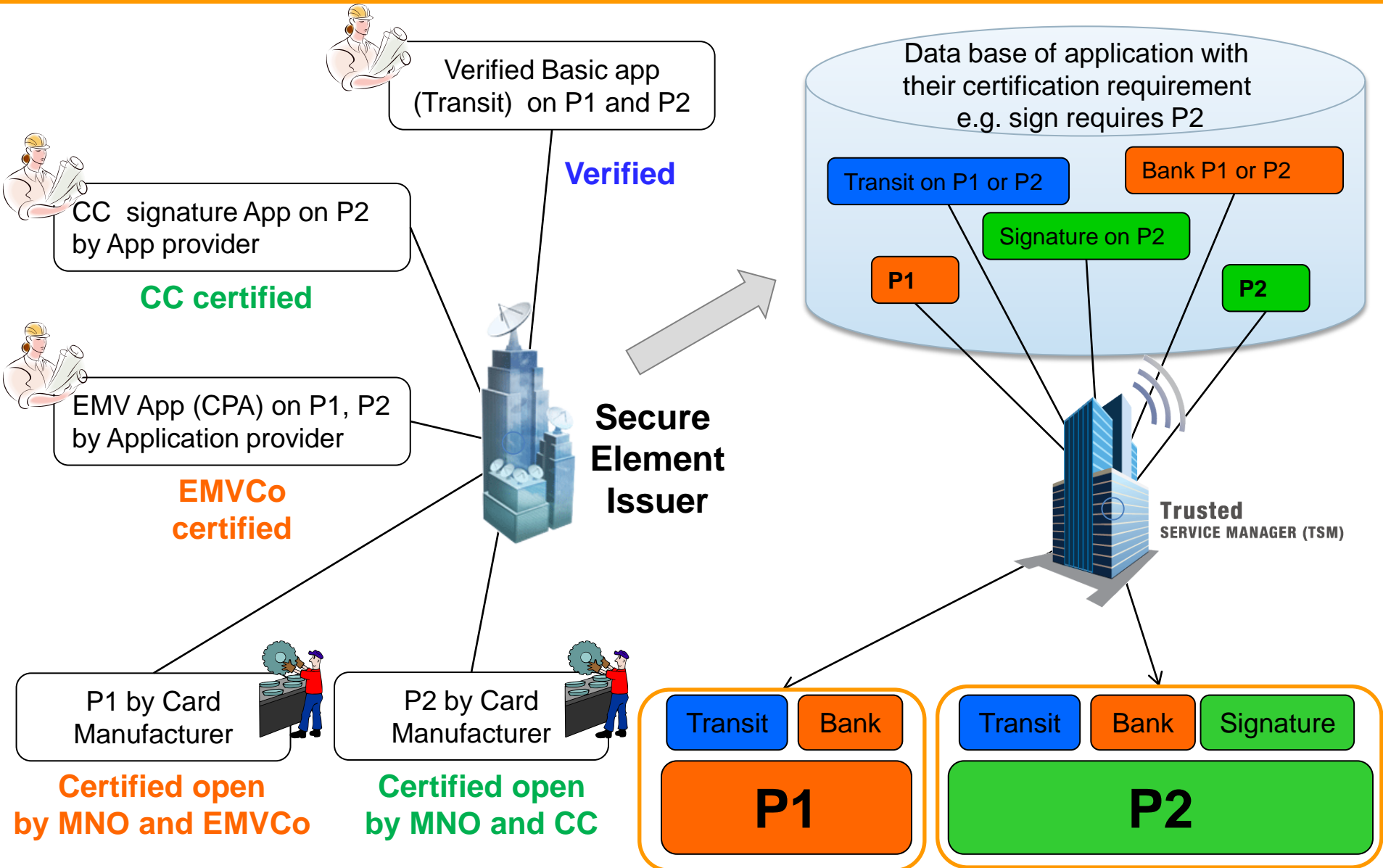
CC certified by the card manufacturer on the requirements of the application issuer



EMVCo certified by the card manufacturer for the banks



Application Deployment in NFC Mobile Market



- Need for a composition model allowing
 - A **fast** deployment of near field communication (NFC) services
 - in a **multi actors** ecosystem: application developers, platform issuers, product issuers, system providers
 - For **multi sectors**: payment, mobile communication, transport, identity
 - Management of **heterogeneous** applications
- Security certification of products using
 - Existing globalized schemes: Common Criteria, EMVCo
 - Mobile network (3GPP) certification requirements
- Avoid the creation of a **new** certification scheme
- Maintaining the **level of security** of the products

Reduce redevelopment, re-evaluation duration to enable the deployment of applications on platforms in the mobile world.

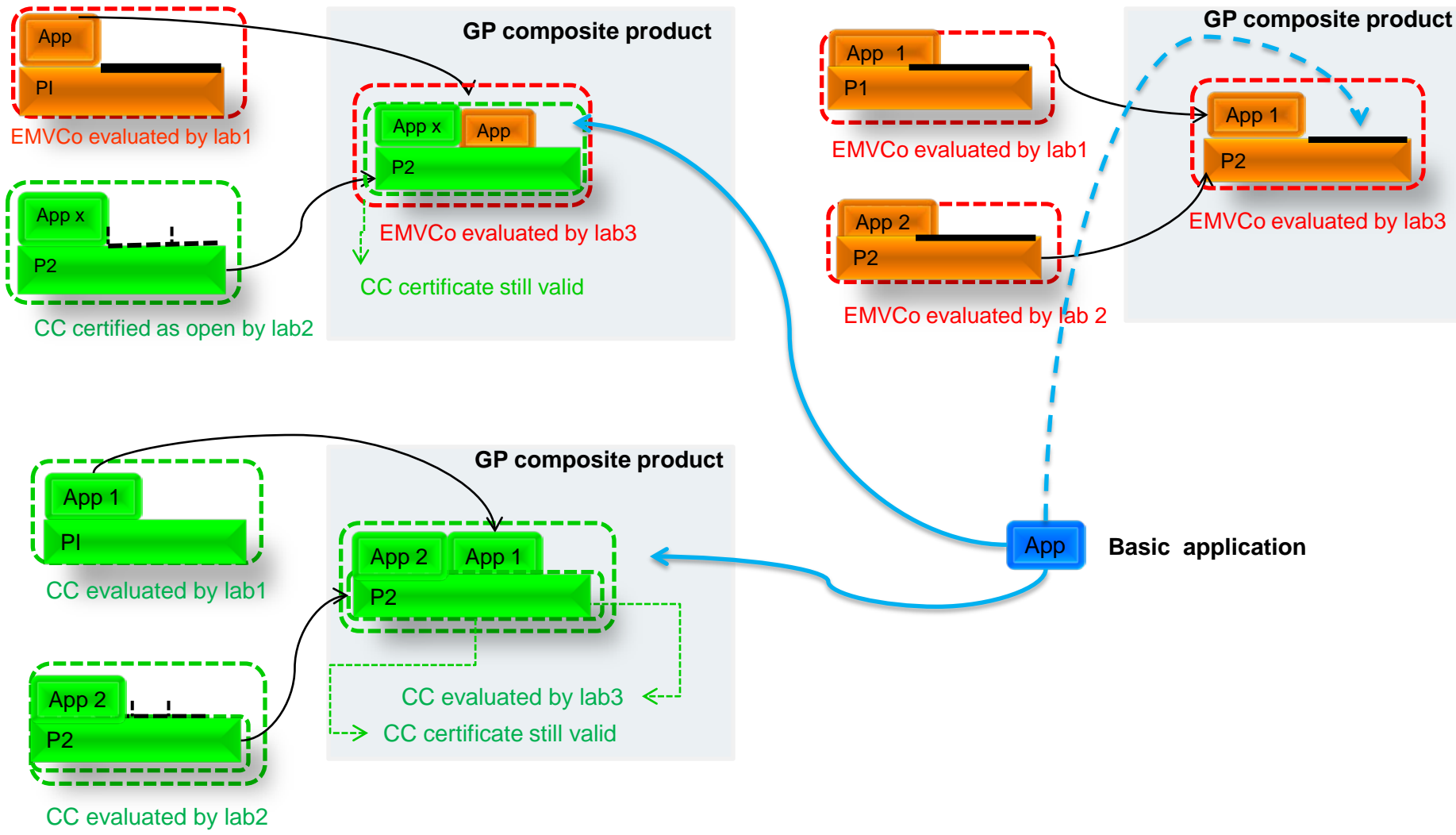
- Maintain the security of the products already in the field
- Avoid re-evaluation when loading applications with no security requirements
- Simplify and speed up testing processes for pre-certified applications when they are redeployed on certified platforms
- Ensuring a cost effective time to market of the NFC services

Reuse of already certified components

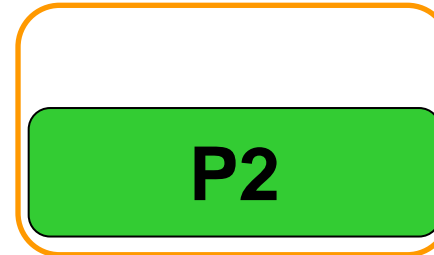
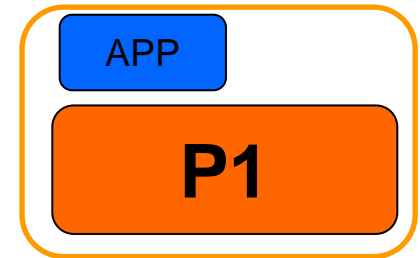
- UICC platform (IC+OS+JC+GP + USIM)
- Sensitive Application : requiring certification
- Basic application: application with no certification requirement

In the Common Criteria and the payment schemes

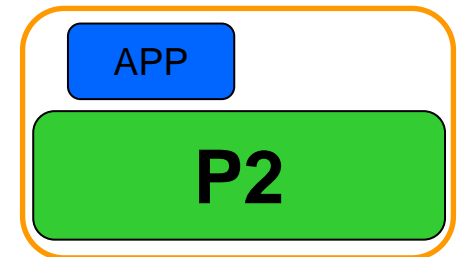
Several Cases to Obtain a Composite GlobalPlatform Product Using Certified Applications with Certified UICC Platforms



- An application APP has been already certified on Platform P1
- A platform P2 has been certified as open



- Build a product made of APP and P2 and certify it by (GlobalPlatform) composition using previous certified building blocks
- Let CC_Lab1, CC_lab2 and CC lab_COMP be the three evaluation laboratories involved
 - List all the activities performed by the CC_lab_comp
 - Identify the required inputs for the task evaluation according to the CC
 - Identify all available information from the previous evaluation
 - Propose a reuse and provide the rational for this reuse



Let's summarize

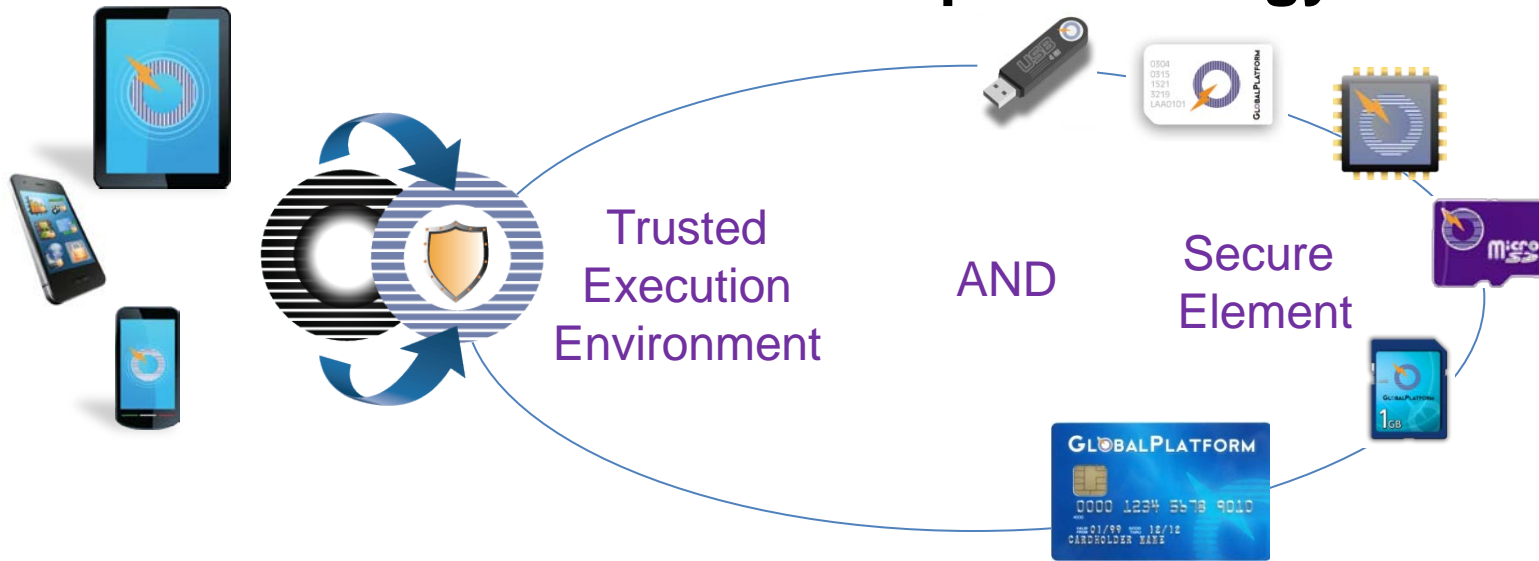
- One **Application**
- One **Service Provider**
- Three possible **Evaluators**
- A number of approval **Schemes**
- A **TSM** for global entry management and recording of certificates
 - Each application
 - On each platform
 - Has its own certificate
- A range of **Mobile Network Operators** for distribution
- An increasing number of **end users** able to access the application
- Under what agreement ?

- The number of certificates under that process is exponential.
- GlobalPlatform Card Security Workgroup agrees that the CC Community, with application of the composition model, needs to embrace a reform of the CC.
- Our main objective is to provide clear **Use Cases** dedicated to the special cases encountered by the GlobalPlatform community, and make sure they are realistic and will facilitate early adoption of the process.
- Our main force is **collaboration**.
- Use the mutual recognition of the evaluation of elementary tasks and partial reports through CBs (CCRA, SOGIS)

GlobalPlatform Positioning

GLOBALPLATFORM™

GlobalPlatform is the standard for managing applications on secure chip technology



Across several market sectors and in converging sectors



GlobalPlatform Members

GLOBALPLATFORM™





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Technical Priorities

- > Mobile Task Force
- > Government Task Force
- > Card Committee
- > Device Committee
- > Systems Committee

GlobalPlatform News

- > 11 Jan 10 - GlobalPlatform Delivers Training to Align with Cartes in Asia 2010
- > 08 Jan 10 - GlobalPlatform Announces Feitian Technologies as its Latest Observer Level Member
- > 05 Jan 10 - Executive Newsletter
- > 05 Jan 10 - GlobalPlatform Welcomes another New Member in Trusted Labs
- > More news

White Papers & Events



GlobalPlatform is delivering a one-day card technology training session in Beijing, China on Friday 29 January 2010. To learn more or to register, please click here

GlobalPlatform celebrates ten years: 1999-2009. Learn more about the about the organization's milestones and its plans for 2010 and beyond.

GlobalPlatform has published a white paper to define its value proposition for the public transportation industry. To download it for free, please click here.

Latest GlobalPlatform Technology



To download GlobalPlatform's **UICC Configuration** and other documents (free to members) click here.

Events

- > 2010 Global Events Calendar

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