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Information technology — Cross jurisdictional and societal aspects of implementation of biometric technologies — Biometrics and children

Technologies de l'information — Aspects pangouvernementaux et pansociétaux de l'implémentation des technologies biométriques — Biométrie et enfants

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/IEC JTC 1, *Information technology*, SC 37, *Biometrics*.

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Introduction

In the growing involvement of children in biometric systems, several issues concerning their use of biometrics appear more critical than to adults.

Most problems rely on the physical and psychological immaturity of children. The bodies of children are still in a growing phase and this may cause difficulties in the biometric capture and comparison processes. For the children themselves, the usability of a biometric system becomes a crucial factor.

On the other hand, their psychological immaturity implies that there could be situations where parent(s) or legal representative(s) have to support them to use biometric systems, especially when data protection or privacy issues are involved.

In this Technical Report, the definition of "child" is considered from the applicative point of view in Clause 5. In Clause 6, studies on biometrics for children are surveyed for certain modalities because the application of biometrics is heavily dependent on the modality. Clause 7 introduces examples of application of biometrics that are typical to children and present clear benefits. Finally, Clause 8 summarizes various elements concerning the protection of children when using biometric systems with particular reference to data protection and psychological concerns.

Examples of the benefits to be gained by using the Technical Report are the following:

— operational support in using biometrics applied to the context of children;

— enhanced acceptance by subjects of systems (children, parents and legal representatives, tutors,...) using biometric technology;

— improved public perception and understanding of these systems;

— smoother introduction and operation of these systems;

— adoption of commonly approved good privacy practice.

The primary stakeholders are identified as follows:

— parents and legal representatives;

— users of the biometric data;

— developers of technical standards;

— subjects who provide the biometric sample;

— requirements analysts;

— system architects;

— IT designers;

— public policy makers.

Any jurisdiction of the country for which the biometric system is intended to shall be considered.

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Information technology — Cross jurisdictional and societal aspects of implementation of biometric technologies — Biometrics and children

1 Scope

This Technical Report builds upon the general recommendations given in ISO/IEC TR 24714-1.

It provides guidance for users (as defined in ISO/IEC 2382-37) of biometric recognition systems on specific requirements in relation to deployments when children are included as subjects in the biometric process.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 2382-37, *Information technology — Vocabulary — Part 37: Biometrics*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 2382-37 and the following apply.

3.1
child
person below the age of 18, unless the laws of a particular country set the legal age for adulthood younger[1)]

3.2
friction ridges
ridges present on the skin of the fingers and toes, the palms and soles of the feet, which makes contact with an incident surface under normal touch

4 Symbols and abbreviated terms

BIODEV	Biometrics Data Experimented in Visa (European Commission funded experimentation, 2005)
BKA	Bundeskriminalamt (Federal Criminal Police Office of Germany)
dpi	dots per inch
EC	European Commission
EER	Equal Error Rate
JRC	European Commission Joint Research Center
MYCHIP	The Masonic Youth Child Identification Program (MYCHIP)

1) http://www.ohchr.org/en/professionalinterest/pages/crc.aspx [viewed 12 July 2015].

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