Technical Specification

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Cards and security devices for personal identification — Building blocks for identity management via mobile devices —

Part 3: Protocols and services for installation and issuing phase

Cartes et dispositifs de sécurité pour l'identification des personnes — Blocs fonctionnels pour la gestion des identités via les dispositifs mobiles —

Partie 3: Protocoles et services pour la phase d'installation et d'émission

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Foreword

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A list of all parts in the ISO/IEC 23220 series can be found on the ISO and IEC websites.

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Introduction

The ISO/IEC 23220 series consists of the following parts, under the general title Cards and security devices for personal identification — Building blocks for identity management via mobile devices:

— Part 1: Generic system architectures of mobile eID systems

— Part 2: Data objects and encoding rules for generic eID systems

— Part 3: Protocols and services for the installation and issuing phase

— Part 4: Protocols and services for the operational phase

— Part 5: Trust models and confidence level assessment

— Part 6: Mechanisms for use of certification on trustworthiness of secure area

— Part 7: Registration Authority Procedures for Mobile Documents

The objective of ISO/IEC TS 23220-3 is to:

— minimize the burden on issuers to engage in device discovery, device attestation, device binding;

— ease the process of categorizing a mdoc app implementation according to the issuer's policy;

— ease the process of provisioning mobile documents;

— rely on a third party for integral Mobile eID function characterization.

This document introduces data structures and APIs applicable for discoverability mechanisms and for mdoc provisioning purposes. Future versions of this document can specify normative protocols based on the data structures and APIs defined in this document that can be referenced by a profile identifier.

Cards and security devices for personal identification — Building blocks for identity management via mobile devices —

Part 3: Protocols and services for installation and issuing phase

1 Scope

This document provides building blocks for mobile eID-System infrastructures and normalizes protocols, interfaces and services for mdoc apps by:

— specifying interfaces for data interchange for installing of software in installation phase as well as issuing and deriving of attributes and credentials in issuing phase;

— specifying security and data protection mechanisms;

— applying privacy-enhancing mechanisms;

— specifying discoverability mechanisms.

Mechanisms for updating or revoking of attributes and credentials or mdocs are out of scope of this document and are provided by SA specific protocols.

This document is applicable to entities involved in specifying, architecting, designing, testing, maintaining, administering and operating a mobile eID-System in parts or entirely.

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 TS 23220-2, *Cards and security devices for personal identification — Building blocks for identity management via mobile devices — Part 2: Data objects and encoding rules for generic eID systems*

ISO/IEC TS 23220-4, *Cards and security devices for personal identification — Building blocks for identity management via mobile devices — Part 4: Protocols and services for operational phase*

ISO/IEC 7816-15, *Identification cards — Integrated circuit cards — Part 15: Cryptographic information application*

RFC 9360, *J. Schaad, CBOR Object Signing and Encryption (COSE): Header Parameters for Carrying and Referencing X.509 Certificates, February 2023*

IETF RFC draft 06, *OAuth 2.0 Attestation-Based Client Authentication, July 2025*

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[13] ISO/IEC TS 23220-6, *Cards and security devices for personal identification — Building blocks for identity management via mobile devices — Part 6: Mechanism for use of certification on trustworthiness of secure area*

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

[15] ISO/IEC 23220-1, *Cards and security devices for personal identification — Building blocks for identity management via mobile devices — Part 1: Generic system architectures of mobile eID systems*

[16] ISO/IEC 18013-5:2021, *Personal identification — ISO-compliant driving licence — Part 5: Mobile driving licence (mDL) application*

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