International

ISO/IEC 30107-4

Information technology — Biometric presentation attack detection —

Part 4: Profile for testing of mobile devices

Technologies de l'information — Détection d'attaque de présentation en biométrie —

Partie 4: Profil pour les essais des dispositifs mobiles

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This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 37, *Biometrics*.

This second edition cancels and replaces the first edition (ISO/IEC 30107-4:2020), which has been technically revised.

The main changes are as follows:

— removal of terms and definitions present in other parts of the ISO/IEC 30107 series;

— addition of FIDO biometrics requirements;

— addition of Clause 4;

— best practice number of PAI species used in evaluation changed from minimum 3 to minimum 6;

— FIDO biometric presentation attack detection evaluation requirements has been moved to Clause 7;

— removal of Annex A: Roles in PAD testing of mobile devices;

— other minor wording changes to align with ISO/IEC 30107-3.

A list of all parts in the ISO/IEC 30107 series can be found on the ISO and IEC websites.

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The presentation of an artefact or of human characteristics to a biometric capture subsystem in a fashion intended to interfere with system policy is referred to as presentation attack. The ISO/IEC 30107 series deals with techniques for the automated detection of presentation attacks. These techniques are called presentation attack detection (PAD) mechanisms. ISO/IEC 30107-3 establishes principles and methods for performance assessment of PAD mechanisms and for reporting the results thereof.

PAD mechanisms are commonly integrated into mobile devices that use biometrics.[1][2] The following characteristics of mobile devices necessitate the development of an ISO/IEC 30107-3 profile specific to mobile devices:

— Mobile devices often have accelerated product development timelines, therefore time and resources for PAD testing can potentially be limited.

— A single type of biometric subsystem is often integrated into a wide range of mobile devices, such that results from a single test can be applicable to multiple types of mobile devices with the same operating system (OS) or using the same development language.

— Biometric subsystems integrated into mobile devices are typically closed systems, such that performance testing takes place through a full-system evaluation.

This document provides requirements for assessing the performance of PAD mechanisms on mobile devices with local biometric recognition. A general profile is provided in Clause 5 as well as a profile specific to Fast IDentity Online (FIDO) biometric presentation attack detection evaluation requirements in Clause 6.[3]