Common Criteria Recognition Arrangement Management Committee Policies and Procedures

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Subject: Supporting Documents for Smartcards and similar devices

Introduction

Supporting documents are used within the Common Criteria certification process to define how the criteria and evaluation methods are applied when certifying specific technologies. They replace multiple individual interpretations and hence provide clarity for developers, evaluators, and users. Their relevance and use for particular technologies is approved by the CCRA Management Committee. This document provides the scope and rationale for the use of supporting documents with Smart card and similar devices.

Scope

The set of supporting documents discussed here relates to smartcards and similar devices where significant proportions of the required security functionality depend upon hardware (for example TPMs used in Trusted Computing, digital tachographs, Host Security Modules, etc.).

Rationale

In the technologies covered by the scope above an attacker will often be able to obtain ready physical access to the device (or a set of devices), the device may well contain critical information such as security credentials/keys and part of the security functionality required of the device will relate to self protection either by active (tamper detection) or passive means (such as tamper resistant coatings). This contrasts with standard multipurpose hardware as used in a general processing equipment such as a PC. The evaluation approach needs to consider all hardware specific aspects of vulnerability analysis including those that require significant additional equipment and resources. Such devices are frequently composed from elements produced by different developers (for example hardware, smart card operating system, and application) and may involve production across a range of development sites (e.g. IC design, mask production, fabrication, characterisation, etc). These factors must also be consistently taken into account during evaluation and certification.

The JIWG (Joint Interpretations Working Group) has already developed a range of supporting documents to cover the scope. Examples of which are listed below.

Initial List of Supporting Documents for Smartcards and similar devices

Document Title	Type
Guidance for Smartcard evaluation	Guidance
Application of attack potential to Smart Cards	Mandatory
Application of CC to Integrated Circuits	Mandatory
ETR-Lite for composition	Mandatory