Personal identification — ISO-compliant driving licence —

Part 5:
Mobile driving licence (mDL) application

1 Scope

This document establishes interface specifications for the implementation of a driving licence in association with a mobile device. This document specifies the interface between the mDL and mDL reader and the interface between the mDL reader and the issuing authority infrastructure. This document also enables parties other than the issuing authority (e.g. other issuing authorities, or mDL verifiers in other countries) to:

— use a machine to obtain the mDL data;

— tie the mDL to the mDL holder;

— authenticate the origin of the mDL data;

— verify the integrity of the mDL data.

The following items are out of scope for this document:

— how mDL holder consent to share data is obtained;

— requirements on storage of mDL data and mDL private keys.

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 3166-1, *Codes for the representation of names of countries and their subdivisions — Part 1: Country code*

ISO 3166-2:2020, *Codes for the representation of names of countries and their subdivisions — Part 2: Country subdivision code*

ISO/IEC 5218, *Information technology — Codes for the representation of human sexes*

ISO/IEC 7816-4:2020, *Identification cards — Integrated circuit cards — Part 4: Organization, security and commands for interchange*

ISO/IEC 8859-1, *Information technology — 8-bit single-byte coded graphic character sets — Part 1: Latin alphabet No. 1*

ISO/IEC 18004, *Information technology — Automatic identification and data capture techniques — QR Code bar code symbology specification*

ISO/IEC 18013-1:2018, *Information technology — Personal identification — ISO-compliant driving licence — Part 1: Physical characteristics and basic data set*

ISO/IEC 18013-2:2020, *Personal identification — ISO-compliant driving licence — Part 2: Machine-readable technologies*

ISO/IEC 19785-3:2020, *Information technology — Common Biometric Exchange Formats Framework — Part 3: Patron format specifications*

BSI TR-03111, *Elliptic Curve Cryptography, Version 2.10, June 2018*

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NIST SP 800-38D, *M. Dworkin, Recommendation for Block Cipher Modes of Operation: Galois/Counter Mode (GCM) and GMAC, November 2007*

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RFC 5246, *T. Dierks et al., The Transport Layer Security (TLS) Protocol Version 1.2, August 2008*

RFC 5280, *D. Cooper et al., Internet X.509 Public Key Infrastructure Certificate and Certificate Revocation List (CRL) Profile, May 2008*

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RFC 7049, *C. Bormann et al., Concise Binary Object Representation (CBOR), October 2013*

RFC 7515, *J. Bradley et al., JSON Web Signature (JWS), May 2015*

RFC 7518, *M. Jones et al., JSON Web Algorithms (JWA), May 2015*

RFC 7519, *J. Bradley et al., JSON Web Token (JWT), May 2015*

RFC 7748, *A. Langley et al., Elliptic Curves for Security, January 2016*

RFC 7905, *A. Langley et al., ChaCha20-Poly1305 Cipher Suites for Transport Layer Security (TLS), June 2016*

RFC 8032, *S. Josefsson et al., Edwards-Curve Digital Signature Algorithm (EdDSA), January 2017*

RFC 8152, *J. Schaad, CBOR Object Signing and Encryption (COSE), July 2017*

RFC 8252, *W. Denniss et al., Oauth 2.0 for Native Apps, October 2017*

RFC 8259, *T. Bray, The JavaScript Object Notation (JSON) Data Interchange Format, December 2017*

RFC 8410, *S. Josefsson et al., Algorithm Identifiers for Ed25519, Ed448, X25519, and X448 for Use in the Internet X.509 Public Key Infrastructure, August 2018*

RFC 8422, *Y. Nir et al., Elliptic Curve Cryptography (ECC) Cipher Suites for Transport Layer Security (TLS) Versions 1.2 and Earlier, August 2018*

RFC 8943, *M. Jones et al., Concise Binary Object Representation (CBOR) Tags for Date, November 2020*

RFC, *CBOR Object Signing and Encryption (COSE): Headers for carrying and referencing X.509 certificates*

Wi-Fi Alliance, *Neighbor Awareness Networking Specification, Version 3.1*