Introduction to GlobalPlatform
Compliance Secretariat
Key to market stability is the adoption of proven standards. Industry acceptance of any standard or specification, however, will only be achieved if there is a commitment to maintain the stability of the specifications to encourage their adoption. Standards, specifications and configurations are only as dependable as the products developed to abide by them. This is why it is important that the industry has a means to test and verify product compliance.

For this reason, GlobalPlatform has invested heavily in the creation of test suites. These allow test tool providers and laboratories to create the correct tools and services, which will provide industry with strong assurance that products in the marketplace are in compliance with GlobalPlatform Specification and will therefore perform as advertised.

The launch of the GlobalPlatform Compliance Secretariat demonstrates GlobalPlatform’s long-term commitment to this program. This body has the authority to issue the compliance trademark to test tools and laboratories, as well as oversee product certification.

This presentation offers an insight into this new body and the processes implemented by GlobalPlatform to manage this scheme.
Positioning the GlobalPlatform Compliance Secretariat in a certification scheme

Scope of current presentation

GlobalPlatform Compliance Secretariat

GlobalPlatform Composition Model

Certification Scheme

Functional compliance

Security compliance
Useful definitions

- **‘TestFest’** means an event conducted by GlobalPlatform for purposes of enabling product vendors to engage in cross-testing of products, in order to demonstrate compliance with the relevant and then current GlobalPlatform Specifications for a configuration and category of product.

- **‘Test suite’** means a suite consisting of GlobalPlatform testing documentation, test scripts and/or other materials, based on a given GlobalPlatform Specification and related configuration, which has been released by GlobalPlatform for purposes of enabling authorized users to develop corresponding qualified test products.

- **‘Configuration’** means a particular set of features and implementation rules as specified by GlobalPlatform for, or required by, a given GlobalPlatform Specification, such as a configuration for mobile or a configuration for government use.

- **‘Test tool’** means a tool that integrates any portion of the test suite and is created, developed or produced for purposes of performing tests on proposed GlobalPlatform compliant products.

- **‘GlobalPlatform compliant product’** means a commercial implementation of a secure chip or terminal related product or component that has successfully demonstrated sufficient conformance with the relevant specifications at a ‘TestFest’ hosted by GlobalPlatform.
• The compliance secretariat manages the product qualification process procedures:
  – **Evaluates TestFest results** and determines whether GlobalPlatform qualification should be granted to a test tool
  – **Evaluates laboratory** documents and determines whether GlobalPlatform qualification should be granted to a laboratory
  – **Evaluates product** (and derivative product) requests for qualification and communicates evaluation results
  – Evaluates appropriate **resolution of non-conformance issues** reported to GlobalPlatform, including additional testing, revision or eventual termination of the ‘Letter of Qualification’ for a particular qualified product (or test tool).

• The role also includes communicating product qualification process status to third parties, maintenance of product qualification process information on the GlobalPlatform website, and the maintenance of a database that provides the following:
  – Product qualification process documentation and forms
  – List of qualified laboratories, qualified test tools, qualified products, self-tested products.
How To Participate

To achieve GlobalPlatform qualified status for a chip product, vendors must competently perform a number of tests using a GlobalPlatform qualified test tool. A qualified test tool may be purchased from a qualified tool provider if the chip product vendor wishes to use the test tool to ‘self test’. Alternatively and preferably, the qualified tool may be in the possession of a qualified laboratory where the chip product supplier may have tests performed by an independent and neutral third party.

To achieve the GlobalPlatform qualification status for test tools or become a qualified laboratory, your organization must be a GlobalPlatform Full Member or Participating Member in good standing. Test tool providers must also participate in the TestFest process.

For any party interested in deploying solutions based on GlobalPlatform’s technology, there are many other benefits to becoming a GlobalPlatform member, including the opportunity to contribute to this initiative.

To register your chip product on the GlobalPlatform website, please email: secretariat@globalplatform.org.
The four processes of the GlobalPlatform Compliance Secretariat

1. Generation and maintenance of test suites
   - From configuration to test suite
   - Manage test suite evolution to address market requirements

2. TestFest coordination: test suite and test tools qualification
   - Manage TestFest
   - Manage test tool qualification
   - Manage product evolution (names, …)

3. Test laboratory qualification
   - Manage annual test lab qualification

4. Product qualification
   - Deliver ‘Letter of Qualification’ to a product vendor
Global overview

1) Compliance WG
   - Coverage
   - Test Suite
   - Test Suite Development

2) Test Fest
   - Qualified ?

3) Qualified ?

4) Test Report
   - Good Claim?

- Publication of Qualified Test Tools
  - Qualified Test Tools

- Publication of Qualified Test Lab
  - Qualified Test Labs

- Publication of Test Claims
  - Qualify Products
  - Self-Tested Products

GlobalPlatform Members
- Test Tools
- Test Labs
- Product
- Vendor

Authorized Organization
From specification to test suite

- Specification
- Market Configuration
- Scope of Interoperability (Coverage Matrix)

UML Modeling Tool

- Model Development
  - Implement the specification with references to the requirement

- Test Generation

- Test Publication

- Test Suite
Compliance test suites

- Specific License Agreements
  - Free license for GlobalPlatform members \textit{internal use only}
  - Commercialization license for GlobalPlatform member tool suppliers of \textbf{qualified tools}
  - Commercialization license for GlobalPlatform member laboratory which delivers \textbf{qualified services}.

- Specific agreement developed for standardization bodies enabling them to review the test suites, and endorse the compliance program.
Test suite and packages

• Testing is split into different packages.

• All packages are managed and maintained separately – for each package there is a coverage matrix.

• Packages are delivered separately but based on the same model to ensure complete coherence.

Example: Packages for GlobalPlatform UICC Configuration

- Card Content Management
- Confidential Card Content Management
- Data Store
- GlobalPlatform APIs
- Key Management
- Life Cycle State Management
- Logical Channel Management
- Security Domain Tree
- Security Domain Tree Extended (confidential CCM)
- Secure Messaging
Test Tool Qualification

- A test tool supplier must be a GlobalPlatform Participating or Full Member.
- During a GlobalPlatform TestFest, the test tool performs a specific test suite on a specific product sample and generates a test report.
- The test report is analyzed by the compliance secretariat:
  - The secretariat verifies that the results of the tests are as expected
  - The test tool should support all packages and generate the appropriate result of 95% tests of each package.
- If results are > 95% and all packages are supported, the compliance secretariat recommends the tool for qualification. TestFest results are validated by the GlobalPlatform Technical Director.
Qualified test labs

• Laboratory must be:
  – A GlobalPlatform Participating or Full Member
  – An officially recognized lab (ISO 17025 or equivalent) and / or are already an EMVCo, FIPS, Common Criteria, PCI qualified laboratory.

• Laboratory must use a GlobalPlatform qualified test tool:
  – Lab must maintain the test tool to current revision levels (as required by GlobalPlatform / market needs).

• A GlobalPlatform qualified laboratory must have:
  – At least one expert which has undertaken GlobalPlatform’s Card Specifications and Test Suites Training. This is delivered by a GlobalPlatform Certified Trainer.
    OR
  – Have an expert directly participate in the Compliance Working Group, the TestFest process and use their own qualified tool in their accredited lab. This must be the same expert who performs testing services at the lab.
Product qualification

Two possibilities: self-testing or lab testing

- Product Provider
  - Self-testing
  - Lab testing
  - Testing procedures
    - Self Testing Process
    - Qualification process
      - Self Tested product
      - Qualified Product

Open to members and non-members
Self-testing process

1. Self-testing
2. "Buy" Qualified Test Tool
3. Execute Test Suite
4. Submit Test Result
5. Submit Listing Agreement
6. Pay Invoice
7. Self-Test Claim listing on GlobalPlatform website
Lab testing process

*Additional costs of the contract for services between the test lab and the product provider are outside the scope of the GlobalPlatform process
Pricing model 1st January 2013

- **Self Testing**
  - US $4,000 for a review of a self test claim provided by a non-GlobalPlatform member Product Vendor
  - US $2,000 for a review of a self test claim provided by a GlobalPlatform member Product Vendor

- **Lab Testing**
  - US $7,800 for a review of a Qualification Request provided by a non-GlobalPlatform member Product Vendor.
  - US $5,000 for a review of a Qualification Request provided by a GlobalPlatform member Product Vendor for Product Configuration as listed in section A.1.
  - US $3,900 for a review of a Qualification Request provided by a GlobalPlatform member Product Vendor for Product Configuration other than as listed in section A.1.
  - US $2,800 for a review of a Qualification Request for a Derivative Product
  - US $2,800 for a review of a Product Change Request
  - US $2,000 for a review of a Request for Renewal of an already Qualified Product

- US $500 for an SCO resubmission due to a declined SCO (incorrect SCO submitted with Qualification Request).
Version management

New Test Suite release

Response from Test Tools:
Announcement of the activation date for Test Suite N+1

21 days
9

Test Suite N

Test Suite N+1 use

Test Suite N+1
Thank you for viewing this presentation.

The latest information regarding the GlobalPlatform Compliance Program can be accessed at www.globalplatform.org.

If you have any specific enquiries, please email the GlobalPlatform Compliance Program Secretariat at compliance@alliancesmanagement.com.