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Part 3: Logical information interchange mechanism

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Partie 3: Mécanisme d'échange de l'information logique

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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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The committee responsible for this document is ISO/IEC JTC 1, *Information technology*, Subcommittee SC 17, *Cards and personal identification*.

A list of all parts in the ISO 17839 series can be found on the ISO website.

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Introduction

A Biometric System-on-Card (BSoC) is a portable card size device including the following entities: biometric acquisition, image/signal processing, storage, comparison and decision. The use of a BSoC with such specifications is subject to an information flow and security mechanisms, which are detailed in this document.

ISO/IEC 17839-1 describes two types of BSoC. Type S1 is a fully flexible card compliant with ISO/IEC 7810. Type S2 deviates from some of the requirements of size and flexibility, while keeping the rest of the requirements intact, including the use of a contactless ICC interface. The logical interface and security mechanisms are independent on whether the BSoC is of type S1 or type S2, so the specifications stated in this document are applicable to both types of BSoC.

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Information technology — Identification cards — Biometric System-on-Card —

Part 3: Logical information interchange mechanism

1 Scope

This document specifies

— logical data structures for a BSoC,

— enrolment procedures, and

— usage of commands and data structures defined in other ISO standards for BSoC.

This document does not define requirements for

— commands and data structures that apply to devices external to a BSoC, and

— commands and data structures that apply to logical interfaces inside a BSoC.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 7816-3, *Identification cards — Integrated circuit cards — Part 3: Cards with contacts — Electrical interface and transmission protocols*

ISO/IEC 7816-4, *Identification cards — Integrated circuit cards — Part 4: Organization, security and commands for interchange*

ISO/IEC 7816-11, *Identification cards — Integrated circuit cards — Part 11: Personal verification through biometric methods*

ISO/IEC 14443-4, *Identification cards — Contactless integrated circuit cards — Proximity cards — Part 4: Transmission protocol*

ISO/IEC 18328-3, *Information technology — ICC-managed devices — Part 3: Organization, security and commands for interchange*

ISO/IEC 24787, *Information technology — Identification cards — On-card biometric comparison*

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