



FeliCa Approval for Security and Trust (FAST) v1 Overview

Introduction

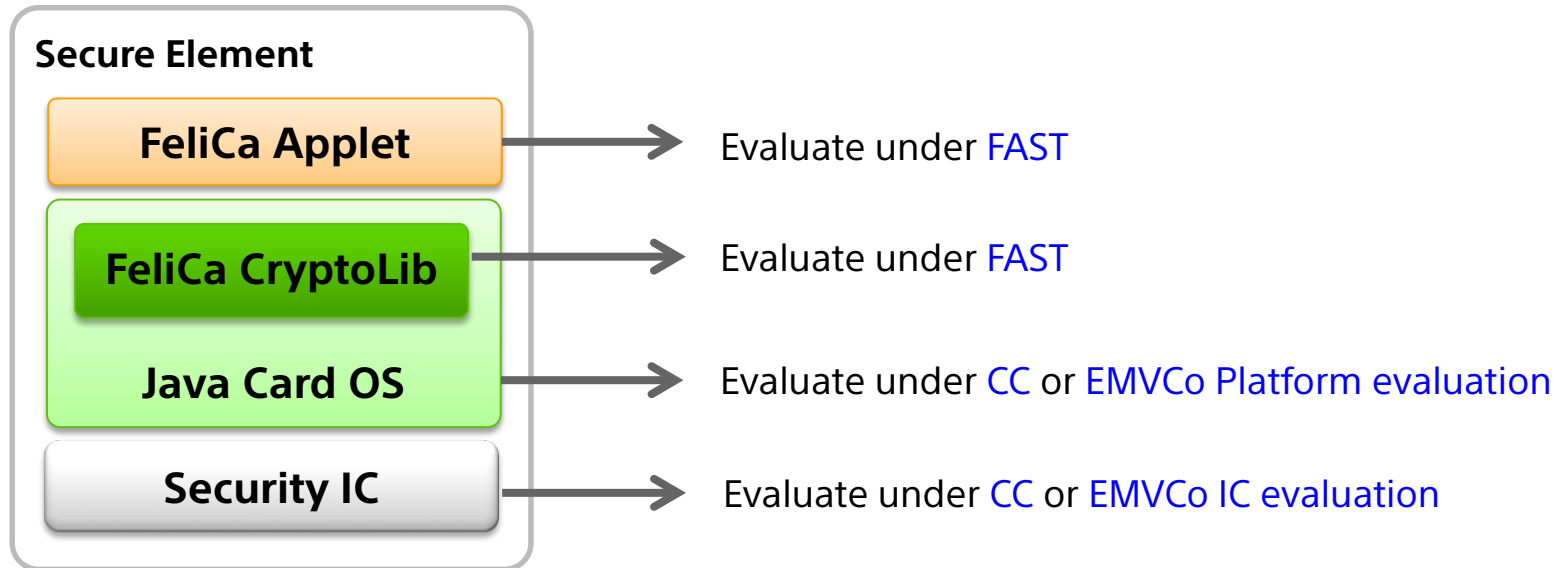
- The security certification scheme called “FeliCa Approval for Security and Trust (FAST)” has been set up to enable the evaluation and certification of the mobile FeliCa product security aspects.
- The FAST v1 scheme requires the same level of security vulnerability analysis and testing as Common Criteria EAL4 + AVA_VAN.5 certification.
- Target of Evaluation (TOE) consists of the security IC, the operating system (such as Java Card OS), and the mobile FeliCa applications (such as payment and transit applications) including relevant crypto libraries for AES and TDES/DES.
- The main purpose of the TOE is to be the Secure Element for the NFC-enabled devices. The FAST v1 scheme aims to give a high assurance of security level (i.e., AVA_VAN.5), in a timely manner, to the service providers who deploy mobile FeliCa products for their payment and/or transit services.

Intent

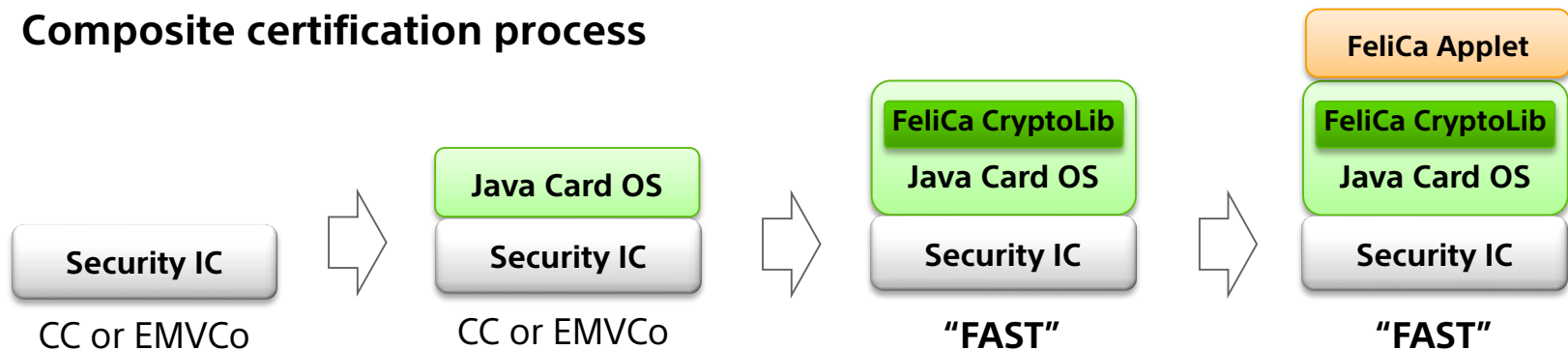
- The intent of the scheme is to provide sufficient assurance for the certified products to protect the assets against potential threats.
- As an alternative to Common Criteria certification at EAL4 + AVA_VAN.5, this scheme streamlines the process by focusing on specific threats that mobile FeliCa products are exposed to, in the context of a standard design view and, therefore, a largely similar high-level overview.
- To maintain a consistent and state-of-the-art level of assurance, while reducing the time and cost of certification management, a lightweight certification process is defined.
- In this certification process, an accredited certifying lab shall assess the evaluation results, and shall then determine whether the products provide sufficient assurance to be certified under this scheme.

FAST v1 scope and process

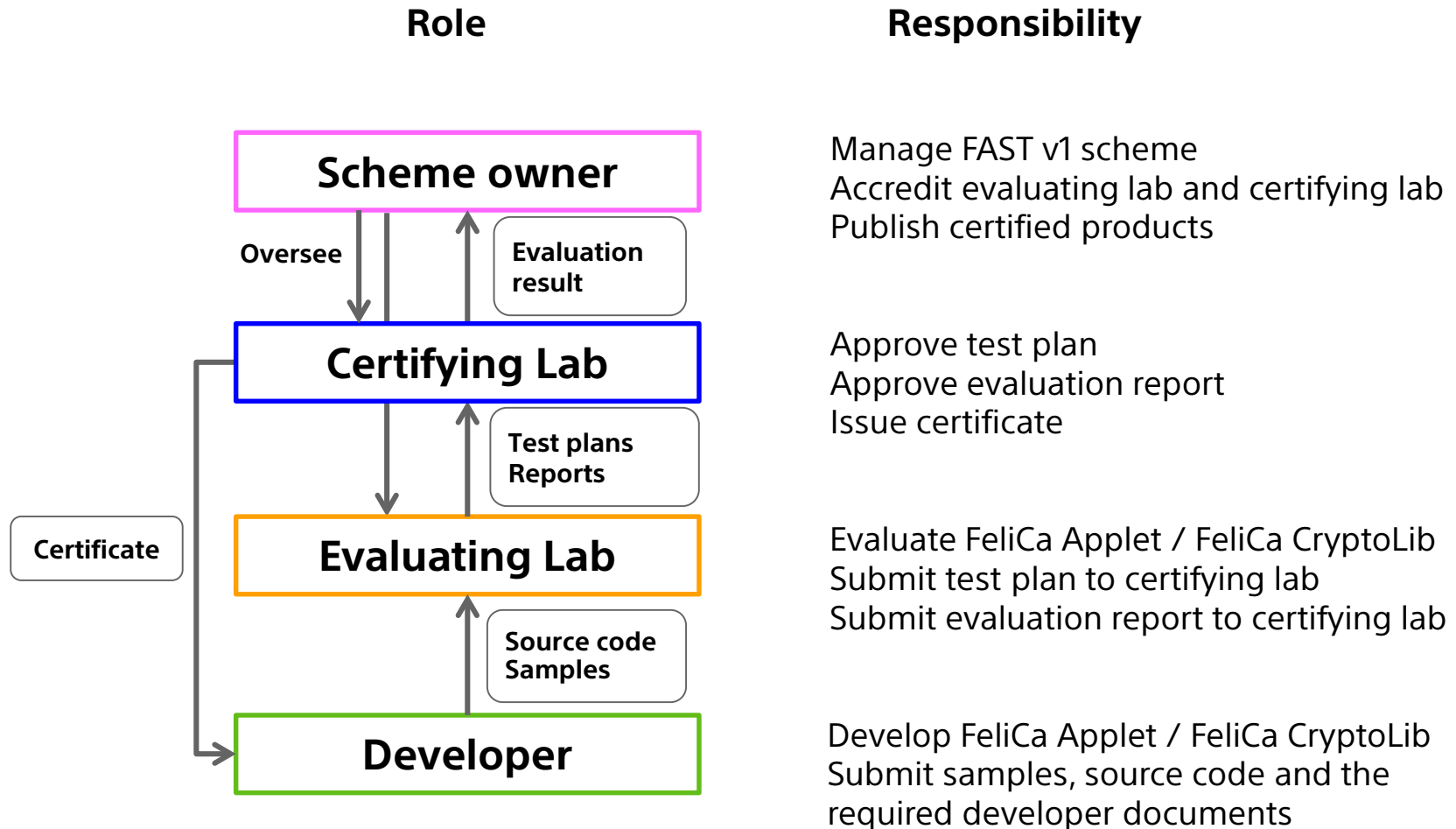
■ Certification scope



■ Composite certification process



Roles and responsibilities



Requirements (non-exhaustive list)

- All requirements for evaluation and certification are defined in the scheme document “FeliCa Approval for Security and Trust scheme” provided by FeliCa Networks.
- Key evaluation aspects:
 - Design and source code review
 - Penetration test against high attack potential (AVA_VAN.5)
 - Site security (EMVCo site audit or the site certification under CC scheme can be reused)
 - AES and TDES/DES crypto protocol
- Certification validity
 - 3 years
 - Validity can be extended by 1.5 years through renewal process